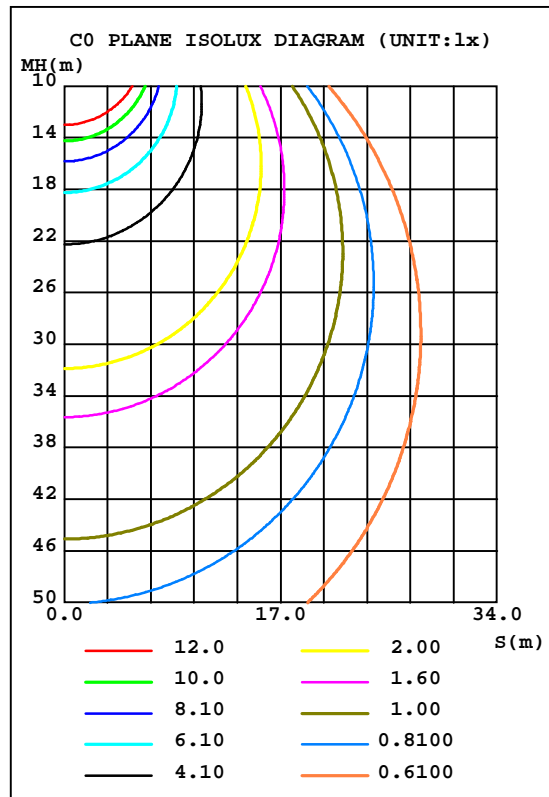
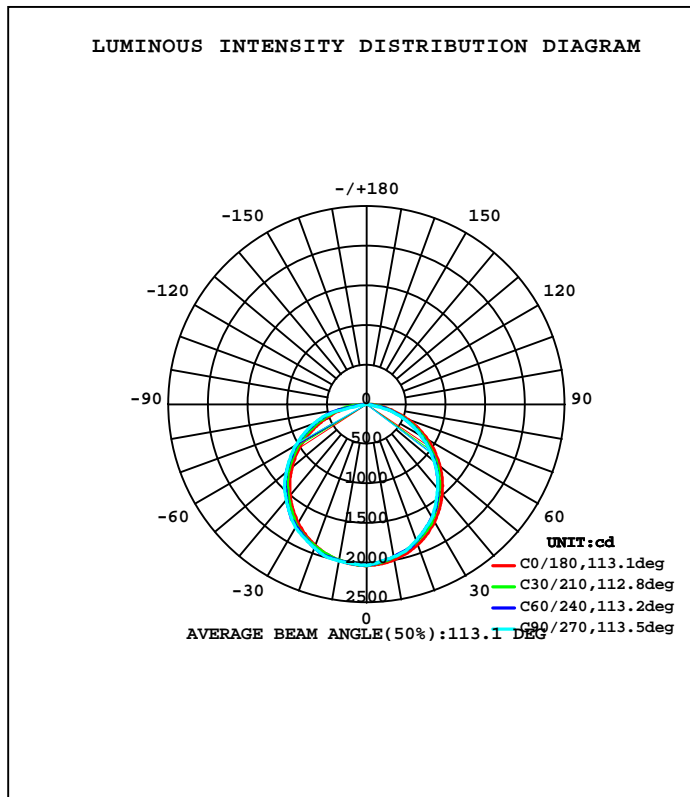


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:219.6V I:0.2109A P:44.85W PF:0.9681 Lamp Flux:5758.23x1 lm		
NAME: 174-237_4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Tronix Lighting	SUR.:550*1150	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 128.40 lm/W			
MODEL	174-237_4000K	I <sub>max</sub> (cd)	2033	S/MH(C0/180)	1.26
NOMINAL POWER(W)	48	LOR(%)	100.0	S/MH(C90/270)	1.31
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	5758.2	h UP, DN(C0-180)	0.0, 47.1
NOMINAL FLUX(lm)	5758.23	CIE CLASS	DIRECT	h UP, DN(C180-360)	0.0, 52.9
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220	h down(%)	100.0	CIBSE SHR MAX	1.35



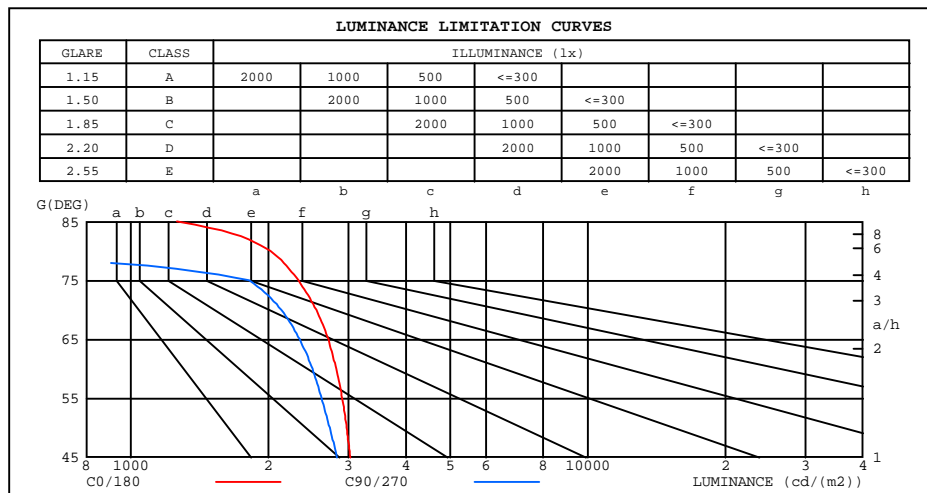
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2017-03-13

log Range: 0 - 90DEG  
 Interval: 0.5DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.286  
 Humidity: 65.0%  
 Test Distance: 13.690m [K=1.0000]  
 Remarks: 174-237\_4000K

### ZONAL FLUX DIAGRAM AND LUMINANCE LIMITATION CURVES

**ZONAL FLUX DIAGRAM:**

g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
5	2022	2000	1994	2002	2025	2020	2020	2018	0- 5	48.29	48.29	0.84,0.84
10	1994	1958	1955	1962	2000	1999	2006	1994	5- 10	142.8	191.1	3.32,3.32
15	1948	1908	1916	1914	1957	1968	1993	1961	10- 15	232.7	423.8	7.36,7.36
20	1886	1850	1829	1858	1897	1930	1928	1922	15- 20	315.2	739.1	12.8,12.8
25	1807	1756	1742	1766	1820	1853	1863	1842	20- 25	386.3	1125	19.5,19.5
30	1714	1651	1654	1663	1730	1765	1798	1752	25- 30	445.0	1570	27.3,27.3
35	1606	1542	1525	1554	1624	1671	1689	1657	30- 35	489.3	2060	35.8,35.8
40	1485	1425	1396	1437	1505	1568	1581	1554	35- 40	516.4	2576	44.7,44.7
45	1352	1277	1268	1290	1374	1434	1472	1417	40- 45	526.9	3103	53.9,53.9
50	1209	1128	1109	1143	1231	1298	1326	1280	45- 50	520.4	3623	62.9,62.9
55	1055	979.6	950.2	994.3	1078	1161	1181	1142	50- 55	495.3	4119	71.5,71.5
60	891.5	810.7	791.5	823.1	915.5	995.3	1035	977.3	55- 60	454.4	4573	79.4,79.4
65	724.6	644.9	627.1	654.9	745.1	832.4	870.3	816.9	60- 65	399.2	4972	86.3,86.3
70	551.4	482.0	462.7	490.8	572.2	667.5	705.7	653.4	65- 70	331.6	5304	92.1,92.1
75	381.9	322.3	298.3	331.6	402.3	500.2	541.0	485.7	70- 75	255.1	5559	96.5,96.5
80	222.1	150.8	0	158.8	242.2	288.4	0	276.4	75- 80	154.4	5713	99.2,99.2
85	69.70	0	0	0	84.64	0	0	0	80- 85	41.25	5755	99.9,99.9
90	0.2578	0	0	0	2.511	0	0	0	85- 90	3.651	5758	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1263	0
80	2021	0
75	2331	1821
70	2547	2137
65	2708	2344
60	2817	2501
55	2906	2617
50	2970	2725
45	3021	2832

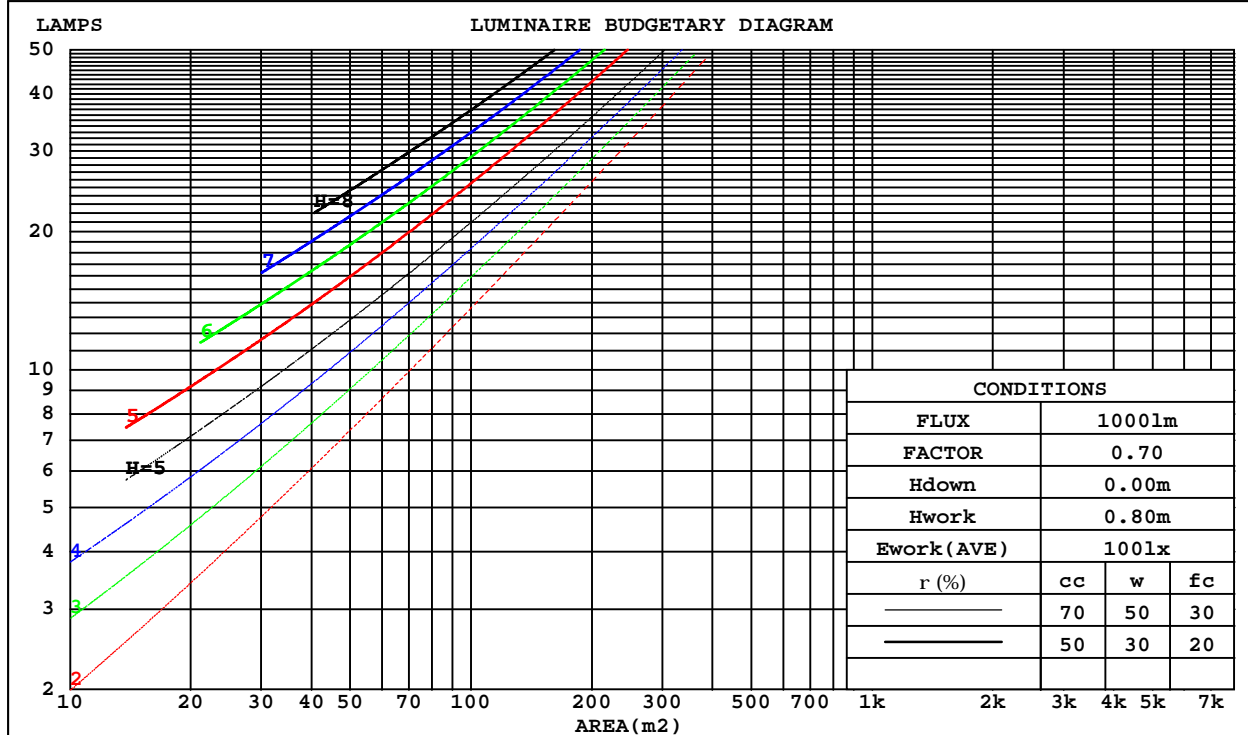
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-03-13

g Range: 0 - 90DEG  
 Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.286  
 Humidity:65.0%  
 Test Distance:13.690m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:219.6V I:0.2109A P:44.85W PF:0.9681 Lamp Flux:5758.23x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Tronix Lighting	SUR.:550*1150	PROTECTION ANGLE:

r <sub>cc</sub>	80%			70%			50%			30%			10%			0
r <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r <sub>fc</sub>	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.04	1.00	.96	1.02	.98	.95	.98	.95	.92	.94	.91	.89	.90	.88	.86	.84
2.0	.91	.84	.78	.89	.83	.77	.85	.80	.76	.82	.78	.74	.79	.76	.72	.70
3.0	.80	.72	.65	.78	.71	.64	.75	.69	.63	.72	.67	.62	.70	.65	.61	.59
4.0	.71	.62	.55	.69	.61	.55	.67	.60	.54	.64	.58	.53	.62	.57	.52	.50
5.0	.63	.54	.47	.62	.53	.47	.60	.52	.46	.58	.51	.46	.56	.50	.45	.43
6.0	.57	.48	.41	.56	.47	.41	.54	.46	.41	.52	.45	.40	.51	.45	.40	.38
7.0	.51	.42	.36	.50	.42	.36	.49	.41	.36	.47	.41	.36	.46	.40	.35	.33
8.0	.47	.38	.32	.46	.38	.32	.45	.37	.32	.43	.37	.32	.42	.36	.32	.30
9.0	.43	.35	.29	.42	.34	.29	.41	.34	.29	.40	.33	.29	.39	.33	.29	.27
10.0	.40	.32	.26	.39	.31	.26	.38	.31	.26	.37	.31	.26	.36	.30	.26	.24



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-03-13

g Range: 0 - 90DEG  
 g Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.286  
 Humidity:65.0%  
 Test Distance:13.690m [K=1.0000]  
 Remarks: 174-237\_4000K

WEC AND CCEC

Test:U:219.6V I:0.2109A P:44.85W PF:0.9681 Lamp Flux:5758.23x1 lm		
NAME: .	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Tronix Lighting	SUR.:550*1150	PROTECTION ANGLE:

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.300	.171	.054	.293	.167	.053	.280	.161	.051	.268	.154	.050	.256	.149	.048	
2.0	.287	.158	.048	.281	.155	.048	.270	.150	.047	.259	.145	.045	.249	.141	.044	
3.0	.268	.143	.043	.262	.140	.042	.252	.137	.042	.242	.133	.041	.234	.129	.040	
4.0	.248	.129	.038	.243	.127	.038	.234	.124	.037	.225	.121	.037	.218	.118	.036	
5.0	.230	.117	.034	.225	.116	.034	.217	.113	.033	.210	.111	.033	.203	.108	.033	
6.0	.213	.107	.031	.209	.106	.030	.202	.104	.030	.195	.101	.030	.189	.099	.030	
7.0	.199	.098	.028	.195	.097	.028	.189	.095	.027	.183	.094	.027	.177	.092	.027	
8.0	.185	.091	.025	.182	.090	.025	.177	.088	.025	.171	.087	.025	.166	.085	.025	
9.0	.174	.084	.023	.171	.083	.023	.166	.082	.023	.161	.081	.023	.156	.079	.023	
10.0	.164	.078	.022	.161	.078	.022	.156	.077	.022	.152	.075	.021	.148	.074	.021	

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.180	.156	.135	.154	.134	.116	.105	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.172	.132	.099	.147	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.164	.114	.075	.141	.099	.065	.097	.068	.045	.056	.040	.027	.018	.013	.009	
4.0	.157	.101	.058	.134	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.149	.091	.047	.128	.078	.041	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.142	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.135	.075	.033	.116	.065	.029	.080	.046	.021	.047	.027	.012	.015	.009	.004	
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.004	
9.0	.123	.065	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-03-13

g Range: 0 - 90DEG  
 Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.286  
 Humidity:65.0%  
 Test Distance:13.690m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:219.6V I:0.2109A P:44.85W PF:0.9681 Lamp Flux:5758.23x1 lm										
NAME: 174-237_4000K					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: Tronix Lighting					SUR.:550*1150			PROTECTION ANGLE:		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	16.3	17.8	16.6	18.0	18.2	15.9	17.4	16.2	17.6	17.8
3H	17.8	19.2	18.1	19.4	19.7	17.3	18.7	17.6	18.9	19.1
4H	18.4	19.7	18.7	20.0	20.2	17.7	19.1	18.0	19.3	19.6
6H	18.7	20.0	19.1	20.3	20.5	17.7	19.0	18.1	19.3	19.5
8H	18.8	20.0	19.2	20.3	20.6	17.7	18.9	18.0	19.2	19.5
12H	18.8	20.0	19.2	20.3	20.6	17.6	18.8	18.0	19.1	19.4
4H 2H	16.8	18.2	17.1	18.4	18.7	16.5	17.9	16.8	18.1	18.4
3H	18.5	19.7	18.8	19.9	20.3	18.0	19.2	18.4	19.5	19.8
4H	19.2	20.2	19.5	20.5	20.9	18.6	19.7	19.0	20.0	20.3
6H	19.6	20.5	20.0	20.9	21.3	18.7	19.6	19.1	19.9	20.3
8H	19.7	20.6	20.1	21.0	21.3	18.6	19.5	19.0	19.9	20.2
12H	19.8	20.6	20.2	21.0	21.4	18.6	19.4	19.0	19.8	20.2
8H 4H	19.3	20.2	19.7	20.6	21.0	18.8	19.7	19.2	20.1	20.5
6H	19.9	20.6	20.3	21.0	21.5	18.9	19.7	19.4	20.1	20.5
8H	20.1	20.7	20.5	21.1	21.6	18.9	19.5	19.3	20.0	20.4
12H	20.2	20.7	20.6	21.2	21.6	18.9	19.4	19.3	19.9	20.3
12H 4H	19.3	20.1	19.7	20.5	20.9	18.8	19.6	19.3	20.0	20.4
6H	19.9	20.5	20.3	21.0	21.4	18.9	19.6	19.4	20.0	20.5
8H	20.1	20.6	20.5	21.1	21.5	18.9	19.5	19.4	19.9	20.4
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.2 / - 0.3				
1.5H	+ 0.1 / - 0.2					+ 0.1 / - 0.3				
2.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.3				

CIE Pub.117 Corrected 5758 lm Total Lamp Luminous Flux.(8log(F/F0) = 6.1)

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-03-13

g Range: 0 - 90DEG  
 g Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.286  
 Humidity:65.0%  
 Test Distance:13.690m [K=1.0000]  
 Remarks: 174-237\_4000K

UTILIZATION FACTORS TABLE

Test:U:219.6V I:0.2109A P:44.85W PF:0.9681 Lamp Flux:5758.23x1 lm		
NAME: 174-237_4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Tronix Lighting	SUR.:550*1150	PROTECTION ANGLE:

REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	58	46	39	57	46	39	56	45	39	32
0.80	68	56	49	67	56	49	65	55	48	41
1.00	76	65	58	75	64	58	73	66	57	50
1.25	83	73	66	82	72	65	79	71	65	57
1.50	88	79	72	87	78	71	84	76	70	63
2.00	95	87	80	93	86	80	90	83	78	70
2.50	99	92	86	97	90	85	93	88	83	75
3.00	103	96	90	100	94	89	96	91	87	79
4.00	107	101	97	104	99	95	100	96	93	84
5.00	109	104	100	107	102	99	102	99	96	87
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-03-13

g Range: 0 - 90DEG  
 Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.286  
 Humidity:65.0%  
 Test Distance:13.690m [K=1.0000]  
 Remarks: 174-237\_4000K

ISOCANDELA DIAGRAM

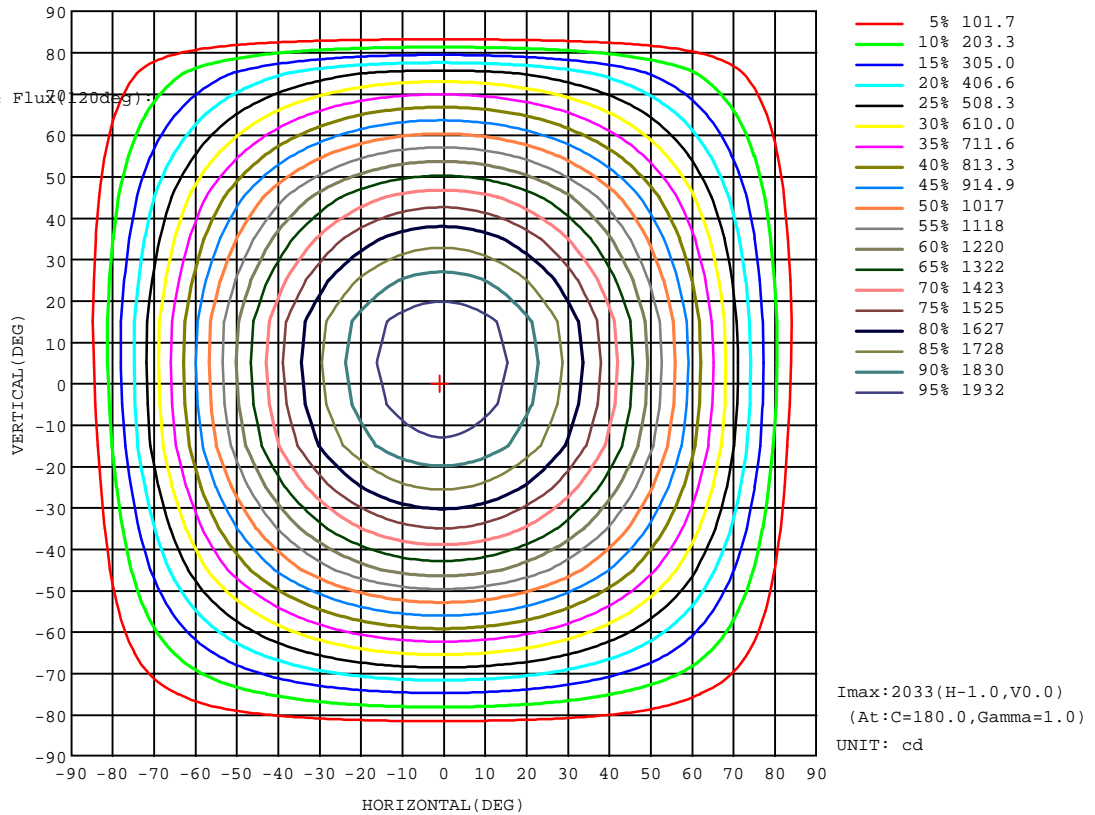
Test:U:219.6V I:0.2109A P:44.85W PF:0.9681 Lamp Flux:5758.23x1 lm		
NAME: 174-237_4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Tronix Lighting	SUR.:550*1150	PROTECTION ANGLE:

Conical surface Flux(90deg):

3102.9 lm  
%lum = 53.9%  
%lamp = 53.9%

Conical surface Flux(20deg):

4573 lm  
%lum = 79.4%  
%lamp = 79.4%



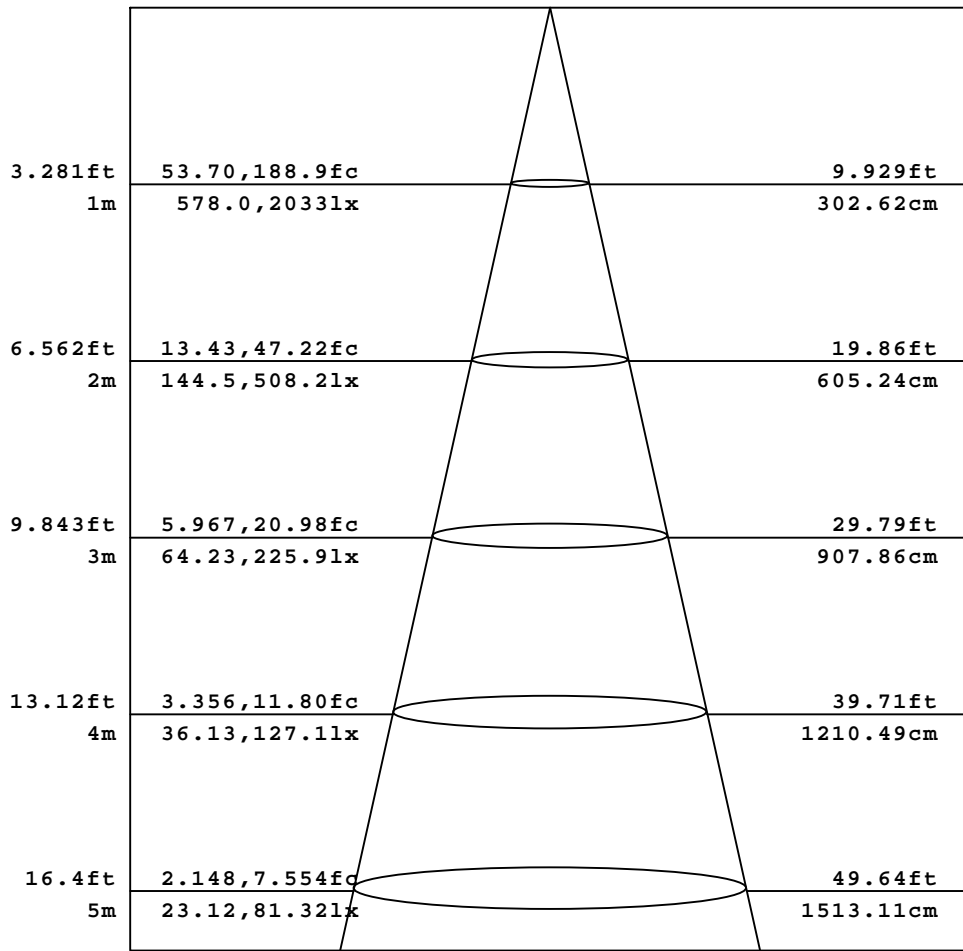
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2017-03-13

Range: 0 - 90DEG  
Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.286  
Humidity:65.0%  
Test Distance:13.690m [K=1.0000]  
Remarks: 174-237\_4000K

AAI Figure

Test:U:219.6V I:0.2109A P:44.85W PF:0.9681 Lamp Flux:5758.23x1 lm		
NAME: 174-237_4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Tronix Lighting	SUR.:550*1150	PROTECTION ANGLE:

Flux out:4306 lm



Height Eavg, Emax Angle:113.08deg Diameter

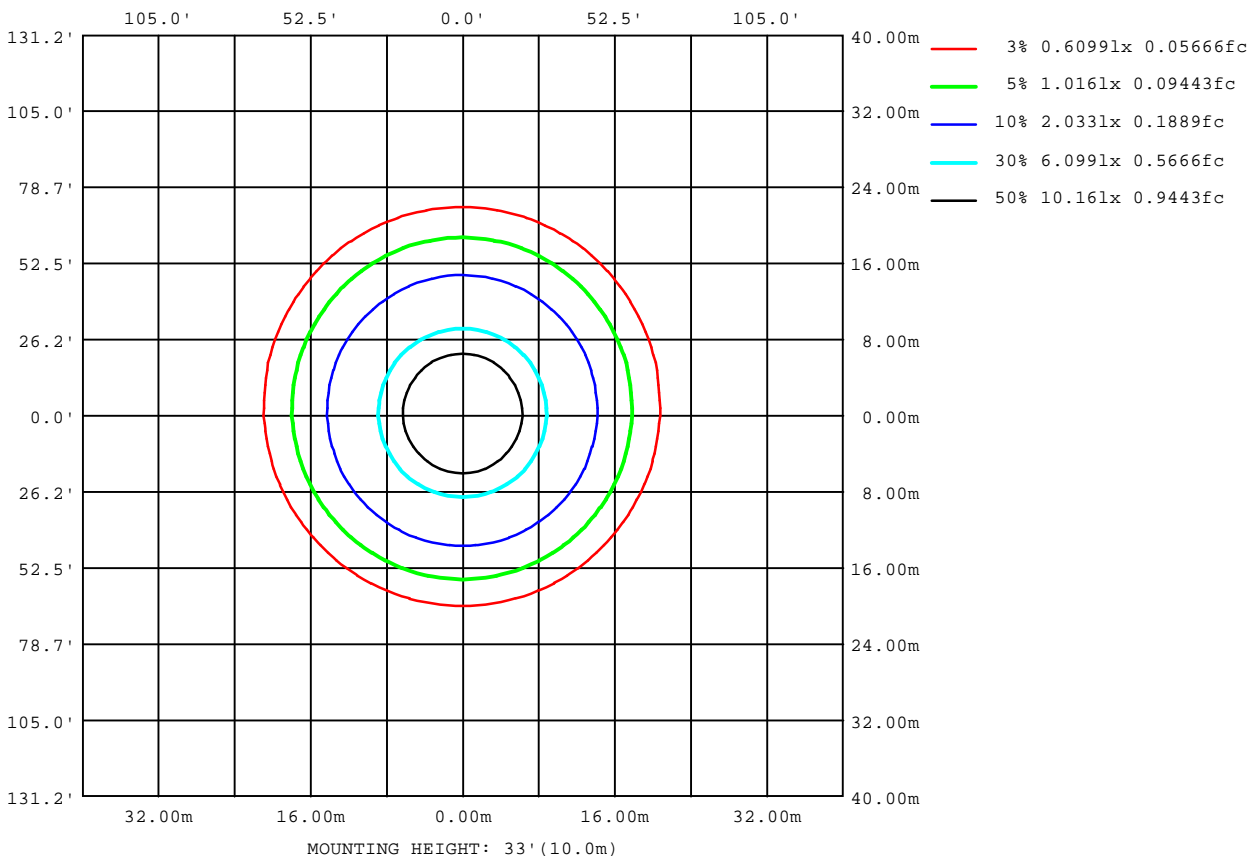
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-03-13

Log Range: 0 - 90DEG  
 Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.286  
 Humidity:65.0%  
 Test Distance:13.690m [K=1.0000]  
 Remarks: 174-237\_4000K

ISOLUX DIAGRAM

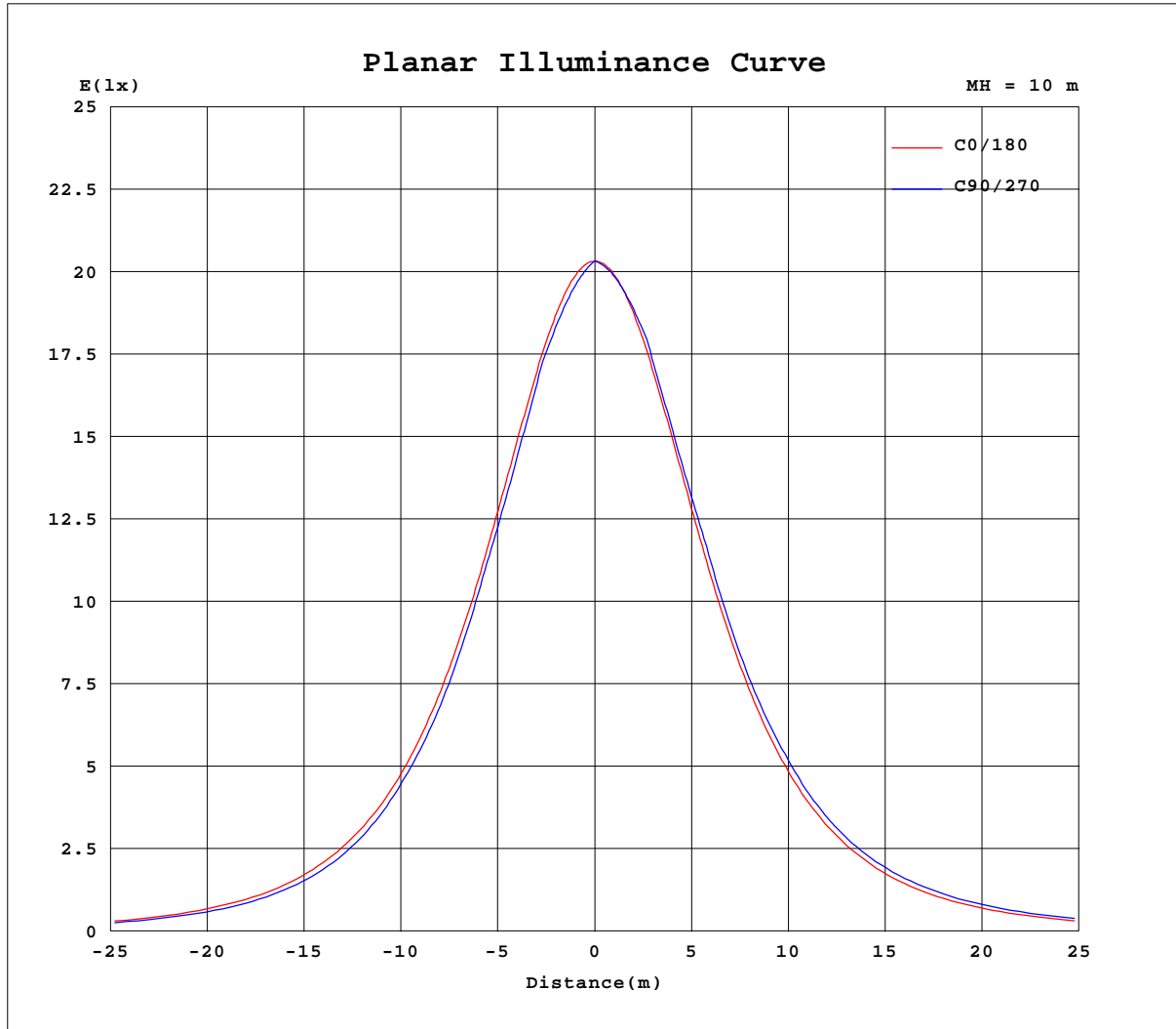
Test:U:219.6V I:0.2109A P:44.85W PF:0.9681 Lamp Flux:5758.23x1 lm		
NAME: 174-237_4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Tronix Lighting	SUR.:550*1150	PROTECTION ANGLE:



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-03-13

Log Range: 0 - 90DEG  
 Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.286  
 Humidity:65.0%  
 Test Distance:13.690m [K=1.0000]  
 Remarks: 174-237\_4000K

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2017-03-13

Log Range: 0 - 90DEG  
 Log Interval: 0.5DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.286  
 Humidity: 65.0%  
 Test Distance: 13.690m [K=1.0000]  
 Remarks: 174-237\_4000K

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.6V I:0.2109A P:44.85W PF:0.9681 Lamp Flux:5758.23x1 lm		
NAME: 174-237_4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Tronix Lighting	SUR.:550*1150	PROTECTION ANGLE:

Table--1

UNIT: cd

C( DEG) g (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033
5	2022	2019	2016	2013	2010	2008	2005	2003	2001	2000	1998	1997	1996	1995	1994	1994	1994	1994	1994
10	1994	1987	1982	1976	1972	1968	1965	1962	1960	1958	1956	1955	1955	1954	1954	1954	1954	1954	1955
15	1948	1938	1930	1924	1919	1914	1911	1909	1908	1908	1908	1909	1910	1910	1911	1912	1913	1914	1915
20	1886	1873	1864	1856	1851	1848	1846	1846	1848	1850	1848	1842	1837	1834	1831	1830	1829	1828	1829
25	1807	1793	1782	1774	1770	1768	1770	1773	1764	1756	1750	1746	1743	1742	1741	1741	1741	1741	1742
30	1714	1697	1685	1679	1677	1679	1674	1664	1656	1651	1649	1647	1647	1648	1649	1651	1652	1653	1654
35	1606	1588	1576	1571	1572	1567	1555	1547	1543	1542	1544	1546	1540	1534	1530	1527	1526	1525	1525
40	1485	1465	1455	1452	1451	1437	1428	1425	1426	1425	1415	1408	1403	1399	1397	1396	1396	1396	1396
45	1352	1331	1322	1324	1309	1299	1297	1299	1286	1277	1271	1267	1265	1264	1265	1265	1266	1267	1268
50	1209	1187	1181	1175	1161	1157	1157	1143	1134	1128	1127	1126	1123	1118	1113	1111	1109	1109	1109
55	1055	1033	1031	1016	1009	1007	992	984	981	980	971	965	960	956	953	951	950	950	950
60	892	871	867	854	853	837	829	828	818	811	805	801	798	796	794	791	791	791	791
65	725	705	695	693	678	670	664	656	650	645	641	639	636	633	631	628	627	627	627
70	551	536	525	515	507	501	494	490	486	482	478	475	471	469	466	464	463	462	463
75	382	363	350	341	336	334	332	330	327	322	318	313	309	306	303	300	299	298	298
80	222	190	182	182	184	185	183	179	173	151	124	98.0	74.0	52.6	34.3	19.6	8.80	2.22	0.00
85	69.7	55.2	58.2	60.2	54.8	29.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-03-13

g Range: 0 - 90DEG  
 Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.286  
 Humidity:65.0%  
 Test Distance:13.690m [K=1.0000]  
 Remarks: 174-237\_4000K

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.6V I:0.2109A P:44.85W PF:0.9681 Lamp Flux:5758.23x1 lm		
NAME: 174-237_4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Tronix Lighting	SUR.:550*1150	PROTECTION ANGLE:

Table--2

UNIT: cd

C( DEG) g (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033
5	1994	1995	1995	1996	1997	1998	1999	2000	2002	2004	2006	2008	2010	2013	2016	2019	2022	2025	2024
10	1956	1956	1956	1957	1957	1958	1959	1960	1962	1964	1966	1970	1973	1977	1982	1987	1993	2000	1998
15	1916	1916	1916	1915	1915	1914	1914	1914	1914	1915	1917	1919	1922	1927	1932	1939	1947	1957	1954
20	1830	1831	1832	1835	1839	1843	1849	1856	1858	1856	1856	1856	1858	1862	1867	1875	1885	1897	1894
25	1742	1743	1744	1745	1747	1751	1754	1759	1766	1775	1786	1783	1782	1783	1788	1795	1806	1820	1817
30	1655	1654	1654	1654	1655	1655	1656	1658	1663	1668	1677	1689	1694	1693	1695	1702	1713	1730	1726
35	1526	1528	1531	1535	1541	1547	1555	1554	1554	1556	1562	1571	1584	1591	1590	1595	1606	1624	1621
40	1397	1399	1401	1403	1407	1411	1418	1426	1437	1440	1440	1445	1455	1471	1473	1475	1486	1505	1502
45	1268	1269	1270	1271	1272	1275	1278	1283	1290	1301	1315	1314	1318	1330	1347	1345	1354	1374	1371
50	1110	1112	1115	1120	1125	1133	1138	1139	1143	1149	1158	1173	1176	1182	1198	1205	1211	1231	1230
55	951	953	955	959	963	968	975	983	994	997	1001	1010	1025	1030	1039	1056	1058	1078	1079
60	792	794	795	798	800	804	809	815	823	833	845	848	857	872	875	892	896	916	918
65	628	630	632	634	637	641	645	650	655	662	671	684	690	696	710	718	731	745	753
70	464	465	468	470	474	478	482	486	491	495	501	509	518	524	529	540	561	572	585
75	299	301	304	307	311	316	321	326	332	337	341	344	349	353	357	362	382	402	414
80	2.23	8.88	19.9	34.9	53.8	76.1	101	129	159	184	191	196	199	199	198	197	205	242	255
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.0	65.0	71.3	68.1	64.6	84.6	110
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.51	0.00

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-03-13

Range: 0 - 90DEG  
 Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.286  
 Humidity:65.0%  
 Test Distance:13.690m [K=1.0000]  
 Remarks: 174-237\_4000K

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.6V I:0.2109A P:44.85W PF:0.9681 Lamp Flux:5758.23x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Tronix Lighting	SUR.:550*1150	PROTECTION ANGLE:

Table--3

UNIT: cd

C( DEG) g (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033
5	2023	2022	2022	2021	2021	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2019	2019
10	1996	1995	1995	1995	1995	1996	1997	1999	2000	2001	2003	2004	2005	2005	2006	2006	2006	2006	2005
15	1953	1952	1953	1955	1957	1960	1964	1968	1972	1977	1981	1984	1988	1990	1992	1993	1993	1992	1990
20	1893	1893	1896	1901	1907	1914	1922	1930	1933	1931	1930	1929	1930	1929	1929	1928	1928	1927	1927
25	1817	1820	1826	1835	1845	1857	1855	1853	1854	1855	1856	1858	1860	1862	1863	1864	1863	1862	1861
30	1727	1733	1743	1756	1763	1761	1762	1765	1769	1774	1780	1785	1790	1794	1797	1799	1798	1797	1795
35	1624	1633	1648	1655	1654	1657	1663	1671	1681	1691	1691	1690	1690	1691	1691	1691	1689	1689	1687
40	1508	1522	1535	1533	1537	1547	1559	1568	1567	1569	1571	1574	1576	1579	1581	1581	1581	1579	1577
45	1381	1401	1400	1404	1416	1431	1432	1434	1438	1444	1450	1457	1463	1467	1470	1472	1472	1470	1466
50	1244	1256	1258	1270	1284	1284	1290	1298	1308	1319	1324	1325	1325	1326	1327	1327	1326	1325	1323
55	1098	1100	1110	1125	1127	1135	1148	1161	1163	1166	1169	1172	1176	1179	1180	1181	1181	1179	1176
60	935	940	957	960	971	988	991	995	1001	1008	1015	1021	1026	1031	1034	1035	1035	1033	1029
65	763	778	785	798	809	815	823	832	843	852	857	862	865	868	870	871	870	869	866
70	591	603	619	628	635	646	659	667	676	683	690	695	700	703	705	706	706	704	701
75	423	438	447	456	469	480	491	500	509	517	524	530	535	538	540	541	541	539	536
80	267	275	287	297	309	320	329	288	235	184	138	97.7	63.4	36.0	16.1	4.04	0.00	4.02	16.0
85	118	127	125	63.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-03-13

Range: 0 - 90DEG  
 Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.286  
 Humidity:65.0%  
 Test Distance:13.690m [K=1.0000]  
 Remarks: 174-237\_4000K

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.6V I:0.2109A P:44.85W PF:0.9681 Lamp Flux:5758.23x1 lm		
NAME: 174-237_4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Tronix Lighting	SUR.:550*1150	PROTECTION ANGLE:

Table--4

UNIT: cd

C( DEG) g (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033				
5	2019	2019	2019	2018	2018	2018	2018	2018	2018	2018	2018	2019	2020	2020	2021				
10	2004	2002	2001	1999	1997	1995	1994	1992	1991	1990	1989	1989	1989	1990	1992				
15	1988	1984	1980	1976	1971	1966	1961	1957	1952	1949	1946	1945	1943	1943	1945				
20	1926	1924	1924	1923	1924	1924	1922	1912	1903	1896	1889	1885	1882	1881	1882				
25	1858	1855	1852	1849	1846	1843	1842	1842	1844	1831	1820	1812	1806	1803	1803				
30	1790	1784	1778	1771	1764	1757	1752	1748	1746	1746	1739	1726	1715	1710	1709				
35	1686	1684	1682	1681	1680	1668	1657	1647	1640	1636	1636	1628	1613	1604	1602				
40	1573	1569	1564	1560	1556	1554	1554	1542	1528	1518	1513	1513	1499	1486	1481				
45	1461	1454	1447	1439	1430	1423	1417	1414	1413	1395	1382	1377	1376	1357	1349				
50	1320	1317	1314	1311	1304	1292	1280	1271	1264	1263	1247	1234	1230	1218	1206				
55	1172	1167	1162	1156	1151	1145	1142	1128	1114	1105	1102	1086	1073	1070	1053				
60	1025	1018	1011	1002	994	985	977	971	965	948	936	933	914	908	892				
65	862	857	852	845	838	827	817	805	794	786	773	759	755	737	725				
70	697	692	685	678	670	661	653	644	629	615	604	593	579	568	556				
75	532	527	520	513	504	495	486	475	464	452	437	423	412	401	387				
80	35.6	62.4	95.8	135	179	227	276	313	303	292	279	267	254	243	230				
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	57.9	110	110	99.1	88.1				
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-03-13

g Range: 0 - 90DEG  
 Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.286  
 Humidity:65.0%  
 Test Distance:13.690m [K=1.0000]  
 Remarks: 174-237\_4000K

Photometric Data Table [cd]

G/C	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0
0.0	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033
2.5	2030	2028	2027	2025	2023	2022	2021	2020	2018	2017
5.0	2022	2019	2016	2013	2010	2008	2005	2003	2001	2000
7.5	2010	2005	2001	1997	1993	1989	1986	1984	1981	1980
10.0	1994	1987	1982	1976	1972	1968	1965	1962	1960	1958
12.5	1973	1965	1958	1952	1947	1943	1939	1937	1935	1934
15.0	1948	1938	1930	1924	1919	1914	1911	1909	1908	1908
17.5	1919	1908	1899	1892	1886	1883	1880	1879	1879	1880
20.0	1886	1873	1864	1856	1851	1848	1846	1846	1848	1850
22.5	1848	1835	1825	1817	1812	1809	1809	1811	1814	1807
25.0	1807	1793	1782	1774	1770	1768	1770	1773	1764	1756
27.5	1762	1746	1735	1728	1724	1725	1728	1720	1711	1704
30.0	1714	1697	1685	1679	1677	1679	1674	1664	1656	1651
32.5	1661	1644	1632	1626	1626	1629	1616	1606	1600	1597
35.0	1606	1588	1576	1571	1572	1567	1555	1547	1543	1542
37.5	1547	1528	1517	1513	1516	1502	1492	1487	1485	1487
40.0	1485	1465	1455	1452	1451	1437	1428	1425	1426	1425
42.5	1420	1400	1390	1389	1381	1368	1363	1363	1362	1351
45.0	1352	1331	1322	1324	1309	1299	1297	1299	1286	1277
47.5	1282	1261	1253	1252	1236	1229	1229	1222	1210	1203
50.0	1209	1187	1181	1175	1161	1157	1157	1143	1134	1128
52.5	1132	1111	1107	1096	1085	1086	1075	1063	1057	1055
55.0	1055	1033	1031	1016	1009	1007	992.3	984.5	981.0	979.6
57.5	973.9	953.2	952.0	935.0	932.2	921.8	910.6	905.7	904.1	894.7
60.0	891.5	871.4	866.7	853.6	852.8	836.7	829.3	827.8	818.3	810.7
62.5	808.0	788.6	781.0	773.1	764.3	752.9	749.2	741.5	733.2	727.3
65.0	724.6	704.8	695.4	693.4	677.8	670.3	664.5	655.8	649.5	644.9
67.5	638.2	620.2	610.0	606.0	592.1	587.7	578.3	572.0	567.0	563.5
70.0	551.4	535.9	525.3	515.2	506.9	500.8	494.0	489.7	486.0	482.0
72.5	465.9	451.9	440.9	425.8	420.5	415.8	411.8	409.2	405.7	401.6
75.0	381.9	363.5	350.4	340.8	335.9	333.9	332.5	330.5	326.9	322.3
77.5	300.6	276.2	262.2	258.0	256.5	257.0	256.5	253.8	249.4	244.0
80.0	222.1	190.3	182.4	182.2	184.0	185.3	183.2	178.9	173.2	150.8
82.5	144.0	113.2	113.5	115.9	118.7	116.9	109.9	82.18	51.79	20.43
85.0	69.70	55.16	58.19	60.23	54.80	29.76	0	0	0	0
87.5	13.43	20.02	15.71	0	0	0	0	0	0	0
90.0	0.2578	0	0	0	0	0	0	0	0	0
G/C	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0	90.0	95.0
0.0	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033
2.5	2016	2016	2015	2014	2014	2014	2013	2013	2013	2014
5.0	1998	1997	1996	1995	1994	1994	1994	1994	1994	1994
7.5	1978	1977	1976	1975	1975	1974	1974	1974	1975	1975
10.0	1956	1955	1955	1954	1954	1954	1954	1954	1955	1956
12.5	1933	1933	1933	1933	1933	1934	1934	1935	1936	1936
15.0	1908	1909	1910	1911	1912	1913	1914	1915	1916	1916
17.5	1881	1883	1883	1879	1876	1874	1873	1872	1873	1873
20.0	1848	1842	1837	1834	1831	1830	1829	1828	1829	1830
22.5	1800	1794	1791	1788	1787	1785	1785	1785	1785	1786
25.0	1750	1746	1743	1742	1741	1741	1741	1741	1742	1742
27.5	1700	1697	1696	1695	1695	1696	1697	1697	1698	1698
30.0	1649	1647	1647	1648	1649	1651	1652	1653	1654	1655
32.5	1596	1597	1598	1601	1596	1593	1591	1590	1590	1591
35.0	1544	1546	1540	1534	1530	1527	1526	1525	1525	1526
37.5	1487	1478	1471	1466	1464	1462	1461	1460	1461	1462
40.0	1415	1408	1403	1399	1397	1396	1396	1396	1396	1397
42.5	1343	1338	1334	1332	1331	1330	1331	1331	1332	1333
45.0	1271	1267	1265	1264	1265	1265	1266	1267	1268	1268
47.5	1199	1197	1197	1197	1194	1191	1189	1188	1188	1190
50.0	1127	1126	1123	1118	1113	1111	1109	1109	1109	1110
52.5	1055	1047	1041	1037	1033	1031	1030	1029	1030	1031
55.0	971.1	964.7	959.9	956.4	953.5	951.0	950.1	949.7	950.2	951.1
57.5	887.5	882.6	878.7	876.0	873.9	871.0	870.5	870.3	870.8	871.6
60.0	804.9	800.8	797.8	795.8	794.4	791.2	790.9	790.8	791.5	792.0
62.5	722.8	719.6	717.4	715.7	713.7	709.9	709.9	708.7	709.3	710.0
65.0	641.4	638.7	635.6	633.0	631.1	627.7	626.8	626.6	627.1	627.8
67.5	559.8	556.4	553.3	550.7	548.6	545.7	544.7	544.4	544.9	545.7
70.0	478.2	474.7	471.5	468.7	466.4	463.8	462.6	462.3	462.7	463.6
72.5	397.5	393.6	390.0	387.0	384.4	381.9	380.6	380.1	380.5	381.4
75.0	317.6	313.1	309.0	305.5	302.6	300.1	298.6	298.0	298.3	299.3
77.5	238.4	233.1	214.7	195.7	179.4	166.2	156.6	150.8	149.1	151.5
80.0	123.8	97.97	74.01	52.63	34.32	19.59	8.801	2.216	0	2.227
82.5	0	0	0	0	0	0	0	0	0	0
85.0	0	0	0	0	0	0	0	0	0	0

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2017-03-13

g Range: 0 - 90DEG  
 g Interval: 0.5DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.286  
 Humidity: 65.0%  
 Test Distance: 13.690m [K=1.0000]  
 Remarks:

Photometric Data Table [cd]

87.5	0	0	0	0	0	0	0	0	0	0
90.0	0	0	0	0	0	0	0	0	0	0
G/C	100.0	105.0	110.0	115.0	120.0	125.0	130.0	135.0	140.0	145.0
0.0	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033
2.5	2014	2014	2015	2015	2016	2017	2018	2018	2020	2021
5.0	1995	1995	1996	1997	1998	1999	2000	2002	2004	2006
7.5	1975	1976	1976	1977	1978	1980	1981	1983	1985	1987
10.0	1956	1956	1957	1957	1958	1959	1960	1962	1964	1966
12.5	1936	1936	1936	1936	1937	1937	1938	1939	1941	1943
15.0	1916	1916	1915	1915	1914	1914	1914	1914	1915	1917
17.5	1875	1877	1880	1884	1889	1890	1888	1888	1887	1887
20.0	1831	1832	1835	1839	1843	1849	1856	1858	1856	1856
22.5	1787	1788	1790	1793	1797	1802	1808	1815	1824	1822
25.0	1743	1744	1745	1747	1751	1754	1759	1766	1775	1786
27.5	1699	1699	1700	1701	1703	1705	1709	1715	1723	1733
30.0	1654	1654	1654	1655	1655	1656	1658	1663	1668	1677
32.5	1593	1596	1601	1607	1606	1606	1607	1609	1613	1620
35.0	1528	1531	1535	1541	1547	1555	1554	1554	1556	1562
37.5	1464	1466	1470	1474	1479	1487	1497	1498	1498	1502
40.0	1399	1401	1403	1407	1411	1418	1426	1437	1440	1440
42.5	1334	1335	1337	1340	1343	1348	1355	1364	1376	1378
45.0	1269	1270	1271	1272	1275	1278	1283	1290	1301	1315
47.5	1192	1196	1201	1205	1206	1208	1211	1216	1225	1237
50.0	1112	1115	1120	1125	1133	1138	1139	1143	1149	1158
52.5	1033	1035	1039	1044	1050	1058	1068	1069	1073	1080
55.0	953.0	955.2	958.6	962.5	968.0	975.0	983.4	994.3	996.7	1001
57.5	873.2	875.1	878.0	881.4	886.1	891.8	899.3	908.3	919.8	922.5
60.0	793.5	795.2	797.6	800.4	804.4	809.2	815.4	823.1	833.0	845.0
62.5	711.7	713.7	716.3	719.5	723.1	726.9	732.1	738.6	746.6	757.5
65.0	629.5	631.5	634.1	637.3	641.1	645.2	649.6	654.9	661.6	670.5
67.5	547.4	549.5	552.2	555.4	559.2	563.3	567.6	572.2	578.0	585.2
70.0	465.2	467.5	470.5	473.7	477.6	481.9	486.3	490.8	495.4	501.5
72.5	383.2	385.7	388.8	392.3	396.4	401.0	405.8	410.6	415.5	419.6
75.0	301.1	303.9	307.3	311.2	315.7	320.7	326.1	331.6	337.1	341.5
77.5	157.9	168.4	182.6	200.1	220.7	240.9	247.2	253.6	260.0	265.2
80.0	8.878	19.85	34.94	53.81	76.10	101.4	129.1	158.8	184.2	190.6
82.5	0	0	0	0	0	0	0	21.53	55.28	89.21
85.0	0	0	0	0	0	0	0	0	0	0
87.5	0	0	0	0	0	0	0	0	0	0
90.0	0	0	0	0	0	0	0	0	0	0
G/C	150.0	155.0	160.0	165.0	170.0	175.0	180.0	185.0	190.0	195.0
0.0	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033
2.5	2022	2023	2025	2026	2028	2030	2031	2031	2030	2030
5.0	2008	2010	2013	2016	2019	2022	2025	2024	2023	2022
7.5	1990	1994	1997	2001	2005	2010	2015	2013	2012	2011
10.0	1970	1973	1977	1982	1987	1993	2000	1998	1996	1995
12.5	1946	1950	1954	1960	1966	1973	1981	1978	1977	1976
15.0	1919	1922	1927	1932	1939	1947	1957	1954	1953	1952
17.5	1889	1892	1896	1902	1909	1918	1929	1926	1925	1925
20.0	1856	1858	1862	1867	1875	1885	1897	1894	1893	1893
22.5	1821	1821	1824	1829	1837	1848	1861	1857	1857	1858
25.0	1783	1782	1783	1788	1795	1806	1820	1817	1817	1820
27.5	1742	1739	1739	1743	1750	1761	1777	1773	1774	1778
30.0	1689	1694	1693	1695	1702	1713	1730	1726	1727	1733
32.5	1631	1646	1643	1644	1650	1661	1678	1675	1677	1684
35.0	1571	1584	1591	1590	1595	1606	1624	1621	1624	1633
37.5	1509	1521	1536	1533	1537	1548	1567	1563	1567	1579
40.0	1445	1455	1471	1473	1475	1486	1505	1502	1508	1522
42.5	1380	1387	1401	1411	1412	1421	1441	1438	1446	1462
45.0	1314	1318	1330	1347	1345	1354	1374	1371	1381	1401
47.5	1246	1248	1257	1275	1276	1283	1304	1302	1313	1331
50.0	1173	1176	1182	1198	1205	1211	1231	1230	1244	1256
52.5	1092	1104	1106	1119	1131	1136	1156	1156	1172	1179
55.0	1010	1025	1030	1039	1056	1058	1078	1079	1098	1100
57.5	928.4	940.5	952.2	957.3	977.4	977.9	997.7	999.6	1021	1020
60.0	847.6	856.6	871.8	875.2	891.6	896.4	915.5	918.3	935.5	939.9
62.5	768.7	772.8	783.7	792.7	804.9	813.6	831.1	835.9	849.5	858.8
65.0	684.0	690.3	696.1	710.0	717.6	730.6	745.1	753.2	762.8	777.8
67.5	595.4	607.1	609.5	620.5	629.4	646.2	658.6	669.3	677.3	690.8
70.0	508.7	517.7	524.4	529.4	540.5	561.3	572.2	585.5	591.3	603.0
72.5	424.4	431.7	437.9	441.0	451.6	474.6	486.2	501.3	508.3	518.2
75.0	343.9	348.9	352.6	356.6	361.6	382.1	402.3	414.4	423.1	438.3
77.5	268.9	271.2	272.2	274.2	277.1	291.5	323.5	332.3	341.9	354.9

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2017-03-13

g Range: 0 - 90DEG  
 g Interval: 0.5DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.286  
 Humidity: 65.0%  
 Test Distance: 13.690m [K=1.0000]  
 Remarks: 174-237\_4000K

Photometric Data Table [cd]

80.0	195.9	198.8	198.7	197.6	197.5	205.0	242.2	254.5	267.0	275.2
82.5	121.8	129.8	132.0	129.9	126.4	126.0	160.3	179.5	189.0	199.7
85.0	0	34.02	65.04	71.28	68.06	64.63	84.64	110.2	117.6	127.2
87.5	0	0	0	0	21.16	26.49	23.04	44.81	45.24	0
90.0	0	0	0	0	0	0	2.511	0	0	0
G/C	200.0	205.0	210.0	215.0	220.0	225.0	230.0	235.0	240.0	245.0
0.0	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033
2.5	2029	2029	2028	2028	2028	2028	2027	2027	2027	2027
5.0	2022	2021	2021	2020	2020	2020	2020	2020	2020	2020
7.5	2011	2010	2010	2009	2010	2010	2011	2011	2012	2012
10.0	1995	1995	1995	1996	1997	1999	2000	2001	2003	2004
12.5	1976	1977	1978	1980	1982	1984	1987	1990	1992	1994
15.0	1953	1955	1957	1960	1964	1968	1972	1977	1981	1984
17.5	1926	1929	1934	1938	1944	1950	1957	1963	1966	1965
20.0	1896	1901	1907	1914	1922	1930	1933	1931	1930	1929
22.5	1863	1869	1877	1887	1898	1896	1894	1893	1894	1894
25.0	1826	1835	1845	1857	1855	1853	1854	1855	1856	1858
27.5	1786	1797	1810	1811	1809	1810	1812	1815	1818	1822
30.0	1743	1756	1763	1761	1762	1765	1769	1774	1780	1785
32.5	1697	1713	1709	1710	1713	1718	1725	1733	1741	1748
35.0	1648	1655	1654	1657	1663	1671	1681	1691	1691	1690
37.5	1597	1595	1597	1602	1611	1623	1632	1631	1631	1632
40.0	1535	1533	1537	1547	1559	1568	1567	1569	1571	1574
42.5	1468	1470	1477	1489	1502	1501	1503	1507	1511	1515
45.0	1400	1404	1416	1431	1432	1434	1438	1444	1450	1457
47.5	1330	1337	1353	1359	1361	1366	1373	1382	1390	1399
50.0	1258	1270	1284	1284	1290	1298	1308	1319	1324	1325
52.5	1185	1201	1206	1210	1219	1230	1244	1245	1246	1248
55.0	1110	1125	1127	1135	1148	1161	1163	1166	1169	1172
57.5	1035	1042	1049	1061	1076	1078	1082	1087	1092	1097
60.0	956.8	959.7	971.0	987.9	990.8	995.3	1001	1008	1015	1021
62.5	870.3	877.9	894.0	901.1	906.2	913.5	921.6	930.1	938.2	945.2
65.0	784.6	798.3	809.4	814.6	822.6	832.4	842.5	851.7	856.8	861.5
67.5	700.5	718.3	721.2	729.9	740.4	752.2	760.3	767.1	773.0	778.2
70.0	618.8	627.8	635.2	646.3	658.7	667.5	675.6	683.1	689.7	695.1
72.5	533.1	540.3	551.4	563.4	573.8	583.2	591.9	599.8	606.6	612.3
75.0	446.5	456.4	468.7	479.9	490.6	500.2	509.1	517.1	524.1	529.9
77.5	365.3	375.1	387.4	398.8	409.2	418.5	427.2	435.1	401.1	363.2
80.0	286.9	296.6	309.0	319.7	329.2	288.4	234.7	184.3	138.3	97.70
82.5	210.5	221.5	224.9	163.0	100.4	39.09	0	0	0	0
85.0	125.2	63.85	0	0	0	0	0	0	0	0
87.5	0	0	0	0	0	0	0	0	0	0
90.0	0	0	0	0	0	0	0	0	0	0
G/C	250.0	255.0	260.0	265.0	270.0	275.0	280.0	285.0	290.0	295.0
0.0	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033
2.5	2027	2027	2026	2026	2026	2026	2026	2026	2026	2026
5.0	2020	2020	2020	2020	2020	2019	2019	2019	2019	2019
7.5	2012	2013	2013	2013	2013	2013	2012	2012	2011	2010
10.0	2005	2005	2006	2006	2006	2006	2005	2004	2002	2001
12.5	1997	1998	1999	1999	2000	1999	1998	1996	1994	1991
15.0	1988	1990	1992	1993	1993	1992	1990	1988	1984	1980
17.5	1963	1962	1962	1961	1961	1960	1960	1959	1959	1959
20.0	1930	1929	1929	1928	1928	1927	1927	1926	1924	1924
22.5	1895	1896	1896	1896	1896	1895	1894	1892	1890	1888
25.0	1860	1862	1863	1864	1863	1862	1861	1858	1855	1852
27.5	1825	1829	1830	1831	1831	1830	1828	1824	1820	1815
30.0	1790	1794	1797	1799	1798	1797	1795	1790	1784	1778
32.5	1747	1746	1746	1745	1744	1743	1743	1742	1741	1741
35.0	1690	1691	1691	1691	1689	1689	1687	1686	1684	1682
37.5	1634	1635	1636	1636	1635	1634	1632	1630	1626	1623
40.0	1576	1579	1581	1581	1581	1579	1577	1573	1569	1564
42.5	1519	1523	1525	1527	1526	1525	1521	1517	1512	1506
45.0	1463	1467	1470	1472	1472	1470	1466	1461	1454	1447
47.5	1400	1400	1400	1400	1399	1398	1396	1394	1392	1388
50.0	1325	1326	1327	1327	1326	1325	1323	1320	1317	1314
52.5	1250	1253	1254	1254	1253	1252	1250	1246	1242	1238
55.0	1176	1179	1180	1181	1181	1179	1176	1172	1167	1162
57.5	1101	1105	1107	1108	1108	1106	1103	1098	1093	1086
60.0	1026	1031	1034	1035	1035	1033	1029	1025	1018	1011
62.5	948.6	951.2	952.6	952.9	952.6	951.1	948.2	944.8	940.5	935.4
65.0	865.5	868.3	870.0	870.5	870.3	868.7	865.7	861.9	857.4	851.6
67.5	782.4	785.6	787.5	788.2	788.0	786.3	783.3	779.3	774.3	768.3
70.0	699.7	702.9	705.0	705.9	705.7	704.0	700.9	696.8	691.6	685.3

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2017-03-13

g Range: 0 - 90DEG  
 g Interval: 0.5DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.286  
 Humidity: 65.0%  
 Test Distance: 13.690m [K=1.0000]  
 Remarks: 174-237\_4000K

Photometric Data Table [cd]

72.5	617.1	620.4	622.6	623.5	623.3	621.6	618.7	614.4	609.1	602.7
75.0	534.6	538.0	540.2	541.2	541.0	539.3	536.4	532.2	526.8	520.4
77.5	331.1	305.2	286.3	274.7	270.5	273.7	284.3	301.8	326.0	356.1
80.0	63.37	35.99	16.10	4.037	0	4.022	15.98	35.58	62.38	95.77
82.5	0	0	0	0	0	0	0	0	0	0
85.0	0	0	0	0	0	0	0	0	0	0
87.5	0	0	0	0	0	0	0	0	0	0
90.0	0	0	0	0	0	0	0	0	0	0
G/C	300.0	305.0	310.0	315.0	320.0	325.0	330.0	335.0	340.0	345.0
0.0	2033	2033	2033	2033	2033	2033	2033	2033	2033	2033
2.5	2026	2026	2026	2026	2027	2027	2027	2027	2028	2028
5.0	2018	2018	2018	2018	2018	2018	2018	2018	2019	2020
7.5	2009	2008	2008	2007	2006	2006	2005	2005	2006	2006
10.0	1999	1997	1995	1994	1992	1991	1990	1989	1989	1989
12.5	1988	1985	1982	1978	1976	1973	1971	1969	1968	1968
15.0	1976	1971	1966	1961	1957	1952	1949	1946	1945	1943
17.5	1959	1956	1949	1942	1935	1930	1924	1919	1916	1914
20.0	1923	1924	1924	1922	1912	1903	1896	1889	1885	1882
22.5	1886	1885	1885	1885	1886	1875	1865	1856	1850	1845
25.0	1849	1846	1843	1842	1842	1844	1831	1820	1812	1806
27.5	1810	1805	1801	1797	1796	1796	1795	1781	1770	1762
30.0	1771	1764	1757	1752	1748	1746	1746	1739	1726	1715
32.5	1731	1722	1713	1705	1698	1693	1692	1694	1678	1666
35.0	1681	1680	1668	1657	1647	1640	1636	1636	1628	1613
37.5	1621	1619	1619	1608	1595	1585	1578	1575	1576	1558
40.0	1560	1556	1554	1554	1542	1528	1518	1513	1513	1499
42.5	1499	1494	1488	1485	1485	1471	1457	1448	1446	1439
45.0	1439	1430	1423	1417	1414	1413	1395	1382	1377	1376
47.5	1378	1368	1357	1349	1342	1340	1332	1315	1306	1305
50.0	1311	1304	1292	1280	1271	1264	1263	1247	1234	1230
52.5	1233	1230	1227	1212	1199	1189	1184	1179	1160	1152
55.0	1156	1151	1145	1142	1128	1114	1105	1102	1086	1073
57.5	1079	1072	1065	1059	1055	1039	1026	1019	1011	994.4
60.0	1002	993.9	985.0	977.3	970.8	965.3	947.6	936.0	933.4	913.9
62.5	926.4	916.3	905.5	896.3	887.4	879.7	870.4	853.9	845.7	833.8
65.0	845.3	838.1	827.1	816.9	805.0	794.3	786.1	773.2	759.5	754.8
67.5	761.4	753.3	745.3	738.1	724.1	710.9	699.6	691.6	674.8	668.6
70.0	678.1	669.7	661.0	653.4	643.7	629.3	615.3	603.8	592.5	579.4
72.5	595.2	586.8	577.7	568.9	558.4	547.4	533.3	518.8	507.7	493.4
75.0	512.9	504.4	495.2	485.7	474.9	463.5	451.6	437.5	423.0	411.8
77.5	391.4	422.7	413.5	403.7	393.2	382.0	370.2	357.7	343.6	330.2
80.0	135.0	179.0	226.6	276.4	313.0	302.6	291.6	279.0	266.7	253.7
82.5	0	0	0	37.45	95.29	152.9	208.2	203.8	191.7	180.1
85.0	0	0	0	0	0	0	0	57.86	110.1	109.6
87.5	0	0	0	0	0	0	0	0	0	0
90.0	0	0	0	0	0	0	0	0	0	0
G/C	350.0	355.0								
0.0	2033	2033								
2.5	2029	2029								
5.0	2020	2021								
7.5	2007	2009								
10.0	1990	1992								
12.5	1969	1970								
15.0	1943	1945								
17.5	1914	1916								
20.0	1881	1882								
22.5	1844	1845								
25.0	1803	1803								
27.5	1758	1758								
30.0	1710	1709								
32.5	1659	1657								
35.0	1604	1602								
37.5	1547	1543								
40.0	1486	1481								
42.5	1423	1416								
45.0	1357	1349								
47.5	1288	1278								
50.0	1218	1206								
52.5	1145	1130								
55.0	1070	1053								
57.5	992.3	973.1								
60.0	907.6	891.9								
62.5	821.9	809.2								

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2017-03-13

g Range: 0 - 90DEG  
 g Interval: 0.5DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.286  
 Humidity: 65.0%  
 Test Distance: 13.690m [K=1.0000]  
 Remarks:

## Photometric Data Table [cd]

65.0	736.7	725.5
67.5	651.2	641.0
70.0	567.6	556.5
72.5	486.1	472.2
75.0	401.2	386.5
77.5	318.5	306.4
80.0	243.0	230.1
82.5	167.2	156.1
85.0	99.10	88.13
87.5	33.52	30.56
90.0	0	0

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2017-03-13

g Range: 0 - 90DEG  
g Interval: 0.5DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.286  
Humidity: 65.0%  
Test Distance: 13.690m [K=1.0000]  
Remarks: 174-237\_4000K