

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

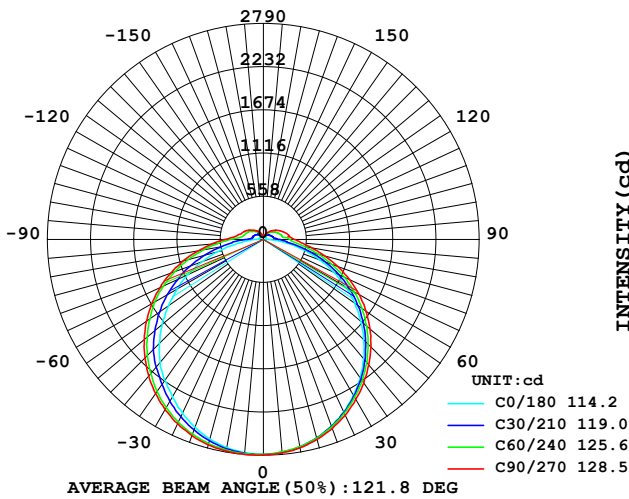
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

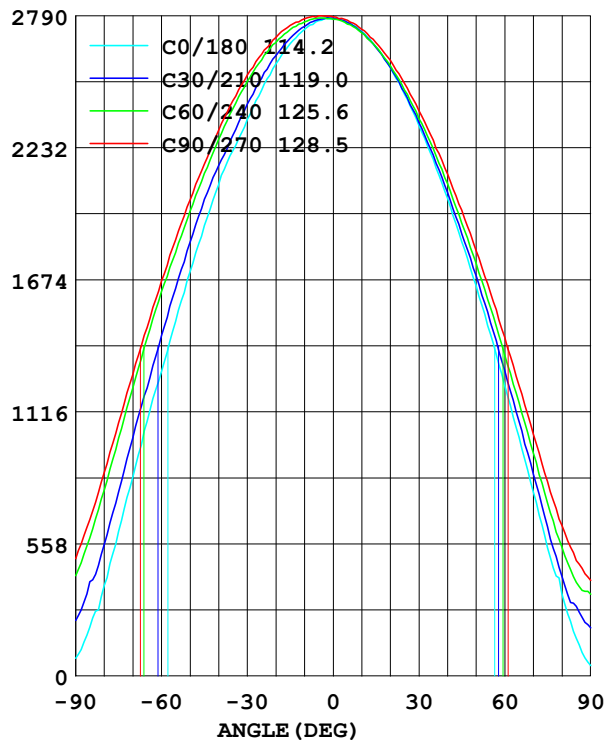
MANUFACTURER: Tronix Lighting B.V.		
Address: Vluchtoord 41, 5406XP, Uden		
Article: 952-316	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:

DATA OF LAMP		Imax (cd)	2790	S/MH (C0/180)	1.26
MODEL		EFFICIENCY (%)	100.0	S/MH (C90/270)	1.35
NOMINAL POWER(W)	78	TOTAL FLUX(lm)	9998.1	Voltage (V)	230.1
RATED VOLTAGE (V)	230	EFFICIENCY (lm/W)	132.3	Current (A)	0.343
NOMINAL FLUX(lm)	9998.1	up (%)	9.5	Power (W)	75.57
LAMPS QUANTITY	1	down (%)	90.5	Power Factor (PF)	0.955
TEST VOLTAGE (V)	230.1	Effective Flux(lm)	9222.3	EEI	0.112

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2018 07! 23"

Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:11.000 m
 Remarks:

Color Temperature Data List

Report number:

MANUFACTURER: Tronix Lighting B.V.		
Address: Vluchtoord 41, 5406XP, Uden		
Article: 952-316 72W 120°	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:

Test System:HOPOO HPG1800
Temperature:25.3DEG
Operators:
Test Date:2018 07! 23"

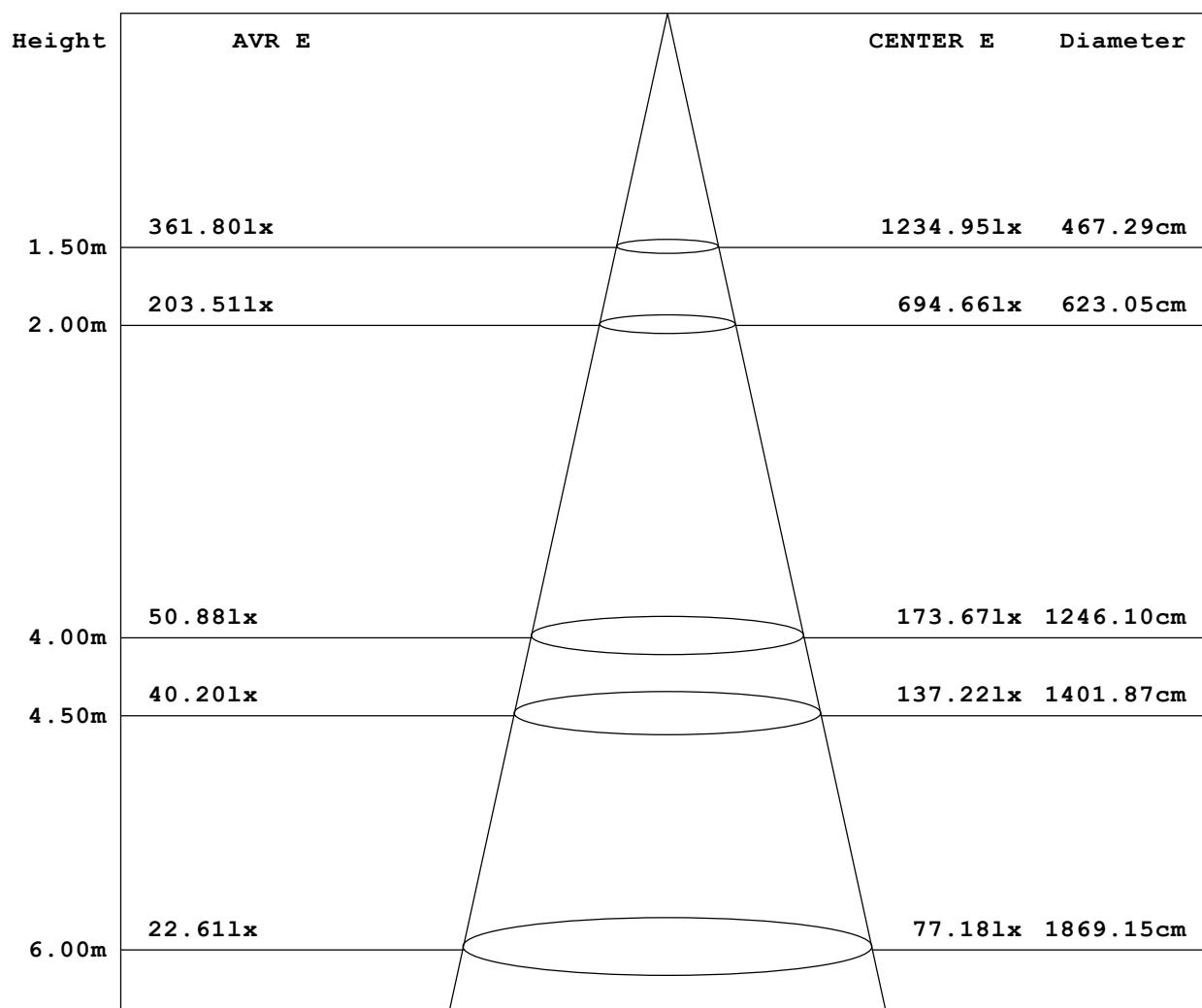
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Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

AVERAGE AND CENTER E Figure

Report number:

MANUFACTURER: Tronix Lighting B.V.		
Address: Vluchtoord 41, 5406XP, Uden		
Article: 952-316 72W 120°	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:



Angle: 114.6deg

Test System: HOPOO HPG1800
 Temperature: 25.3DEG
 Operators:
 Test Date: 2018 07! 23"

Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity: 65.0%
 Test Distance: 11.000 m
 Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER: Tronix Lighting B.V.		
Address: Vluchtoord 41, 5406XP, Uden		
Article: 952-316 72W 120°	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:

	C0	C45	C90	C135	C180	C225	C270	C315		zone	total
5.0	2768	2777	2789	2770	2761	2758	2770	2760	0- 5	66.30	66.30
10.0	2732	2754	2776	2744	2724	2718	2733	2724	5- 10	196.9	263.2
15.0	2671	2713	2749	2702	2657	2656	2676	2665	10- 15	321.6	584.9
20.0	2585	2648	2698	2636	2571	2575	2600	2589	15- 20	436.5	1022
25.0	2476	2564	2627	2550	2458	2471	2504	2489	20- 25	537.9	1559
30.0	2351	2464	2539	2447	2326	2347	2388	2366	25- 30	622.9	2182
35.0	2220	2341	2430	2324	2183	2214	2264	2232	30- 35	689.1	2872
40.0	2074	2210	2304	2183	2016	2060	2119	2090	35- 40	735.7	3607
45.0	1903	2069	2163	2035	1835	1891	1969	1935	40- 45	761.2	4369
50.0	1707	1897	2010	1867	1650	1718	1797	1758	45- 50	763.6	5132
55.0	1498	1713	1842	1686	1443	1524	1618	1566	50- 55	743.2	5875
60.0	1287	1531	1669	1501	1228	1325	1433	1364	55- 60	701.9	6577
65.0	1075	1322	1471	1298	1010	1116	1227	1157	60- 65	640.3	7218
70.0	837.1	1110	1272	1085	776.0	895.3	1021	933.7	65- 70	560.2	7778
75.0	612.3	892.0	1070	875.4	541.4	680.6	820.8	716.2	70- 75	464.6	8243
80.0	381.3	669.9	858.9	659.2	346.5	482.6	635.6	512.3	75- 80	360.7	8603
85.0	206.0	490.9	660.5	485.8	158.9	344.7	487.6	364.6	80- 85	261.7	8865
90.0	74.89	328.9	495.9	329.2	44.40	274.5	404.1	287.3	85- 90	186.8	9052
95.0	59.89	234.4	381.1	230.8	33.75	235.5	353.0	261.2	90- 95	140.7	9193
100.0	65.82	206.6	335.8	206.4	34.96	191.5	333.3	219.7	95-100	114.2	9307
105.0	58.44	196.5	298.1	196.8	35.33	182.8	309.2	208.1	100-105	104.8	9412
110.0	56.38	187.9	280.3	189.4	38.35	172.6	282.5	197.0	105-110	96.67	9509
115.0	53.23	175.8	260.0	176.3	38.84	158.8	256.1	178.5	110-115	87.14	9596
120.0	55.17	165.2	237.0	164.6	39.68	146.6	235.7	164.2	115-120	77.64	9673
125.0	51.90	145.5	216.4	152.3	42.34	136.0	209.5	146.1	120-125	67.84	9741
130.0	49.36	132.6	191.0	138.4	41.50	122.4	184.4	130.9	125-130	57.91	9799
135.0	51.06	120.7	171.4	125.5	44.40	107.9	162.1	114.6	130-135	48.43	9848
140.0	47.18	107.4	149.9	114.9	42.71	96.86	142.7	98.43	135-140	39.73	9887
145.0	45.61	98.31	130.0	102.6	46.58	83.73	119.9	90.68	140-145	32.17	9919
150.0	45.25	89.96	112.6	90.38	42.34	72.66	99.09	78.16	145-150	25.18	9945
155.0	46.94	79.55	96.19	82.09	44.64	63.22	81.55	66.85	150-155	19.05	9964
160.0	47.43	69.75	75.38	67.15	41.01	59.47	62.91	61.40	155-160	13.97	9978
165.0	46.82	59.28	60.50	61.77	41.74	54.08	50.57	53.90	160-165	9.557	9987
170.0	44.04	52.81	47.79	50.88	41.62	51.72	44.89	52.87	165-170	6.188	9993
175.0	45.61	52.09	40.05	49.54	42.47	52.33	47.91	56.02	170-175	3.527	9997
180.0	43.19	54.32	44.16	51.12	46.94	54.75	49.36	54.93	175-180	1.174	9998
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2018 07! 23"

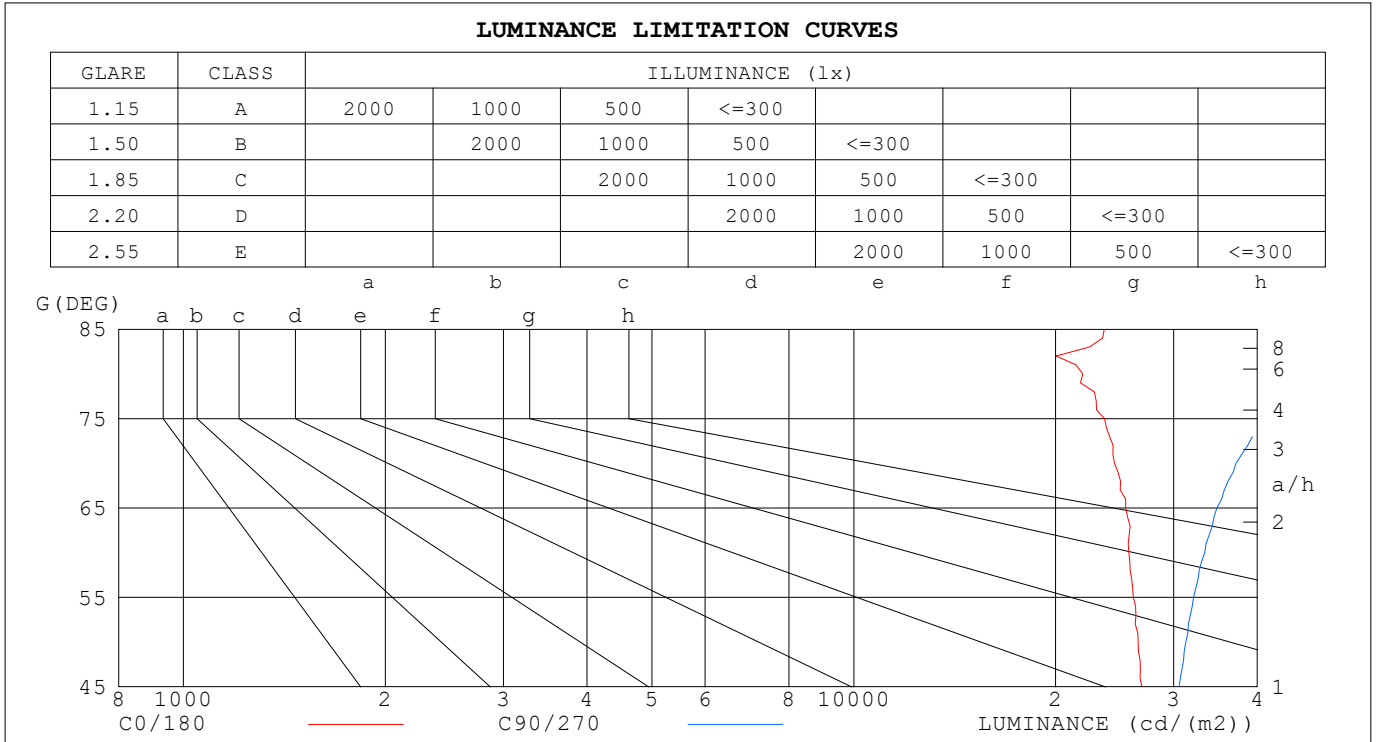
Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:11.000 m
 Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINANCE LIMITATION CURVES

Report number:

MANUFACTURER: Tronix Lighting B.V.		
Address: Vluchtoord 41, 5406XP, Uden		
Article: 952-316 72W 120°	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:



LUMINANCE cd/m2		
G (DEG)	C0/180	C90/270
85	23643	75788
80	21963	49467
75	23661	41332
70	24478	37196
65	25444	34818
60	25734	33379
55	26114	32120
50	26559	31273
45	26919	30584

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 Temperature:25.3DEG
 Operators:
 Test Date:2018 07! 23"

Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:11.000 m
 Remarks:

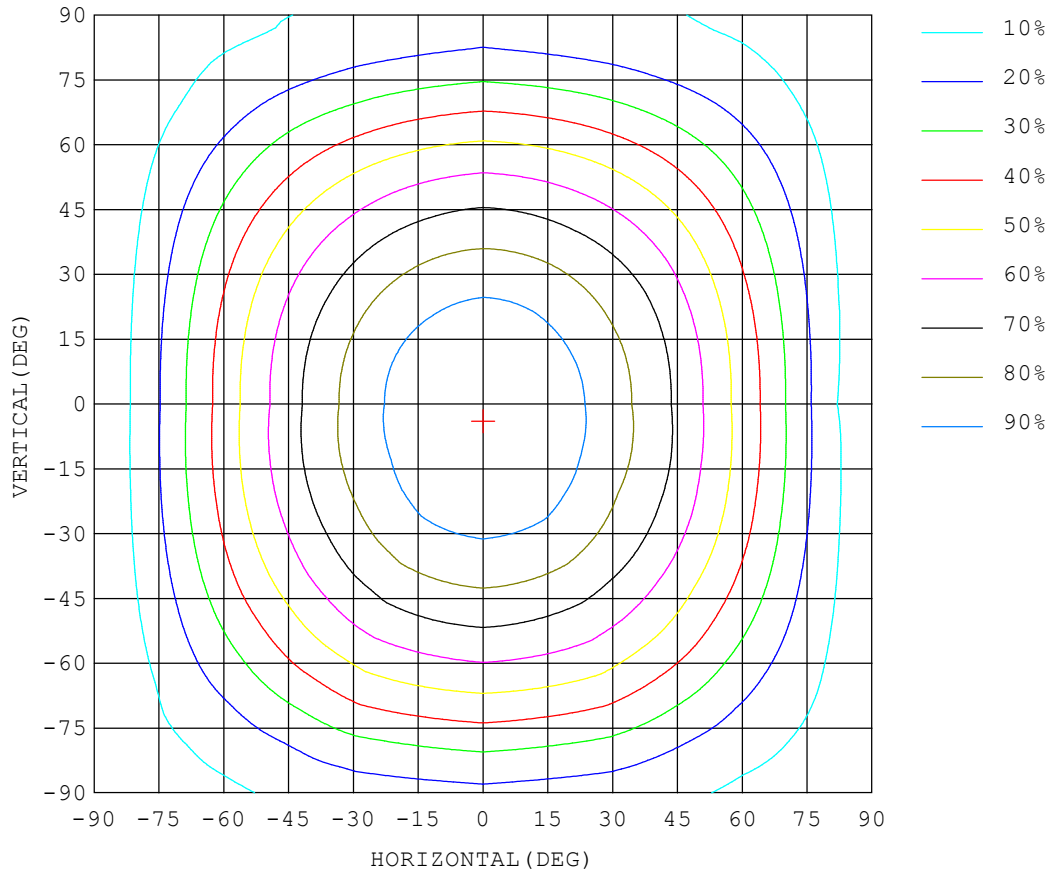
HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: Tronix Lighting B.V.		
Address: Vluchtoord 41, 5406XP, Uden		
Article: 952-316 72W 120°	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:

UNIT: cd



Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2018 07! 23"

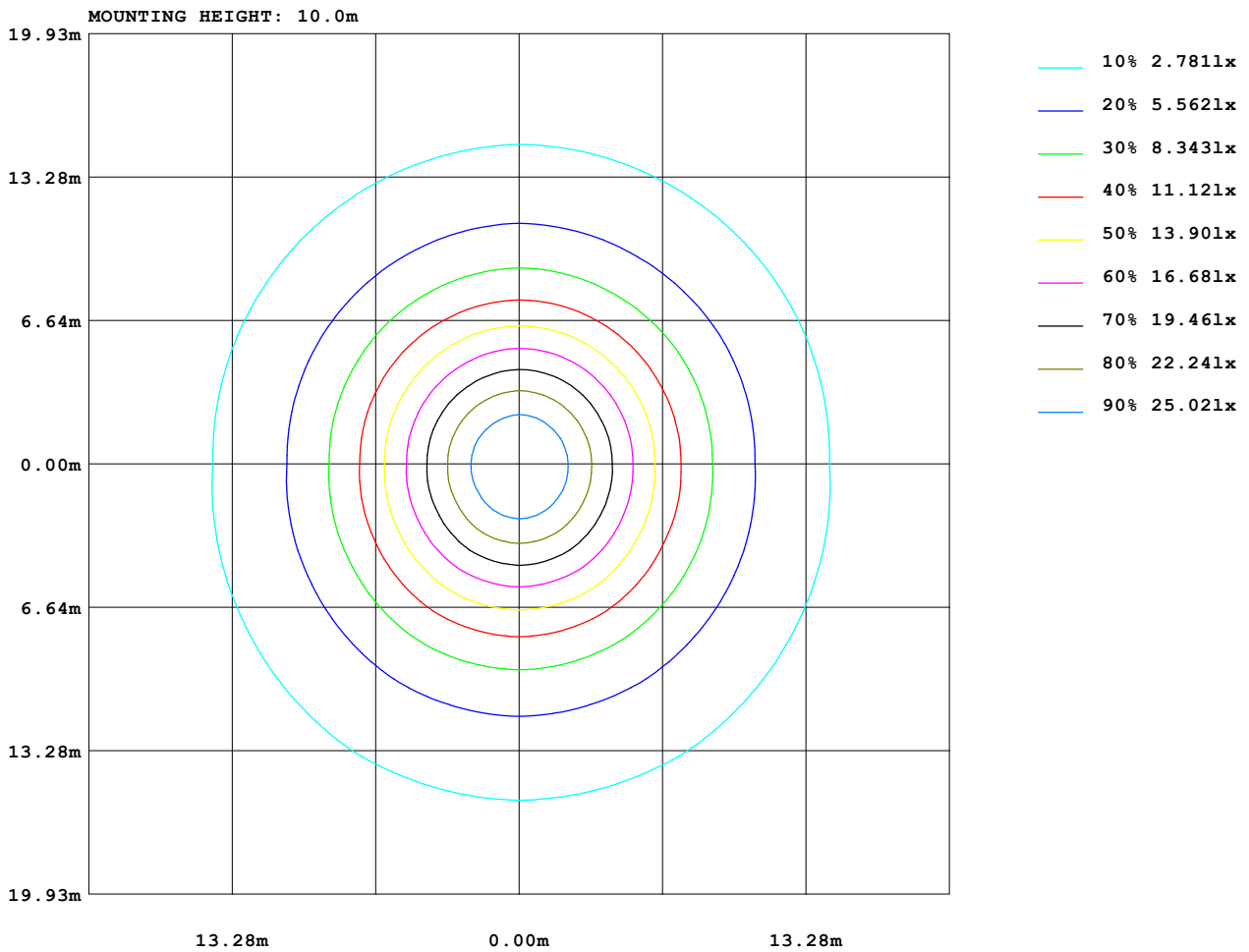
Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:11.000 m
 Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

Report number:

MANUFACTURER: Tronix Lighting B.V.		
Address: Vluchtoord 41, 5406XP, Uden		
Article: 952-316 72W 120°	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:



Test System:HOPOO HPG1800
 Temperature:25.3DEG
 Operators:
 Test Date:2018 07! 23"

Test Set: 8.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:11.000 m
 Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

AREA LUMINOUS FLUX

Report number:

MANUFACTURER: Tronix Lighting B.V.		
Address: Vluchtoord 41, 5406XP, Uden		
Article: 952-316 72W 120°	TYPE:	WEIGHT:
SPECIFICATION:	DIMENSION:	SERIAL No.:

VERTICAL (DEG)	AREA FLUX DIAGRAM																		UNIT: lm		Φ t	Φ a
	90	80	70	60	50	40	30	20	10	0	10	20	30	40	50	60	70	80	90			
90	0.23	1.14	2.70	4.70	6.91	9.29	11.5	13.3	14.7	14.8	13.5	11.8	9.65	7.27	5.07	3.05	1.38	0.31	132	118		
80	0.28	1.56	3.76	6.82	10.7	15.0	19.0	22.1	24.3	24.4	22.5	19.5	15.7	11.4	7.38	4.11	1.82	0.37	211	206		
70	0.34	2.03	5.40	10.4	16.6	23.1	29.0	33.7	36.6	36.7	34.1	29.7	23.9	17.5	11.2	5.91	2.30	0.44	320	317		
60	0.40	2.64	7.32	14.3	22.6	31.1	38.8	44.8	48.3	48.5	45.2	39.6	32.1	23.6	15.2	7.98	2.91	0.50	426	425		
50	0.46	3.23	9.17	17.8	28.0	38.3	47.6	54.7	58.8	59.0	55.1	48.3	39.3	29.0	18.8	9.89	3.54	0.57	522	521		
40	0.51	3.75	10.7	20.8	32.5	44.4	55.0	63.1	67.8	67.9	63.6	55.8	45.6	33.7	21.7	11.5	4.12	0.61	604	603		
30	0.55	4.16	11.9	23.0	36.0	49.1	60.9	69.9	75.0	75.2	70.4	61.6	50.3	37.3	24.0	12.7	4.57	0.65	668	667		
20	0.58	4.43	12.7	24.5	38.3	52.4	65.1	74.8	80.2	80.4	75.2	65.7	53.4	39.6	25.5	13.5	4.86	0.68	713	712		
10	0.59	4.54	13.0	25.2	39.4	54.1	67.3	77.4	83.0	83.1	77.8	67.8	55.0	40.8	26.2	13.9	4.99	0.69	736	735		
0	0.59	4.58	13.2	25.4	39.7	54.4	67.8	77.9	83.5	83.7	78.3	68.3	55.4	41.0	26.4	14.0	5.02	0.69	741	740		
-10	0.59	4.56	13.0	25.1	39.2	53.6	66.6	76.7	82.4	82.5	77.1	67.1	54.5	40.5	26.1	13.8	4.97	0.69	730	729		
-20	0.58	4.37	12.5	24.0	37.4	51.2	63.8	73.5	78.8	78.9	73.9	64.3	52.3	38.6	24.9	13.2	4.74	0.67	698	698		
-30	0.54	4.04	11.5	22.2	34.6	47.4	59.2	68.1	72.8	72.9	68.4	59.8	48.4	35.5	22.9	12.1	4.35	0.64	646	645		
-40	0.49	3.58	10.1	19.6	30.8	42.4	53.0	60.6	64.8	64.9	60.8	53.4	43.1	31.5	20.2	10.6	3.82	0.60	575	574		
-50	0.44	3.01	8.45	16.4	26.0	36.1	45.2	51.5	55.2	55.3	51.8	45.7	36.7	26.7	17.0	8.87	3.21	0.54	489	487		
-60	0.37	2.40	6.58	12.8	20.5	28.7	36.1	41.1	44.1	44.2	41.4	36.5	29.2	21.0	13.2	6.85	2.62	0.46	388	387		
-70	0.31	1.86	4.80	9.01	14.5	20.6	25.9	29.5	31.8	31.9	29.7	26.1	20.8	14.8	9.26	5.01	2.05	0.38	279	275		
-80	0.25	1.32	3.27	6.02	9.30	12.9	16.1	18.2	19.8	19.8	18.3	16.1	13.0	9.36	6.07	3.37	1.45	0.32	175	166		
-90																						
	8.10	57.2	161	309	484	665	829	952	1023	1025	958	838	679	500	322	171	62.8	9.79	9998			
	1.56	49.0	154	305	483	665	829	952	1023	1025	958	838	679	500	319	166	55.7	3.17		9222		

Test System: HOPOO HPG1800
 Temperature: 25.3 DEG
 Operators:
 Test Date: 2018 07! 23"

Test Set: 8.0 deg/s C-Gamma (TYPE C)
 Humidity: 65.0%
 Test Distance: 11.000 m
 Remarks:

HOPOO GONIOPHOTOMETERS SYSTEM TEST REPORT

Uncorrected UGR Table

Report number:

MANUFACTURER: Tronix Lighting B.V.										
Address: Vluchtoord 41, 5406XP, Uden										
Article: 952-316 72W 120°					TYPE:			WEIGHT:		
SPECIFICATION:					DIMENSION:			SERIAL No.:		
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	23.8	25.2	24.2	25.6	26.0	24.8	26.3	25.2	26.6	27.0
3H	25.4	26.8	25.9	27.2	27.6	27.0	28.3	27.4	28.7	29.1
4H	26.1	27.4	26.6	27.8	28.3	28.0	29.3	28.5	29.7	30.2
6H	26.6	27.8	27.1	28.3	28.7	29.1	30.3	29.6	30.7	31.2
8H	26.8	27.9	27.3	28.4	28.9	29.6	30.8	30.1	31.2	31.7
12H	27.0	28.1	27.4	28.5	29.0	30.2	31.3	30.7	31.8	32.3
4H 2H	24.7	25.9	25.1	26.4	26.8	25.4	26.7	25.9	27.1	27.6
3H	26.5	27.6	27.0	28.1	28.6	27.8	28.9	28.3	29.4	29.9
4H	27.3	28.4	27.9	28.8	29.4	29.0	30.0	29.5	30.5	31.1
6H	28.0	28.9	28.5	29.4	30.0	30.3	31.2	30.8	31.7	32.3
8H	28.2	29.1	28.8	29.6	30.2	30.9	31.8	31.5	32.3	32.9
12H	28.5	29.2	29.0	29.8	30.4	31.6	32.4	32.2	33.0	33.6
8H 4H	27.9	28.8	28.5	29.3	29.9	29.3	30.2	29.9	30.7	31.3
6H	28.8	29.5	29.4	30.1	30.7	30.9	31.6	31.4	32.1	32.8
8H	29.2	29.8	29.8	30.4	31.1	31.7	32.3	32.3	32.9	33.6
12H	29.6	30.1	30.2	30.7	31.4	32.6	33.2	33.2	33.8	34.4
12H 4H	28.1	28.8	28.6	29.4	30.0	29.4	30.1	29.9	30.7	31.3
6H	29.1	29.7	29.7	30.3	30.9	31.0	31.6	31.6	32.2	32.8
8H	29.5	30.1	30.2	30.7	31.4	31.9	32.4	32.5	33.0	33.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.4					+ 0.2 / - 0.3				

CIE Pub.117 Corrected 9998 lm Total Lamp Luminous Flux. (8log(F/F0) = 8.0)

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 Operators:
 Test Date:2018 07! 23"

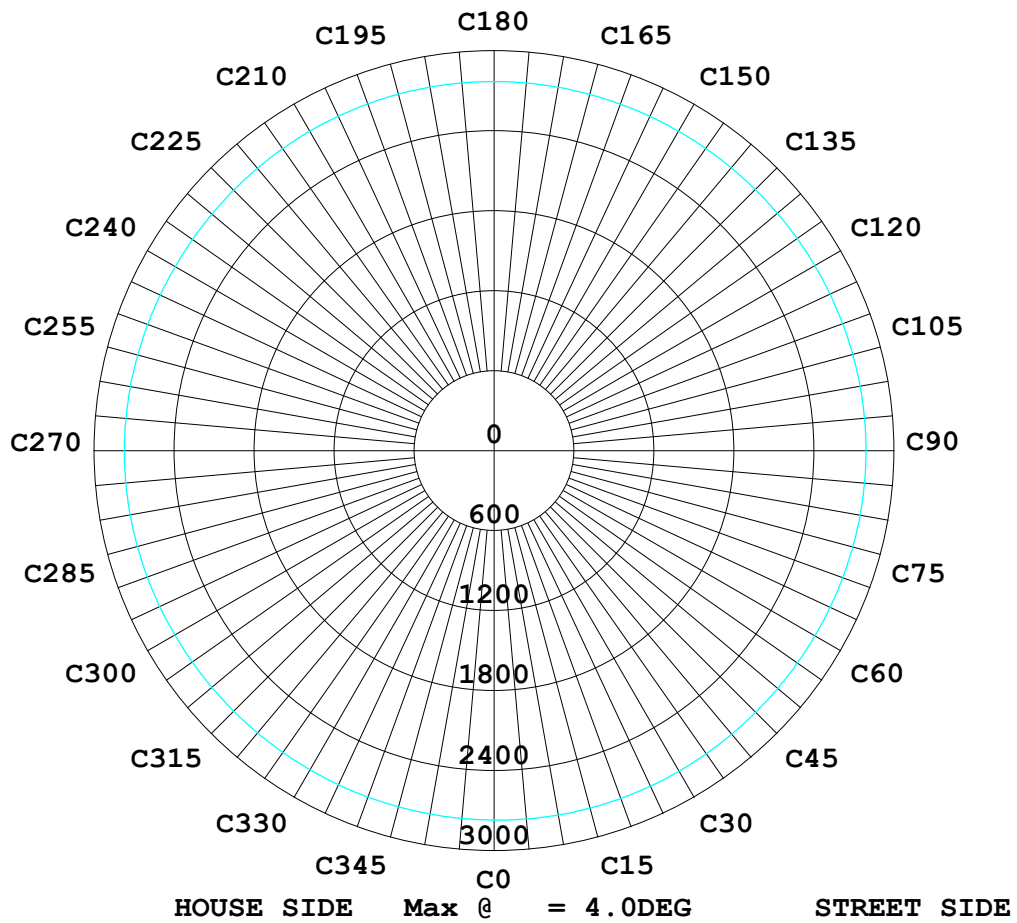
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ISOCANDELA DIAGRAM

Report number:

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Address: Vluchtoord 41, 5406XP, Uden		
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