

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number:

Luminaire Tested: EHBR1-54-UNV-TASM-L840-UPL12

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: REPORT IS A COMBINATION OF REPORTS P1431868 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-54-UNV-TASM-L840-UPL12
Description: Elevate Round Highbay at, 54000 lumens, 4000K 80CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

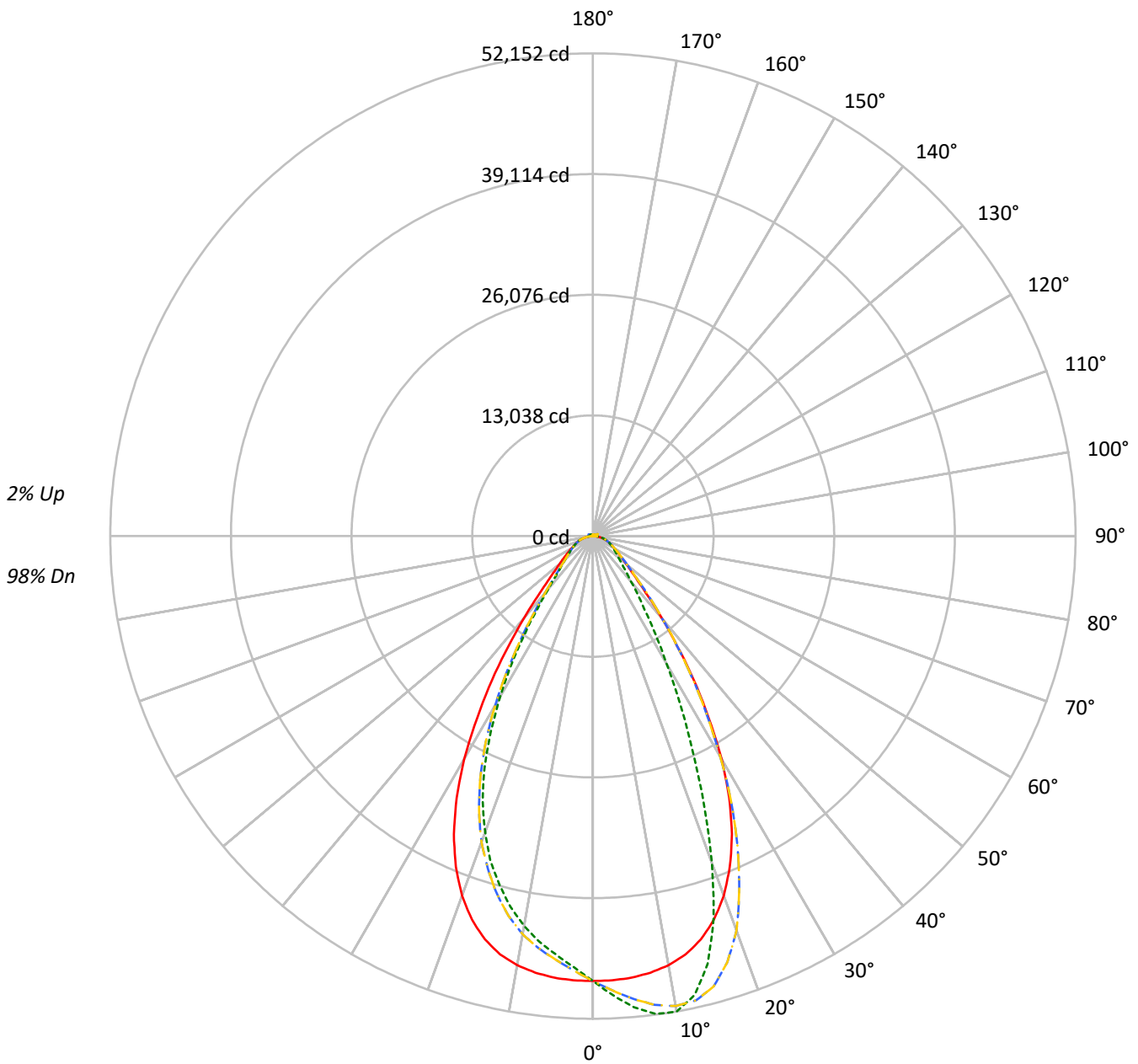
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 54950.0 lumens
Efficiency: N/A
Efficacy: 181.1 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 0.84 / 0.9
Luminous Opening: Vertical Cylinder (Dia: 1.71' x H: 0.1')
CIE Type: Direct

Input Watts (W): 303.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - · - · 90°-270° - · - · 135°-315°



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	115	115	115	115	110	110	110	105	105	105	100	100	100	100	100	100	98
1	111	108	105	102	109	106	103	100	101	99	97	97	95	93	93	92	90	93	92	90	88
2	104	98	94	89	102	97	92	88	93	89	86	89	86	84	86	84	82	86	84	82	80
3	98	90	84	80	96	89	83	79	86	81	77	83	79	76	80	77	74	80	77	74	72
4	92	83	77	72	90	82	76	71	79	74	70	77	72	69	75	71	68	75	71	68	66
5	87	77	70	65	85	76	69	65	74	68	64	72	67	63	70	66	62	70	66	62	61
6	82	72	65	60	80	71	64	59	69	63	59	67	62	58	65	61	58	65	61	58	56
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	61	57	53	61	57	53	52
8	73	62	56	51	72	62	55	51	60	55	50	59	54	50	58	53	50	58	53	50	48
9	69	59	52	48	68	58	52	47	57	51	47	56	50	47	55	50	46	55	50	46	45
10	66	55	49	44	65	55	48	44	54	48	44	53	47	44	52	47	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	225705	225705	225705	225705
5°	224331	239320	224331	212690
10°	221574	245464	221574	201293
15°	215032	228112	215032	185940
20°	201109	182915	201109	165621
25°	177997	126734	177997	138797
30°	144527	82450	144527	103848
35°	103659	53396	103659	69134
40°	67019	36804	67019	43600
45°	42523	28509	42523	31065
50°	31579	24225	31579	25876
55°	25782	22068	25782	22842
60°	22326	21021	22326	21149
65°	20351	20274	20351	20187
70°	19289	19864	19289	19608
75°	18040	19217	18040	18640
80°	15846	18142	15846	16960
85°	10253	12953	10253	12351

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 59785 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4570.0	8.3
10°-20°	12433.0	22.6
20°-30°	14581.3	26.5
30°-40°	10140.4	18.5
40°-50°	5039.3	9.2
50°-60°	3014.0	5.5
60°-70°	2121.4	3.9
70°-80°	1366.5	2.5
80°-90°	436.2	0.8
90°-100°	34.3	0.1
100°-110°	213.8	0.4
110°-120°	393.0	0.7
120°-130°	235.2	0.4
130°-140°	144.5	0.3
140°-150°	102.0	0.2
150°-160°	68.9	0.1
160°-170°	41.8	0.1
170°-180°	14.4	0.0
0°-30°	31584.3	57.5
0°-40°	41724.6	75.9
0°-60°	49778.0	90.6
0°-90°	53702.1	97.7
90°-120°	641.0	1.2
90°-150°	1122.7	2.0
90°-180°	1248.0	2.3
0°-180°	54950.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	48062	48062	48062	48062	48062	
5°	47898	51099	47898	45413	47898	4546
15°	45113	47857	45113	39009	45113	12607
25°	35546	25309	35546	27718	35546	16093
35°	19025	9800	19025	12689	19025	11877
45°	6880	4613	6880	5026	6880	5630
55°	3484	2982	3484	3087	3484	3186
65°	2124	2116	2124	2107	2124	2133
75°	1271	1354	1271	1313	1271	1334
85°	352	445	352	424	352	392
90°	10	16	10	10	10	21
95°	19	22	19	16	19	19
105°	98	56	98	75	98	132
115°	418	361	418	339	418	381
125°	269	286	269	246	269	248
135°	174	202	174	181	174	138
145°	161	168	161	156	161	100
155°	147	154	147	145	147	69
165°	146	155	146	145	146	42
175°	152	160	152	149	152	14
180°	153	153	153	153	153	



TEST NUMBER:

CATALOG NUMBER: EHBR1-54-UNV-TASM-L840-UPL12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	48062.3	48062.3	48062.3	48062.3	48062.3	48062.3	48062.3	48062.3	48062.3	48062.3	48062.3
2.5°	48034.4	48655.3	49158.2	49489.9	49653.9	49489.9	49158.2	48655.3	48034.4	47417.0	46992.5
5°	47898.3	49142.0	50195.6	50885.0	51098.6	50885.0	50195.6	49142.0	47898.3	46723.1	45943.5
7.5°	47572.9	49510.6	51076.1	51880.9	52077.4	51880.9	51076.1	49510.6	47572.9	45909.3	44924.2
10°	47076.4	49743.1	51551.9	52128.7	52152.2	52128.7	51551.9	49743.1	47076.4	44835.0	43673.3
12.5°	46284.2	49660.2	51392.4	51203.2	50773.3	51203.2	51392.4	49660.2	46284.2	43522.8	42057.3
15°	45112.6	49169.0	50382.1	48841.9	47856.8	48841.9	50382.1	49169.0	45112.6	41750.9	40051.2
17.5°	43461.5	48249.8	48273.2	45226.1	43367.8	45226.1	48273.2	48249.8	43461.5	39584.3	37712.5
20°	41333.7	46775.3	45369.4	39796.1	37594.4	39796.1	45369.4	46775.3	41333.7	37023.0	35186.3
22.5°	38666.0	44787.2	41325.5	34333.7	31329.9	34333.7	41325.5	44787.2	38666.0	34044.4	32132.9
25°	35545.9	42351.2	36975.2	28381.9	25308.7	28381.9	36975.2	42351.2	35545.9	30495.3	28766.7
27.5°	31876.0	39263.5	32342.9	23192.6	20357.2	23192.6	32342.9	39263.5	31876.0	26830.9	25065.3
30°	27799.7	35305.2	27522.1	18470.0	15859.2	18470.0	27522.1	35305.2	27799.7	22714.0	21133.2
32.5°	23235.8	31425.4	22892.4	14799.3	12587.6	14799.3	22892.4	31425.4	23235.8	18785.5	17133.5
35°	19025.2	26571.3	18717.9	11628.7	9800.1	11628.7	18717.9	26571.3	19025.2	15076.9	13454.6
37.5°	14930.9	21984.9	14921.0	9363.9	7949.0	9363.9	14921.0	21984.9	14930.9	11721.6	10404.8
40°	11616.1	17190.3	11690.9	7474.9	6379.0	7474.9	11690.9	17190.3	11616.1	8918.7	8076.0
42.5°	8801.5	13144.6	9189.1	6134.8	5418.3	6134.8	9189.1	13144.6	8801.5	7027.0	6396.1
45°	6880.1	9673.0	7175.7	5175.8	4612.6	5175.8	7175.7	9673.0	6880.1	5658.9	5235.3
47.5°	5603.0	7475.8	5815.7	4439.5	4044.8	4439.5	5815.7	7475.8	5603.0	4786.5	4469.3
50°	4706.3	5736.4	4828.9	3875.3	3610.4	3875.3	4828.9	5736.4	4706.3	4098.8	3887.1
52.5°	4043.0	4678.3	4112.4	3453.6	3275.1	3453.6	4112.4	4678.3	4043.0	3586.0	3454.5
55°	3484.2	3933.0	3576.1	3105.7	2982.2	3105.7	3576.1	3933.0	3484.2	3191.3	3094.0
57.5°	3059.7	3336.4	3105.7	2809.2	2727.2	2809.2	3105.7	3336.4	3059.7	2839.8	2787.5
60°	2683.9	2889.4	2740.7	2550.5	2527.1	2550.5	2740.7	2889.4	2683.9	2555.0	2520.8
62.5°	2394.6	2524.4	2423.4	2318.0	2297.3	2318.0	2423.4	2524.4	2394.6	2295.5	2301.8
65°	2124.2	2245.0	2165.7	2108.9	2116.1	2108.9	2165.7	2245.0	2124.2	2078.3	2088.2
67.5°	1915.1	1978.2	1944.0	1911.5	1919.6	1911.5	1944.0	1978.2	1915.1	1870.1	1885.4
70°	1692.5	1760.1	1725.0	1729.5	1743.0	1729.5	1725.0	1760.1	1692.5	1679.0	1690.7
72.5°	1479.8	1532.1	1520.4	1531.2	1545.6	1531.2	1520.4	1532.1	1479.8	1478.0	1478.9
75°	1270.8	1310.4	1315.8	1331.1	1353.7	1331.1	1315.8	1310.4	1270.8	1257.2	1273.5
77.5°	1042.7	1087.8	1104.9	1125.7	1159.0	1125.7	1104.9	1087.8	1042.7	1051.7	1059.9
80°	833.6	854.4	892.2	907.6	954.4	907.6	892.2	854.4	833.6	818.3	830.0
82.5°	610.1	629.1	661.5	690.4	717.4	690.4	661.5	629.1	610.1	602.9	603.8
85°	352.4	381.2	402.9	437.1	445.2	437.1	402.9	381.2	352.4	360.5	352.4
87.5°	123.5	132.5	151.4	164.9	165.8	164.9	151.4	132.5	123.5	126.2	114.5
90°	9.6	16.6	28.2	18.8	15.9	18.8	28.2	16.6	9.6	16.3	25.1
92.5°	12.3	21.9	39.0	23.5	19.3	23.5	39.0	21.9	12.3	21.0	39.9
95°	18.6	26.6	49.0	25.5	22.0	25.5	49.0	26.6	18.6	27.8	55.3
97.5°	28.0	32.7	55.1	26.9	25.3	26.9	55.1	32.7	28.0	33.8	63.4
100°	36.7	36.7	98.7	30.2	28.0	30.2	98.7	36.7	36.7	42.1	98.3
102.5°	54.9	71.2	226.6	56.7	32.7	56.7	226.6	71.2	54.9	77.7	207.8
105°	98.5	159.9	396.5	137.9	55.8	137.9	396.5	159.9	98.5	161.0	369.6
107.5°	185.2	296.2	510.0	266.9	120.9	266.9	510.0	296.2	185.2	283.9	488.0
110°	295.3	413.1	556.3	363.6	237.8	363.6	556.3	413.1	295.3	389.3	511.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	383.9	460.1	543.6	402.6	326.4	402.6	543.6	460.1	383.9	429.6	490.1
115°	417.8	453.4	485.8	401.2	361.4	401.2	485.8	453.4	417.8	419.5	437.7
117.5°	403.7	415.1	420.0	377.0	363.4	377.0	420.0	415.1	403.7	378.1	371.9
120°	364.7	360.0	355.1	341.4	343.2	341.4	355.1	360.0	364.7	330.4	310.7
122.5°	316.6	306.5	300.7	306.1	315.7	306.1	300.7	306.5	316.6	282.3	267.3
125°	268.9	258.8	263.3	275.2	285.7	275.2	263.3	258.8	268.9	240.9	236.7
127.5°	229.5	224.8	235.8	249.0	258.2	249.0	235.8	224.8	229.5	211.4	214.5
130°	201.5	202.0	216.3	228.4	234.0	228.4	216.3	202.0	201.5	192.8	201.3
132.5°	184.3	188.8	202.4	213.2	216.8	213.2	202.4	188.8	184.3	182.5	193.0
135°	173.8	180.0	193.2	199.5	202.0	199.5	193.2	180.0	173.8	175.3	184.3
137.5°	167.9	174.2	183.8	189.7	189.2	189.7	183.8	174.2	167.9	170.9	178.0
140°	164.8	171.1	175.1	181.6	182.1	181.6	175.1	171.1	164.8	166.2	172.2
142.5°	161.7	167.3	169.3	174.4	174.0	174.4	169.3	167.3	161.7	163.0	167.1
145°	160.6	165.0	162.8	168.4	168.2	168.4	162.8	165.0	160.6	160.3	163.3
147.5°	157.2	160.3	158.3	163.3	163.0	163.3	158.3	160.3	157.2	157.2	158.8
150°	154.1	156.8	153.2	158.8	159.9	158.8	153.2	156.8	154.1	153.4	155.0
152.5°	149.6	152.3	149.6	155.9	156.1	155.9	149.6	152.3	149.6	148.9	150.5
155°	146.7	148.1	146.7	153.0	153.9	153.0	146.7	148.1	146.7	145.8	147.6
157.5°	145.2	146.7	146.1	151.7	152.6	151.7	146.1	146.7	145.2	145.2	146.1
160°	145.4	146.7	147.0	151.9	152.8	151.9	147.0	146.7	145.4	145.2	146.1
162.5°	145.8	145.8	147.0	151.9	153.7	151.9	147.0	145.8	145.8	145.8	146.5
165°	146.5	147.2	147.7	152.1	154.6	152.1	147.7	147.2	146.5	146.3	146.3
167.5°	147.7	147.0	148.8	153.5	156.0	153.5	148.8	147.0	147.7	147.4	147.4
170°	147.2	148.1	149.2	154.0	156.4	154.0	149.2	148.1	147.2	147.9	147.7
172.5°	149.9	149.9	151.3	155.3	158.6	155.3	151.3	149.9	149.9	149.7	150.4
175°	151.7	151.9	153.1	156.5	159.7	156.5	153.1	151.9	151.7	150.8	150.8
177.5°	151.0	152.8	154.6	158.1	161.9	158.1	154.6	152.8	151.0	150.8	150.8
180°	152.8	152.8	152.8	152.8	152.8	152.8	152.8	152.8	152.8	152.8	152.8



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	48062.3	48062.3	48062.3	48062.3	48062.3	48062.3
2.5°	46666.3	46635.7	46666.3	46992.5	47417.0	48034.4
5°	45582.1	45412.7	45582.1	45943.5	46723.1	47898.3
7.5°	44319.5	44221.2	44319.5	44924.2	45909.3	47572.9
10°	42990.1	42767.5	42990.1	43673.3	44835.0	47076.4
12.5°	41351.7	41057.0	41351.7	42057.3	43522.8	46284.2
15°	39268.0	39009.3	39268.0	40051.2	41750.9	45112.6
17.5°	37032.0	36797.7	37032.0	37712.5	39584.3	43461.5
20°	34223.8	34039.9	34223.8	35186.3	37023.0	41333.7
22.5°	31277.6	31105.5	31277.6	32132.9	34044.4	38666.0
25°	27811.4	27717.7	27811.4	28766.7	30495.3	35545.9
27.5°	24065.9	23906.3	24065.9	25065.3	26830.9	31876.0
30°	20239.2	19975.1	20239.2	21133.2	22714.0	27799.7
32.5°	16496.3	16306.2	16496.3	17133.5	18785.5	23235.8
35°	12878.7	12688.6	12878.7	13454.6	15076.9	19025.2
37.5°	10035.3	9699.2	10035.3	10404.8	11721.6	14930.9
40°	7611.0	7556.9	7611.0	8076.0	8918.7	11616.1
42.5°	6196.0	6049.1	6196.0	6396.1	7027.0	8801.5
45°	5083.9	5026.2	5083.9	5235.3	5658.9	6880.1
47.5°	4371.9	4397.2	4371.9	4469.3	4786.5	5603.0
50°	3841.1	3856.4	3841.1	3887.1	4098.8	4706.3
52.5°	3450.0	3436.4	3450.0	3454.5	3586.0	4043.0
55°	3103.9	3086.8	3103.9	3094.0	3191.3	3484.2
57.5°	2801.1	2813.7	2801.1	2787.5	2839.8	3059.7
60°	2530.7	2542.4	2530.7	2520.8	2555.0	2683.9
62.5°	2302.7	2309.9	2302.7	2301.8	2295.5	2394.6
65°	2099.0	2107.1	2099.0	2088.2	2078.3	2124.2
67.5°	1904.3	1904.3	1904.3	1885.4	1870.1	1915.1
70°	1721.4	1720.5	1721.4	1690.7	1679.0	1692.5
72.5°	1501.5	1523.1	1501.5	1478.9	1478.0	1479.8
75°	1287.9	1313.1	1287.9	1273.5	1257.2	1270.8
77.5°	1071.6	1110.3	1071.6	1059.9	1051.7	1042.7
80°	849.9	892.2	849.9	830.0	818.3	833.6
82.5°	628.2	659.7	628.2	603.8	602.9	610.1
85°	374.0	424.5	374.0	352.4	360.5	352.4
87.5°	119.9	153.2	119.9	114.5	126.2	123.5
90°	15.0	9.6	15.0	25.1	16.3	9.6
92.5°	22.4	13.7	22.4	39.9	21.0	12.3
95°	25.7	15.7	25.7	55.3	27.8	18.6
97.5°	28.4	20.6	28.4	63.4	33.8	28.0
100°	33.1	26.6	33.1	98.3	42.1	36.7
102.5°	69.4	44.1	69.4	207.8	77.7	54.9
105°	145.3	75.0	145.3	369.6	161.0	98.5
107.5°	259.5	128.7	259.5	488.0	283.9	185.2
110°	344.1	238.9	344.1	511.6	389.3	295.3



TEST NUMBER:

CATALOG NUMBER: EHBR1-54-UNV-TASM-L840-UPL12

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	369.6	322.2	369.6	490.1	429.6	383.9
115°	355.5	339.0	355.5	437.7	419.5	417.8
117.5°	324.6	327.5	324.6	371.9	378.1	403.7
120°	289.0	303.4	289.0	310.7	330.4	364.7
122.5°	257.0	273.1	257.0	267.3	282.3	316.6
125°	228.8	245.8	228.8	236.7	240.9	268.9
127.5°	209.3	221.0	209.3	214.5	211.4	229.5
130°	194.8	204.2	194.8	201.3	192.8	201.5
132.5°	184.9	191.0	184.9	193.0	182.5	184.3
135°	176.4	180.9	176.4	184.3	175.3	173.8
137.5°	169.3	173.1	169.3	178.0	170.9	167.9
140°	163.7	166.8	163.7	172.2	166.2	164.8
142.5°	157.2	159.9	157.2	167.1	163.0	161.7
145°	153.6	155.6	153.6	163.3	160.3	160.6
147.5°	150.7	152.1	150.7	158.8	157.2	157.2
150°	147.8	149.2	147.8	155.0	153.4	154.1
152.5°	144.0	146.3	144.0	150.5	148.9	149.6
155°	142.5	144.7	142.5	147.6	145.8	146.7
157.5°	142.2	144.7	142.2	146.1	145.2	145.2
160°	142.9	144.5	142.9	146.1	145.2	145.4
162.5°	142.7	144.3	142.7	146.5	145.8	145.8
165°	143.8	144.7	143.8	146.3	146.3	146.5
167.5°	144.1	144.7	144.1	147.4	147.4	147.7
170°	145.0	145.9	145.0	147.7	147.9	147.2
172.5°	146.8	147.7	146.8	150.4	149.7	149.9
175°	147.9	148.8	147.9	150.8	150.8	151.7
177.5°	149.5	150.4	149.5	150.8	150.8	151.0
180°	152.8	152.8	152.8	152.8	152.8	152.8



TEST NUMBER: CATALOG
 CATALOG NUMBER: EHBR1-54-UNV-TASM-L840-UPL12

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference 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	19.82	20.99	20.23	21.35	21.73	19.14	20.31	19.55	20.67	21.05
	3H	21.37	22.41	21.79	22.79	23.21	20.99	22.03	21.41	22.41	22.83
	4H	22.01	22.98	22.45	23.38	23.82	21.77	22.74	22.22	23.14	23.59
	6H	22.49	23.38	22.95	23.80	24.25	22.42	23.31	22.87	23.73	24.18
	8H	22.64	23.49	23.12	23.93	24.39	22.64	23.48	23.11	23.92	24.38
	12H	22.72	23.52	23.19	23.95	24.44	22.77	23.58	23.24	24.01	24.49
4H	2H	20.24	21.21	20.68	21.61	22.05	19.72	20.69	20.16	21.09	21.53
	3H	22.04	22.84	22.49	23.29	23.75	21.78	22.58	22.23	23.03	23.49
	4H	22.81	23.53	23.29	24.00	24.50	22.69	23.41	23.16	23.87	24.37
	6H	23.43	24.05	23.94	24.54	25.06	23.46	24.08	23.96	24.57	25.09
	8H	23.63	24.21	24.14	24.70	25.22	23.73	24.31	24.24	24.80	25.33
	12H	23.74	24.24	24.26	24.77	25.30	23.90	24.41	24.43	24.94	25.46
8H	4H	23.07	23.64	23.58	24.14	24.66	22.97	23.55	23.48	24.04	24.56
	6H	23.81	24.28	24.35	24.82	25.35	23.87	24.34	24.42	24.88	25.42
	8H	24.08	24.50	24.64	25.05	25.60	24.23	24.65	24.79	25.20	25.75
	12H	24.25	24.62	24.81	25.16	25.78	24.48	24.84	25.03	25.38	26.01
12H	4H	23.08	23.59	23.60	24.11	24.64	22.98	23.49	23.51	24.02	24.55
	6H	23.85	24.27	24.41	24.83	25.37	23.92	24.34	24.48	24.89	25.44
	8H	24.17	24.54	24.73	25.07	25.70	24.32	24.69	24.88	25.23	25.85