

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-UPL18

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS A COMBINATION OF REPORTS P1431870 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-UPL18
Description: Elevate Round Highbay at, 54000 lumens, 4000K 80CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

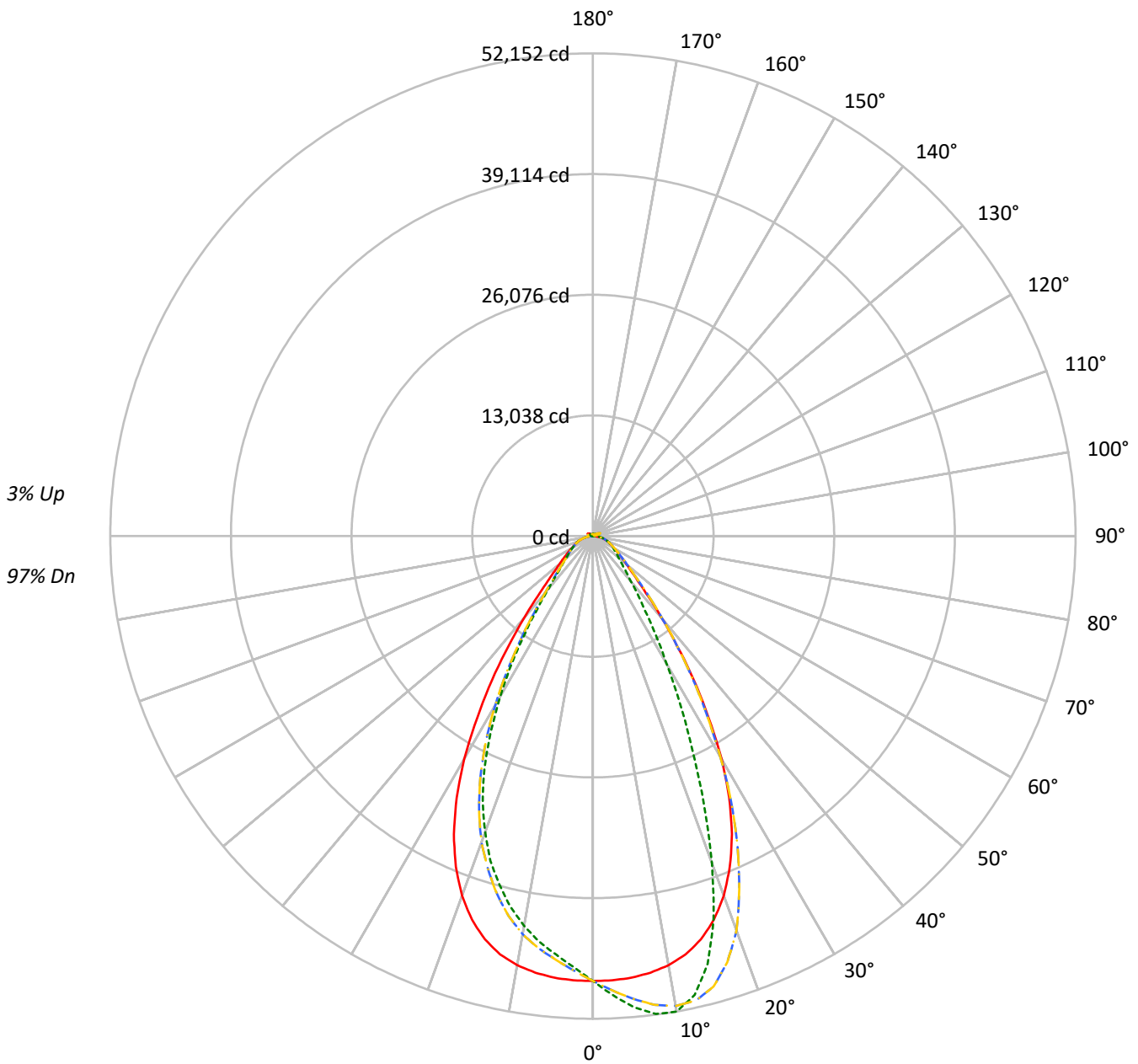
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 55585.9 lumens
Efficiency: N/A
Efficacy: 180.5 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): 307.9
Input Voltage (V): NR
Input Current (A_{in}): 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

TEST NUMBER:
CATALOG NUMBER: EHBR1-54-UNV-TASM-L840-UPL18

Luminous Intensity Polar Plot



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



TEST NUMBER:

CATALOG NUMBER: EHBR1-54-UNV-TASM-L840-UPL18

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	99	99	99	97
1	111	108	105	102	108	105	102	100	100	98	96	96	94	93	92	91	89	89	89	89	87
2	104	98	93	89	101	96	92	88	92	89	85	89	86	83	85	83	81	81	81	81	79
3	98	90	84	79	95	88	83	78	85	80	77	82	78	75	79	76	73	73	73	73	71
4	92	83	76	71	90	81	75	71	79	74	69	76	72	68	74	70	67	67	67	67	65
5	86	77	70	65	84	75	69	64	73	68	63	71	66	63	69	65	62	62	62	62	60
6	81	71	64	59	80	70	64	59	68	63	58	66	61	58	65	60	57	57	57	57	55
7	77	66	60	55	75	66	59	54	64	58	54	62	57	53	61	56	53	53	53	53	51
8	73	62	55	51	71	61	55	51	60	54	50	59	53	50	57	53	49	49	49	49	48
9	69	58	52	47	68	58	51	47	56	51	47	55	50	46	54	49	46	46	46	46	44
10	66	55	48	44	64	54	48	44	53	48	44	52	47	43	51	46	43	43	43	43	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



TEST NUMBER:

CATALOG NUMBER: EHBR1-54-UNV-TASM-L840-UPL18

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4570.0	8.2
10°-20°	12433.0	22.4
20°-30°	14581.3	26.2
30°-40°	10140.4	18.2
40°-50°	5039.3	9.1
50°-60°	3014.0	5.4
60°-70°	2121.4	3.8
70°-80°	1366.5	2.5
80°-90°	437.3	0.8
90°-100°	51.1	0.1
100°-110°	324.6	0.6
110°-120°	598.1	1.1
120°-130°	356.8	0.6
130°-140°	217.7	0.4
140°-150°	152.4	0.3
150°-160°	101.4	0.2
160°-170°	60.2	0.1
170°-180°	20.4	0.0
0°-30°	31584.3	56.8
0°-40°	41724.6	75.1
0°-60°	49778.0	89.6
0°-90°	53703.2	96.6
90°-120°	973.7	1.8
90°-150°	1700.7	3.1
90°-180°	1883.0	3.4
0°-180°	55585.9	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°	14	20	14	14	14	23
95°	27	30	27	23	27	29
105°	149	81	149	114	149	201
115°	636	547	636	516	636	580
125°	408	431	408	374	408	376
135°	261	303	261	274	261	207
145°	239	250	239	232	239	150
155°	216	226	216	212	216	101
165°	211	220	211	208	211	60
175°	215	223	215	211	215	20
180°	216	216	216	216	216	



TEST NUMBER:
 CATALOG NUMBER: EHBR1-54-UNV-TASM-L840-UPL18

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°	14.2	24.3	41.6	25.9	20.5	25.9	41.6	24.3	14.2	24.5	37.8
92.5°	18.3	32.5	58.0	33.1	25.6	33.1	58.0	32.5	18.3	31.6	60.3
95°	27.4	39.7	73.4	36.1	29.7	36.1	73.4	39.7	27.4	41.9	83.9
97.5°	41.8	48.9	82.6	38.2	34.9	38.2	82.6	48.9	41.8	51.1	96.2
100°	55.1	55.1	149.3	43.3	39.0	43.3	149.3	55.1	55.1	63.3	149.5
102.5°	82.8	107.2	343.9	83.2	46.1	83.2	343.9	107.2	82.8	117.6	316.6
105°	149.4	242.5	603.2	207.2	80.9	207.2	603.2	242.5	149.4	244.7	563.6
107.5°	281.6	450.6	776.4	404.0	180.3	404.0	776.4	450.6	281.6	432.3	743.8
110°	449.7	628.9	847.1	551.6	358.6	551.6	847.1	628.9	449.7	593.2	779.7



TEST NUMBER:

CATALOG NUMBER: EHBR1-54-UNV-TASM-L840-UPL18

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	585.0	700.7	827.6	611.0	493.9	611.0	827.6	700.7	585.0	654.7	746.9
115°	636.1	690.4	739.5	609.0	547.2	609.0	739.5	690.4	636.1	639.3	667.0
117.5°	614.6	632.0	639.1	572.1	550.3	572.1	639.1	632.0	614.6	575.6	566.5
120°	555.1	548.0	539.5	517.7	519.5	517.7	539.5	548.0	555.1	502.9	473.3
122.5°	481.2	465.8	456.5	463.3	477.5	463.3	456.5	465.8	481.2	428.9	406.5
125°	408.4	393.1	399.0	416.1	431.3	416.1	399.0	393.1	408.4	365.3	359.2
127.5°	347.8	340.7	356.9	376.2	389.2	376.2	356.9	340.7	347.8	320.2	325.4
130°	304.7	305.8	327.2	344.3	352.3	344.3	327.2	305.8	304.7	291.4	304.8
132.5°	277.9	285.2	305.6	320.6	325.6	320.6	305.6	285.2	277.9	274.7	291.2
135°	261.4	271.9	291.1	300.2	303.0	300.2	291.1	271.9	261.4	263.3	277.9
137.5°	252.0	262.5	276.8	284.7	283.6	284.7	276.8	262.5	252.0	256.0	267.4
140°	246.8	257.3	263.4	272.4	272.2	272.4	263.4	257.3	246.8	248.8	258.1
142.5°	241.5	251.0	254.1	261.0	259.9	261.0	254.1	251.0	241.5	243.6	249.7
145°	239.4	246.7	243.7	251.8	250.5	251.8	243.7	246.7	239.4	239.5	243.5
147.5°	234.2	239.5	236.4	243.5	242.2	243.5	236.4	239.5	234.2	234.2	236.2
150°	229.0	233.1	228.1	236.2	236.9	236.2	228.1	233.1	229.0	228.0	229.9
152.5°	221.7	225.8	221.7	230.8	230.7	230.8	221.7	225.8	221.7	220.7	222.6
155°	216.3	218.4	216.3	225.4	226.3	225.4	216.3	218.4	216.3	215.4	217.2
157.5°	213.0	214.9	213.9	222.0	222.9	222.0	213.9	214.9	213.0	213.0	213.9
160°	211.5	213.5	213.4	220.4	221.3	220.4	213.4	213.5	211.5	211.6	212.5
162.5°	211.2	211.2	212.0	219.0	220.8	219.0	212.0	211.2	211.2	211.2	212.2
165°	210.8	211.9	211.6	217.5	220.3	217.5	211.6	211.9	210.8	211.0	211.0
167.5°	211.6	210.6	212.4	218.2	221.0	218.2	212.4	210.6	211.6	211.7	211.7
170°	210.5	211.4	212.1	217.9	220.7	217.9	212.1	211.4	210.5	211.5	211.6
172.5°	213.2	213.2	213.8	218.6	222.5	218.6	213.8	213.2	213.2	213.3	214.3
175°	215.0	214.8	215.6	219.4	223.3	219.4	215.6	214.8	215.0	214.1	214.1
177.5°	213.9	215.7	217.5	221.4	226.2	221.4	217.5	215.7	213.9	214.1	214.1
180°	215.7	215.7	215.7	215.7	215.7	215.7	215.7	215.7	215.7	215.7	215.7



TEST NUMBER:

CATALOG NUMBER: EHBR1-54-UNV-TASM-L840-UPL18

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°	22.4	14.2	22.4	37.8	24.5	14.2
92.5°	33.7	20.4	33.7	60.3	31.6	18.3
95°	38.8	23.4	38.8	83.9	41.9	27.4
97.5°	42.9	30.5	42.9	96.2	51.1	41.8
100°	50.1	39.7	50.1	149.5	63.3	55.1
102.5°	105.4	66.4	105.4	316.6	117.6	82.8
105°	221.3	113.5	221.3	563.6	244.7	149.4
107.5°	395.5	195.5	395.5	743.8	432.3	281.6
110°	524.6	363.6	524.6	779.7	593.2	449.7



TEST NUMBER:

CATALOG NUMBER: EHBR1-54-UNV-TASM-L840-UPL18

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	563.6	490.7	563.6	746.9	654.7	585.0
115°	542.1	516.3	542.1	667.0	639.3	636.1
117.5°	494.9	498.9	494.9	566.5	575.6	614.6
120°	440.6	462.0	440.6	473.3	502.9	555.1
122.5°	391.3	415.9	391.3	406.5	428.9	481.2
125°	348.2	373.7	348.2	359.2	365.3	408.4
127.5°	318.5	335.8	318.5	325.4	320.2	347.8
130°	295.8	310.2	295.8	304.8	291.4	304.7
132.5°	280.3	289.6	280.3	291.2	274.7	277.9
135°	266.9	274.2	266.9	277.9	263.3	261.4
137.5°	255.5	261.8	255.5	267.4	256.0	252.0
140°	246.0	251.3	246.0	258.1	248.8	246.8
142.5°	235.6	239.7	235.6	249.7	243.6	241.5
145°	229.2	232.3	229.2	243.5	239.5	239.4
147.5°	223.9	225.9	223.9	236.2	234.2	234.2
150°	218.5	220.5	218.5	229.9	228.0	229.0
152.5°	212.2	215.2	212.2	222.6	220.7	221.7
155°	208.9	211.8	208.9	217.2	215.4	216.3
157.5°	207.6	210.4	207.6	213.9	213.0	213.0
160°	207.2	209.2	207.2	212.5	211.6	211.5
162.5°	206.0	207.9	206.0	212.2	211.2	211.2
165°	206.7	207.6	206.7	211.0	211.0	210.8
167.5°	206.6	207.6	206.6	211.7	211.7	211.6
170°	207.5	208.4	207.5	211.6	211.5	210.5
172.5°	209.3	210.2	209.3	214.3	213.3	213.2
175°	210.1	211.0	210.1	214.1	214.1	215.0
177.5°	212.0	212.9	212.0	214.1	214.1	213.9
180°	215.7	215.7	215.7	215.7	215.7	215.7



TEST NUMBER: CATALOG
 CATALOG NUMBER: EHBR1-54-UNV-TASM-L840-UPL18

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	19.73	20.88	20.16	21.27	21.67	19.05	20.20	19.48	20.59	20.99
	3H	21.28	22.30	21.72	22.71	23.16	20.90	21.92	21.34	22.33	22.78
	4H	21.92	22.87	22.38	23.30	23.77	21.68	22.64	22.15	23.06	23.53
	6H	22.40	23.28	22.88	23.72	24.20	22.33	23.20	22.80	23.65	24.12
	8H	22.55	23.38	23.04	23.84	24.33	22.55	23.38	23.04	23.84	24.33
	12H	22.62	23.42	23.12	23.87	24.38	22.68	23.47	23.17	23.92	24.44
4H	2H	20.15	21.11	20.61	21.53	22.00	19.63	20.58	20.09	21.01	21.48
	3H	21.95	22.74	22.42	23.21	23.70	21.69	22.48	22.16	22.95	23.44
	4H	22.72	23.43	23.22	23.92	24.44	22.59	23.30	23.09	23.79	24.32
	6H	23.34	23.95	23.86	24.46	25.01	23.37	23.98	23.89	24.49	25.04
	8H	23.53	24.11	24.06	24.62	25.17	23.64	24.21	24.17	24.72	25.27
	12H	23.64	24.14	24.19	24.69	25.24	23.81	24.31	24.35	24.86	25.41
8H	4H	22.97	23.54	23.50	24.06	24.61	22.88	23.45	23.40	23.96	24.51
	6H	23.72	24.18	24.28	24.74	25.30	23.78	24.24	24.34	24.80	25.36
	8H	23.98	24.40	24.57	24.97	25.55	24.13	24.55	24.71	25.12	25.69
	12H	24.16	24.52	24.73	25.08	25.73	24.38	24.75	24.96	25.30	25.95
12H	4H	22.98	23.49	23.53	24.03	24.59	22.89	23.39	23.43	23.94	24.49
	6H	23.76	24.17	24.34	24.75	25.32	23.82	24.24	24.41	24.81	25.39
	8H	24.08	24.44	24.65	24.99	25.64	24.23	24.59	24.80	25.15	25.80