

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: EHBR1-60-UNV-TASM-L840-UPL24

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: REPORT IS A COMBINATION OF REPORTS P1431903 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-60-UNV-TASM-L840-UPL24
Description: Elevate Round Highbay at, 60000 lumens, 4000K 80CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

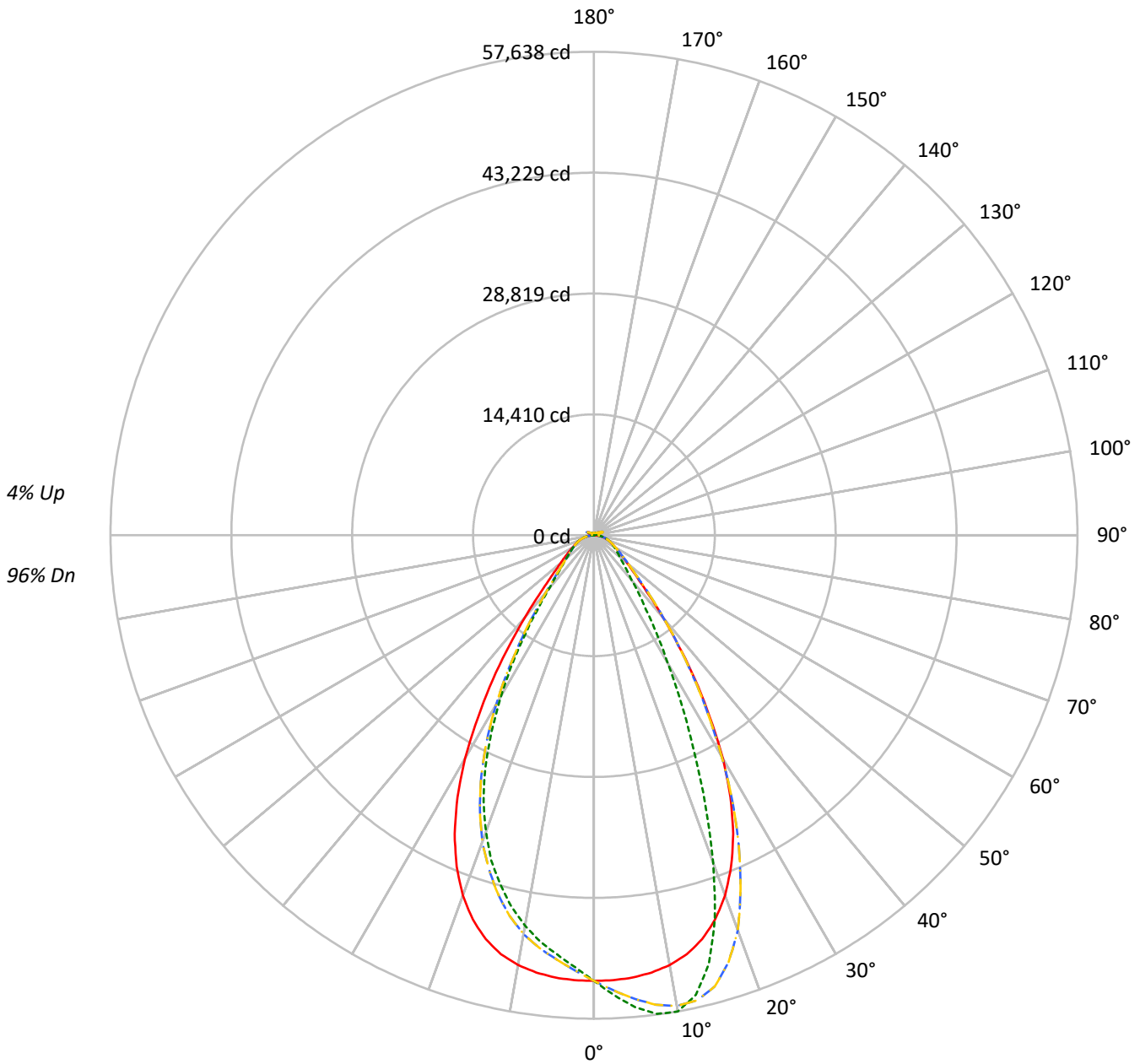
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 61827.1 lumens
Efficiency: N/A
Efficacy: 178.2 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): 346.9
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

TEST NUMBER:
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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				
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	103	103	103	98	98	98	98	98	98	96
1	111	107	104	102	108	105	102	100	100	98	96	96	94	92	91	90	89	89	89	89	87
2	104	98	93	89	101	96	91	88	92	88	85	88	85	83	85	82	80	80	80	80	78
3	98	90	84	79	95	88	83	78	85	80	76	82	78	75	79	76	73	73	73	73	71
4	92	83	76	71	89	81	75	70	78	73	69	76	71	68	73	70	67	67	67	67	65
5	86	76	70	65	84	75	69	64	73	67	63	71	66	62	69	65	61	61	61	61	60
6	81	71	64	59	79	70	64	59	68	62	58	66	61	57	64	60	57	57	57	57	55
7	77	66	59	55	75	65	59	54	64	58	54	62	57	53	60	56	53	53	53	53	51
8	73	62	55	51	71	61	55	50	60	54	50	58	53	49	57	52	49	49	49	49	47
9	69	58	51	47	67	57	51	47	56	50	46	55	50	46	54	49	46	46	46	46	44
10	65	55	48	44	64	54	48	44	53	47	43	52	47	43	51	46	43	43	43	43	41

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	249447	249447	249447	249447
5°	247929	264494	247929	235063
10°	244881	271284	244881	222467
15°	237651	252108	237651	205499
20°	222263	202156	222263	183042
25°	196720	140065	196720	153397
30°	159730	91123	159730	114772
35°	114563	59013	114563	76406
40°	74069	40675	74069	48186
45°	46996	31507	46996	34333
50°	34900	26773	34900	28598
55°	28494	24389	28494	25244
60°	24674	23232	24674	23373
65°	22492	22406	22492	22310
70°	21319	21954	21319	21670
75°	19936	21238	19936	20601
80°	17513	20051	17513	18745
85°	11333	14315	11333	13649

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 66074 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5050.7	8.2
10°-20°	13740.8	22.2
20°-30°	16115.1	26.1
30°-40°	11207.0	18.1
40°-50°	5569.4	9.0
50°-60°	3331.1	5.4
60°-70°	2344.5	3.8
70°-80°	1510.3	2.4
80°-90°	484.0	0.8
90°-100°	66.8	0.1
100°-110°	427.5	0.7
110°-120°	788.0	1.3
120°-130°	469.7	0.8
130°-140°	286.0	0.5
140°-150°	199.7	0.3
150°-160°	132.3	0.2
160°-170°	77.9	0.1
170°-180°	26.3	0.0
0°-30°	34906.6	56.5
0°-40°	46113.6	74.6
0°-60°	55014.1	89.0
0°-90°	59352.9	96.0
90°-120°	1282.3	2.1
90°-150°	2237.7	3.6
90°-180°	2474.0	4.0
0°-180°	61827.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	53118	53118	53118	53118	53118	
5°	52937	56474	52937	50190	52937	5024
15°	49858	52891	49858	43113	49858	13934
25°	39285	27971	39285	30633	39285	17785
35°	21026	10831	21026	14023	21026	13126
45°	7604	5098	7604	5555	7604	6222
55°	3851	3296	3851	3411	3851	3521
65°	2348	2339	2348	2329	2348	2358
75°	1404	1496	1404	1451	1404	1474
85°	390	492	390	469	390	433
90°	19	26	19	19	19	27
95°	36	38	36	31	36	38
105°	197	105	197	149	197	265
115°	838	720	838	680	838	764
125°	538	567	538	492	538	495
135°	343	398	343	361	343	272
145°	313	328	313	304	313	196
155°	282	295	282	276	282	132
165°	273	284	273	268	273	78
175°	277	286	277	272	277	26
180°	278	278	278	278	278	



TEST NUMBER:
 CATALOG NUMBER: EHBR1-60-UNV-TASM-L840-UPL24

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	53118.0	53118.0	53118.0	53118.0	53118.0	53118.0	53118.0	53118.0	53118.0	53118.0	53118.0
2.5°	53087.1	53773.4	54329.2	54695.7	54877.0	54695.7	54329.2	53773.4	53087.1	52404.8	51935.7
5°	52936.7	54311.2	55475.6	56237.6	56473.7	56237.6	55475.6	54311.2	52936.7	51637.9	50776.3
7.5°	52577.1	54718.6	56448.8	57338.2	57555.4	57338.2	56448.8	54718.6	52577.1	50738.4	49649.8
10°	52028.3	54975.6	56974.7	57612.1	57638.0	57612.1	56974.7	54975.6	52028.3	49551.2	48267.3
12.5°	51152.8	54884.0	56798.4	56589.2	56114.1	56589.2	56798.4	54884.0	51152.8	48100.9	46481.3
15°	49857.9	54341.1	55681.8	53979.6	52890.9	53979.6	55681.8	54341.1	49857.9	46142.7	44264.2
17.5°	48033.2	53325.2	53351.1	49983.4	47929.6	49983.4	53351.1	53325.2	48033.2	43748.2	41679.4
20°	45681.5	51695.6	50141.8	43982.3	41548.9	43982.3	50141.8	51695.6	45681.5	40917.5	38887.5
22.5°	42733.2	49498.4	45672.6	37945.3	34625.4	37945.3	45672.6	49498.4	42733.2	37625.5	35512.9
25°	39284.9	46806.1	40864.7	31367.4	27970.9	31367.4	40864.7	46806.1	39284.9	33703.1	31792.7
27.5°	35229.0	43393.6	35745.0	25632.2	22498.6	25632.2	35745.0	43393.6	35229.0	29653.2	27702.0
30°	30723.9	39019.0	30417.2	20412.9	17527.4	20412.9	30417.2	39019.0	30723.9	25103.3	23356.2
32.5°	25680.0	34731.0	25300.5	16356.0	13911.7	16356.0	25300.5	34731.0	25680.0	20761.5	18935.8
35°	21026.5	29366.3	20686.8	12851.9	10831.0	12851.9	20686.8	29366.3	21026.5	16662.8	14869.9
37.5°	16501.4	24297.5	16490.5	10348.9	8785.1	10348.9	16490.5	24297.5	16501.4	12954.5	11499.3
40°	12838.0	18998.5	12920.7	8261.2	7050.0	8261.2	12920.7	18998.5	12838.0	9856.8	8925.5
42.5°	9727.4	14527.3	10155.7	6780.1	5988.2	6780.1	10155.7	14527.3	9727.4	7766.1	7068.9
45°	7603.8	10690.5	7930.5	5720.3	5097.7	5720.3	7930.5	10690.5	7603.8	6254.2	5786.0
47.5°	6192.4	8262.2	6427.5	4906.5	4470.2	4906.5	6427.5	8262.2	6192.4	5290.0	4939.4
50°	5201.3	6339.8	5336.8	4283.0	3990.1	4283.0	5336.8	6339.8	5201.3	4530.0	4295.9
52.5°	4468.2	5170.5	4544.9	3816.8	3619.6	3816.8	4544.9	5170.5	4468.2	3963.3	3817.8
55°	3850.7	4346.7	3952.3	3432.4	3295.9	3432.4	3952.3	4346.7	3850.7	3527.0	3419.4
57.5°	3381.6	3687.4	3432.4	3104.7	3014.0	3104.7	3432.4	3687.4	3381.6	3138.5	3080.8
60°	2966.2	3193.3	3029.0	2818.8	2792.9	2818.8	3029.0	3193.3	2966.2	2823.8	2785.9
62.5°	2646.5	2789.9	2678.4	2561.8	2538.9	2561.8	2678.4	2789.9	2646.5	2536.9	2543.9
65°	2347.7	2481.1	2393.5	2330.7	2338.7	2330.7	2393.5	2481.1	2347.7	2296.9	2307.8
67.5°	2116.6	2186.3	2148.5	2112.6	2121.6	2112.6	2148.5	2186.3	2116.6	2066.8	2083.7
70°	1870.6	1945.3	1906.4	1911.4	1926.3	1911.4	1906.4	1945.3	1870.6	1855.6	1868.6
72.5°	1635.5	1693.3	1680.3	1692.3	1708.2	1692.3	1680.3	1693.3	1635.5	1633.5	1634.5
75°	1404.4	1448.2	1454.2	1471.2	1496.1	1471.2	1454.2	1448.2	1404.4	1389.5	1407.4
77.5°	1152.4	1202.2	1221.1	1244.1	1280.9	1244.1	1221.1	1202.2	1152.4	1162.4	1171.3
80°	921.3	944.2	986.1	1003.0	1054.8	1003.0	986.1	944.2	921.3	904.4	917.4
82.5°	674.3	695.2	731.1	763.0	792.9	763.0	731.1	695.2	674.3	666.4	667.3
85°	389.5	421.3	445.2	483.1	492.0	483.1	445.2	421.3	389.5	398.4	389.5
87.5°	136.5	146.4	167.3	182.3	183.3	182.3	167.3	146.4	136.5	139.4	126.5
90°	18.6	31.7	54.4	33.0	25.6	33.0	54.4	31.7	18.6	32.1	49.7
92.5°	24.0	42.5	76.0	42.5	32.3	42.5	76.0	42.5	24.0	41.5	79.4
95°	35.8	52.0	96.3	46.5	37.7	46.5	96.3	52.0	35.8	55.1	110.5
97.5°	54.7	64.2	108.4	49.3	44.5	49.3	108.4	64.2	54.7	67.2	126.7
100°	72.3	72.3	196.3	56.0	49.9	56.0	196.3	72.3	72.3	83.1	197.0
102.5°	108.8	140.9	452.7	108.4	59.4	108.4	452.7	140.9	108.8	154.7	417.3
105°	196.6	319.3	794.7	271.9	105.0	271.9	794.7	319.3	196.6	322.3	743.0
107.5°	371.0	593.6	1023.1	531.4	236.1	531.4	1023.1	593.6	371.0	569.7	980.5
110°	592.6	828.8	1116.3	726.0	471.2	726.0	1116.3	828.8	592.6	781.9	1027.8



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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°	771.0	923.4	1090.7	804.4	649.6	804.4	1090.7	923.4	771.0	862.9	984.6
115°	838.3	909.9	974.4	801.7	719.9	801.7	974.4	909.9	838.3	842.7	879.2
117.5°	809.9	832.9	842.0	753.1	724.0	753.1	842.0	832.9	809.9	758.5	746.7
120°	731.5	722.0	710.5	681.4	683.4	681.4	710.5	722.0	731.5	662.6	623.7
122.5°	633.8	613.6	601.0	609.4	628.0	609.4	601.0	613.6	633.8	564.9	535.5
125°	537.9	517.6	525.0	547.3	566.8	547.3	525.0	517.6	537.9	480.8	473.0
127.5°	457.8	448.3	469.6	494.6	511.4	494.6	469.6	448.3	457.8	421.3	428.4
130°	400.7	402.4	430.4	452.3	462.8	452.3	430.4	402.4	400.7	383.1	401.0
132.5°	365.2	375.0	401.7	420.9	427.3	420.9	401.7	375.0	365.2	360.8	382.7
135°	343.2	357.4	382.4	394.2	397.5	394.2	382.4	357.4	343.2	345.5	365.2
137.5°	330.7	344.9	363.5	373.6	371.9	373.6	363.5	344.9	330.7	335.7	350.9
140°	323.6	337.8	345.9	357.4	356.6	357.4	345.9	337.8	323.6	326.3	338.4
142.5°	316.5	329.3	333.4	342.1	340.4	342.1	333.4	329.3	316.5	319.2	327.3
145°	313.4	323.2	319.5	330.0	327.8	330.0	319.5	323.2	313.4	313.8	318.8
147.5°	306.6	313.8	309.7	318.8	316.7	318.8	309.7	313.8	306.6	306.6	308.9
150°	299.4	304.8	298.5	308.9	309.5	308.9	298.5	304.8	299.4	298.1	300.4
152.5°	289.6	295.0	289.6	301.4	301.1	301.4	289.6	295.0	289.6	288.3	290.6
155°	282.2	284.9	282.2	294.0	295.0	294.0	282.2	284.9	282.2	281.2	283.2
157.5°	277.4	279.8	278.4	288.9	289.9	288.9	278.4	279.8	277.4	277.4	278.4
160°	274.6	277.3	277.0	286.1	287.1	286.1	277.0	277.3	274.6	275.0	276.0
162.5°	273.9	273.9	274.6	283.7	285.7	283.7	274.6	273.9	273.9	273.9	275.3
165°	272.9	274.2	273.5	280.9	284.3	280.9	273.5	274.2	272.9	273.2	273.2
167.5°	273.5	272.2	274.2	281.2	284.6	281.2	274.2	272.2	273.5	273.9	273.9
170°	271.8	272.8	273.5	280.5	283.8	280.5	273.5	272.8	271.8	273.2	273.5
172.5°	274.8	274.8	275.1	280.7	285.4	280.7	275.1	274.8	274.8	275.2	276.5
175°	276.8	276.5	277.0	281.4	286.1	281.4	277.0	276.5	276.8	275.8	275.8
177.5°	275.5	277.5	279.4	283.7	289.8	283.7	279.4	277.5	275.5	275.8	275.8
180°	277.5	277.5	277.5	277.5	277.5	277.5	277.5	277.5	277.5	277.5	277.5



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	53118.0	53118.0	53118.0	53118.0	53118.0	53118.0
2.5°	51575.1	51541.2	51575.1	51935.7	52404.8	53087.1
5°	50376.9	50189.6	50376.9	50776.3	51637.9	52936.7
7.5°	48981.4	48872.8	48981.4	49649.8	50738.4	52577.1
10°	47512.3	47266.2	47512.3	48267.3	49551.2	52028.3
12.5°	45701.4	45375.7	45701.4	46481.3	48100.9	51152.8
15°	43398.6	43112.7	43398.6	44264.2	46142.7	49857.9
17.5°	40927.4	40668.4	40927.4	41679.4	43748.2	48033.2
20°	37823.7	37620.5	37823.7	38887.5	40917.5	45681.5
22.5°	34567.7	34377.4	34567.7	35512.9	37625.5	42733.2
25°	30736.9	30633.3	30736.9	31792.7	33703.1	39284.9
27.5°	26597.3	26421.0	26597.3	27702.0	29653.2	35229.0
30°	22368.1	22076.3	22368.1	23356.2	25103.3	30723.9
32.5°	18231.6	18021.4	18231.6	18935.8	20761.5	25680.0
35°	14233.5	14023.3	14233.5	14869.9	16662.8	21026.5
37.5°	11090.9	10719.4	11090.9	11499.3	12954.5	16501.4
40°	8411.6	8351.8	8411.6	8925.5	9856.8	12838.0
42.5°	6847.8	6685.4	6847.8	7068.9	7766.1	9727.4
45°	5618.7	5554.9	5618.7	5786.0	6254.2	7603.8
47.5°	4831.8	4859.7	4831.8	4939.4	5290.0	6192.4
50°	4245.1	4262.1	4245.1	4295.9	4530.0	5201.3
52.5°	3812.9	3797.9	3812.9	3817.8	3963.3	4468.2
55°	3430.4	3411.4	3430.4	3419.4	3527.0	3850.7
57.5°	3095.7	3109.6	3095.7	3080.8	3138.5	3381.6
60°	2796.9	2809.8	2796.9	2785.9	2823.8	2966.2
62.5°	2544.9	2552.9	2544.9	2543.9	2536.9	2646.5
65°	2319.8	2328.7	2319.8	2307.8	2296.9	2347.7
67.5°	2104.6	2104.6	2104.6	2083.7	2066.8	2116.6
70°	1902.4	1901.4	1902.4	1868.6	1855.6	1870.6
72.5°	1659.4	1683.3	1659.4	1634.5	1633.5	1635.5
75°	1423.3	1451.2	1423.3	1407.4	1389.5	1404.4
77.5°	1184.3	1227.1	1184.3	1171.3	1162.4	1152.4
80°	939.3	986.1	939.3	917.4	904.4	921.3
82.5°	694.2	729.1	694.2	667.3	666.4	674.3
85°	413.4	469.1	413.4	389.5	398.4	389.5
87.5°	132.5	169.3	132.5	126.5	139.4	136.5
90°	29.4	18.6	29.4	49.7	32.1	18.6
92.5°	44.3	26.7	44.3	79.4	41.5	24.0
95°	51.0	30.7	51.0	110.5	55.1	35.8
97.5°	56.4	39.8	56.4	126.7	67.2	54.7
100°	65.9	52.0	65.9	197.0	83.1	72.3
102.5°	138.9	87.1	138.9	417.3	154.7	108.8
105°	291.6	149.3	291.6	743.0	322.3	196.6
107.5°	521.4	257.4	521.4	980.5	569.7	371.0
110°	691.6	479.1	691.6	1027.8	781.9	592.6



TEST NUMBER:

CATALOG NUMBER: EHBR1-60-UNV-TASM-L840-UPL24

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	743.0	646.7	743.0	984.6	862.9	771.0
115°	714.6	680.5	714.6	879.2	842.7	838.3
117.5°	652.5	657.5	652.5	746.7	758.5	809.9
120°	580.8	608.9	580.8	623.7	662.6	731.5
122.5°	515.6	548.0	515.6	535.5	564.9	633.8
125°	458.8	492.3	458.8	473.0	480.8	537.9
127.5°	419.6	442.3	419.6	428.4	421.3	457.8
130°	389.5	408.5	389.5	401.0	383.1	400.7
132.5°	368.9	381.1	368.9	382.7	360.8	365.2
135°	351.0	360.8	351.0	365.2	345.5	343.2
137.5°	335.8	344.2	335.8	350.9	335.7	330.7
140°	322.9	330.0	322.9	338.4	326.3	323.6
142.5°	309.0	314.5	309.0	327.3	319.2	316.5
145°	300.2	304.3	300.2	318.8	313.8	313.4
147.5°	292.7	295.4	292.7	308.9	306.6	306.6
150°	285.2	287.9	285.2	300.4	298.1	299.4
152.5°	276.8	280.5	276.8	290.6	288.3	289.6
155°	272.0	275.7	272.0	283.2	281.2	282.2
157.5°	269.9	273.3	269.9	278.4	277.4	277.4
160°	268.9	271.2	268.9	276.0	275.0	274.6
162.5°	266.8	269.2	266.8	275.3	273.9	273.9
165°	267.5	268.5	267.5	273.2	273.2	272.9
167.5°	267.1	268.5	267.1	273.9	273.9	273.5
170°	268.1	269.1	268.1	273.5	273.2	271.8
172.5°	270.1	271.1	270.1	276.5	275.2	274.8
175°	270.8	271.8	270.8	275.8	275.8	276.8
177.5°	273.1	274.1	273.1	275.8	275.8	275.5
180°	277.5	277.5	277.5	277.5	277.5	277.5



TEST NUMBER: CATALOG
 CATALOG NUMBER: EHBR1-60-UNV-TASM-L840-UPL24

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	20.03	21.17	20.47	21.57	21.99	19.35	20.49	19.79	20.89	21.31
	3H	21.58	22.59	22.03	23.01	23.48	21.20	22.21	21.65	22.63	23.10
	4H	22.21	23.16	22.69	23.60	24.08	21.98	22.93	22.45	23.36	23.85
	6H	22.70	23.57	23.18	24.02	24.52	22.62	23.50	23.11	23.95	24.44
	8H	22.85	23.67	23.35	24.15	24.65	22.85	23.67	23.35	24.14	24.65
	12H	22.92	23.71	23.43	24.17	24.70	22.97	23.76	23.48	24.23	24.75
4H	2H	20.45	21.40	20.92	21.83	22.31	19.92	20.87	20.40	21.31	21.79
	3H	22.24	23.03	22.73	23.51	24.01	21.98	22.77	22.47	23.25	23.75
	4H	23.02	23.72	23.53	24.22	24.76	22.89	23.60	23.40	24.09	24.63
	6H	23.64	24.24	24.17	24.76	25.33	23.66	24.27	24.20	24.79	25.35
	8H	23.83	24.40	24.37	24.92	25.49	23.93	24.50	24.47	25.02	25.59
	12H	23.94	24.44	24.49	24.99	25.56	24.10	24.60	24.66	25.16	25.73
8H	4H	23.27	23.84	23.81	24.36	24.92	23.17	23.74	23.71	24.26	24.83
	6H	24.01	24.47	24.58	25.04	25.62	24.08	24.54	24.65	25.11	25.68
	8H	24.28	24.69	24.87	25.28	25.86	24.43	24.84	25.02	25.43	26.01
	12H	24.46	24.81	25.04	25.38	26.04	24.68	25.04	25.26	25.60	26.27
12H	4H	23.28	23.78	23.84	24.34	24.90	23.18	23.68	23.74	24.24	24.81
	6H	24.05	24.47	24.64	25.05	25.64	24.12	24.53	24.71	25.12	25.70
	8H	24.37	24.73	24.96	25.30	25.96	24.53	24.89	25.11	25.45	26.11