

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-UPL12

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: REPORT IS A COMBINATION OF REPORTS P1431900 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-UPL12
Description: Elevate Round Highbay at, 60000 lumens, 4000K 80CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

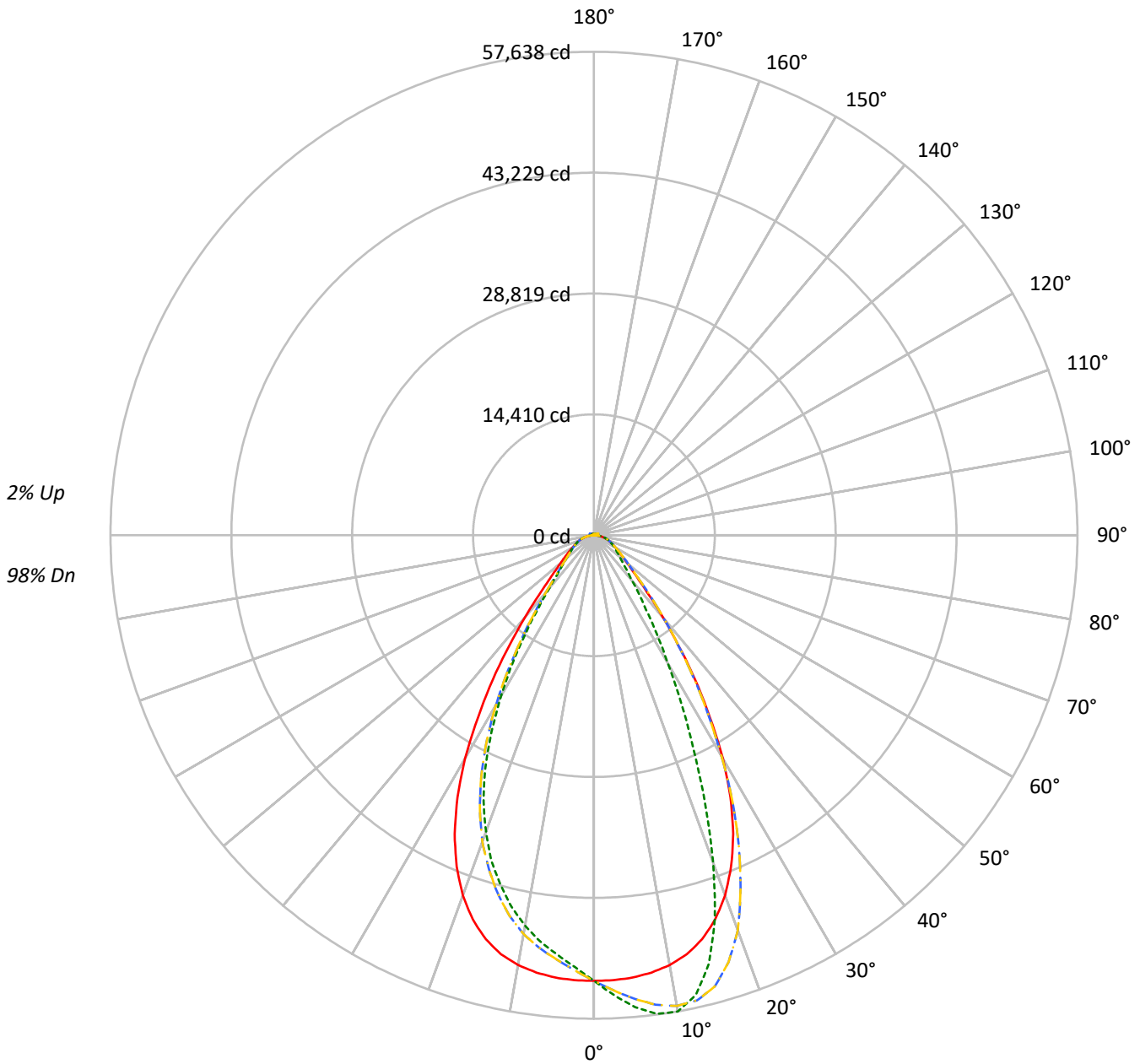
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 60603.1 lumens
Efficiency: N/A
Efficacy: 179.4 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): 337.8
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				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	116	116	116	116	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	94	93	92	90	93	92	90	88
2	104	99	94	89	102	97	92	88	93	89	86	90	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	73	69	75	71	68	75	71	68	66
5	87	77	70	65	85	76	70	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	66	61	58	66	61	58	56
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	62	57	54	52
8	73	62	56	51	72	62	55	51	60	55	51	59	54	50	58	53	50	58	53	50	48
9	69	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	55	50	47	45
10	66	55	49	44	65	55	49	44	54	48	44	53	48	44	52	47	44	52	47	44	42

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	8.3
10°-20°	13740.8	22.7
20°-30°	16115.1	26.6
30°-40°	11207.0	18.5
40°-50°	5569.4	9.2
50°-60°	3331.1	5.5
60°-70°	2344.5	3.9
70°-80°	1510.3	2.5
80°-90°	481.8	0.8
90°-100°	34.6	0.1
100°-110°	214.1	0.4
110°-120°	393.3	0.6
120°-130°	235.6	0.4
130°-140°	145.1	0.2
140°-150°	102.7	0.2
150°-160°	69.7	0.1
160°-170°	42.5	0.1
170°-180°	14.7	0.0
0°-30°	34906.6	57.6
0°-40°	46113.6	76.1
0°-60°	55014.1	90.8
0°-90°	59350.8	97.9
90°-120°	642.0	1.1
90°-150°	1125.4	1.9
90°-180°	1252.0	2.1
0°-180°	60603.1	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°	10	17	10	10	10	23
95°	19	23	19	16	19	19
105°	99	57	99	75	99	133
115°	418	362	418	339	418	381
125°	269	287	269	246	269	248
135°	175	203	175	181	175	138
145°	162	169	162	157	162	101
155°	148	156	148	146	148	69
165°	149	158	149	147	149	42
175°	155	164	155	152	155	15
180°	156	156	156	156	156	



TEST NUMBER:

CATALOG NUMBER: EHBR1-60-UNV-TASM-L840-UPL12

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°	9.7	16.8	28.5	19.4	16.7	19.4	28.5	16.8	9.7	16.4	25.2
92.5°	12.4	22.1	39.3	24.1	20.1	24.1	39.3	22.1	12.4	21.1	40.0
95°	18.8	26.8	49.3	26.1	22.8	26.1	49.3	26.8	18.8	27.9	55.4
97.5°	28.2	32.9	55.4	27.5	26.1	27.5	55.4	32.9	28.2	33.9	63.5
100°	36.9	36.9	99.0	30.8	28.8	30.8	99.0	36.9	36.9	42.3	98.4
102.5°	55.1	71.5	227.0	57.4	33.5	57.4	227.0	71.5	55.1	77.9	207.9
105°	98.7	160.2	396.9	138.6	56.7	138.6	396.9	160.2	98.7	161.2	369.7
107.5°	185.4	296.5	510.4	267.6	121.8	267.6	510.4	296.5	185.4	284.1	488.2
110°	295.5	413.4	556.7	364.3	238.7	364.3	556.7	413.4	295.5	389.5	511.8



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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°	384.1	460.4	544.0	403.3	327.3	403.3	544.0	460.4	384.1	429.8	490.3
115°	418.1	453.7	486.2	401.9	362.3	401.9	486.2	453.7	418.1	419.7	437.9
117.5°	404.0	415.4	420.4	377.7	364.3	377.7	420.4	415.4	404.0	378.4	372.1
120°	365.0	360.3	355.6	342.1	344.1	342.1	355.6	360.3	365.0	330.7	310.9
122.5°	317.0	306.9	301.2	306.9	316.6	306.9	301.2	306.9	317.0	282.7	267.6
125°	269.3	259.2	263.9	276.0	286.7	276.0	263.9	259.2	269.3	241.4	237.1
127.5°	230.0	225.3	236.4	249.8	259.2	249.8	236.4	225.3	230.0	211.9	214.9
130°	202.1	202.5	216.9	229.3	235.0	229.3	216.9	202.5	202.1	193.4	201.8
132.5°	185.0	189.4	203.1	214.2	217.9	214.2	203.1	189.4	185.0	183.3	193.7
135°	174.6	180.6	194.0	200.4	203.1	200.4	194.0	180.6	174.6	176.2	185.0
137.5°	168.8	174.9	184.6	190.7	190.3	190.7	184.6	174.9	168.8	171.9	178.9
140°	165.8	171.9	175.9	182.6	183.3	182.6	175.9	171.9	165.8	167.2	173.2
142.5°	162.8	168.2	170.2	175.5	175.2	175.5	170.2	168.2	162.8	164.1	168.2
145°	161.8	166.1	163.8	169.5	169.4	169.5	163.8	166.1	161.8	161.4	164.5
147.5°	158.4	161.4	159.4	164.5	164.3	164.5	159.4	161.4	158.4	158.4	160.0
150°	155.3	158.0	154.4	160.0	161.3	160.0	154.4	158.0	155.3	154.6	156.3
152.5°	150.9	153.6	150.9	157.3	157.6	157.3	150.9	153.6	150.9	150.2	151.9
155°	148.2	149.6	148.2	154.6	155.6	154.6	148.2	149.6	148.2	147.2	149.2
157.5°	146.9	148.5	147.9	153.6	154.6	153.6	147.9	148.5	146.9	146.9	147.9
160°	147.5	148.8	149.2	154.2	155.2	154.2	149.2	148.8	147.5	147.2	148.2
162.5°	148.1	148.1	149.5	154.5	156.5	154.5	149.5	148.1	148.1	148.1	148.8
165°	149.1	149.8	150.5	155.1	157.8	155.1	150.5	149.8	149.1	148.8	148.8
167.5°	150.5	149.8	151.8	156.8	159.5	156.8	151.8	149.8	150.5	150.1	150.1
170°	150.1	151.1	152.4	157.5	160.0	157.5	152.4	151.1	150.1	150.8	150.5
172.5°	153.1	153.1	154.8	159.0	162.4	159.0	154.8	153.1	153.1	152.8	153.5
175°	155.1	155.4	156.7	160.3	163.7	160.3	156.7	155.4	155.1	154.1	154.1
177.5°	154.4	156.4	158.3	162.0	166.0	162.0	158.3	156.4	154.4	154.1	154.1
180°	156.4	156.4	156.4	156.4	156.4	156.4	156.4	156.4	156.4	156.4	156.4



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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°	15.1	9.7	15.1	25.2	16.4	9.7
92.5°	22.5	13.8	22.5	40.0	21.1	12.4
95°	25.8	15.8	25.8	55.4	27.9	18.8
97.5°	28.5	20.8	28.5	63.5	33.9	28.2
100°	33.2	26.8	33.2	98.4	42.3	36.9
102.5°	69.5	44.3	69.5	207.9	77.9	55.1
105°	145.4	75.2	145.4	369.7	161.2	98.7
107.5°	259.6	128.9	259.6	488.2	284.1	185.4
110°	344.2	239.1	344.2	511.8	389.5	295.5



TEST NUMBER:

CATALOG NUMBER: EHBR1-60-UNV-TASM-L840-UPL12

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	369.7	322.4	369.7	490.3	429.8	384.1
115°	355.6	339.2	355.6	437.9	419.7	418.1
117.5°	324.7	327.7	324.7	372.1	378.4	404.0
120°	289.1	303.6	289.1	310.9	330.7	365.0
122.5°	257.2	273.3	257.2	267.6	282.7	317.0
125°	229.0	246.1	229.0	237.1	241.4	269.3
127.5°	209.5	221.3	209.5	214.9	211.9	230.0
130°	195.1	204.5	195.1	201.8	193.4	202.1
132.5°	185.3	191.4	185.3	193.7	183.3	185.0
135°	176.9	181.3	176.9	185.0	176.2	174.6
137.5°	169.9	173.6	169.9	178.9	171.9	168.8
140°	164.5	167.5	164.5	173.2	167.2	165.8
142.5°	158.1	160.8	158.1	168.2	164.1	162.8
145°	154.7	156.7	154.7	164.5	161.4	161.8
147.5°	151.9	153.3	151.9	160.0	158.4	158.4
150°	149.2	150.6	149.2	156.3	154.6	155.3
152.5°	145.5	147.9	145.5	151.9	150.2	150.9
155°	144.2	146.5	144.2	149.2	147.2	148.2
157.5°	144.1	146.8	144.1	147.9	146.9	146.9
160°	145.1	146.8	145.1	148.2	147.2	147.5
162.5°	145.1	146.8	145.1	148.8	148.1	148.1
165°	146.4	147.4	146.4	148.8	148.8	149.1
167.5°	146.8	147.4	146.8	150.1	150.1	150.5
170°	147.8	148.8	147.8	150.5	150.8	150.1
172.5°	149.8	150.8	149.8	153.5	152.8	153.1
175°	151.1	152.1	151.1	154.1	154.1	155.1
177.5°	152.8	153.8	152.8	154.1	154.1	154.4
180°	156.4	156.4	156.4	156.4	156.4	156.4



TEST NUMBER: CATALOG
 CATALOG NUMBER: EHBR1-60-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	20.18	21.36	20.59	21.72	22.09	19.50	20.68	19.91	21.03	21.40
	3H	21.73	22.78	22.15	23.15	23.57	21.35	22.40	21.77	22.77	23.19
	4H	22.37	23.35	22.81	23.74	24.18	22.14	23.11	22.58	23.51	23.94
	6H	22.85	23.75	23.31	24.16	24.61	22.78	23.68	23.23	24.09	24.54
	8H	23.01	23.85	23.48	24.29	24.75	23.00	23.85	23.47	24.28	24.74
	12H	23.08	23.89	23.55	24.32	24.80	23.13	23.94	23.60	24.37	24.85
4H	2H	20.60	21.58	21.05	21.97	22.41	20.08	21.06	20.52	21.45	21.89
	3H	22.40	23.21	22.86	23.65	24.11	22.14	22.95	22.59	23.39	23.85
	4H	23.18	23.90	23.65	24.36	24.86	23.05	23.77	23.52	24.23	24.73
	6H	23.80	24.42	24.30	24.90	25.42	23.82	24.45	24.33	24.93	25.45
	8H	23.99	24.57	24.50	25.06	25.58	24.09	24.67	24.60	25.16	25.68
	12H	24.10	24.61	24.62	25.13	25.66	24.26	24.78	24.79	25.30	25.82
8H	4H	23.43	24.01	23.94	24.50	25.02	23.33	23.91	23.84	24.40	24.92
	6H	24.17	24.64	24.71	25.18	25.71	24.24	24.71	24.78	25.24	25.78
	8H	24.44	24.86	25.00	25.42	25.96	24.59	25.01	25.15	25.56	26.11
	12H	24.62	24.99	25.17	25.52	26.14	24.84	25.21	25.39	25.74	26.36
12H	4H	23.44	23.95	23.97	24.48	25.00	23.35	23.86	23.87	24.38	24.90
	6H	24.21	24.64	24.77	25.19	25.73	24.28	24.70	24.84	25.26	25.80
	8H	24.53	24.90	25.09	25.44	26.06	24.69	25.06	25.24	25.59	26.21