

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: EHBR1-48-UNV-TASM-L840-UPL15

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS A COMBINATION OF REPORTS P1431837 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-48-UNV-TASM-L840-UPL15
Description: Elevate Round Highbay at, 48000 lumens, 4000K 80CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

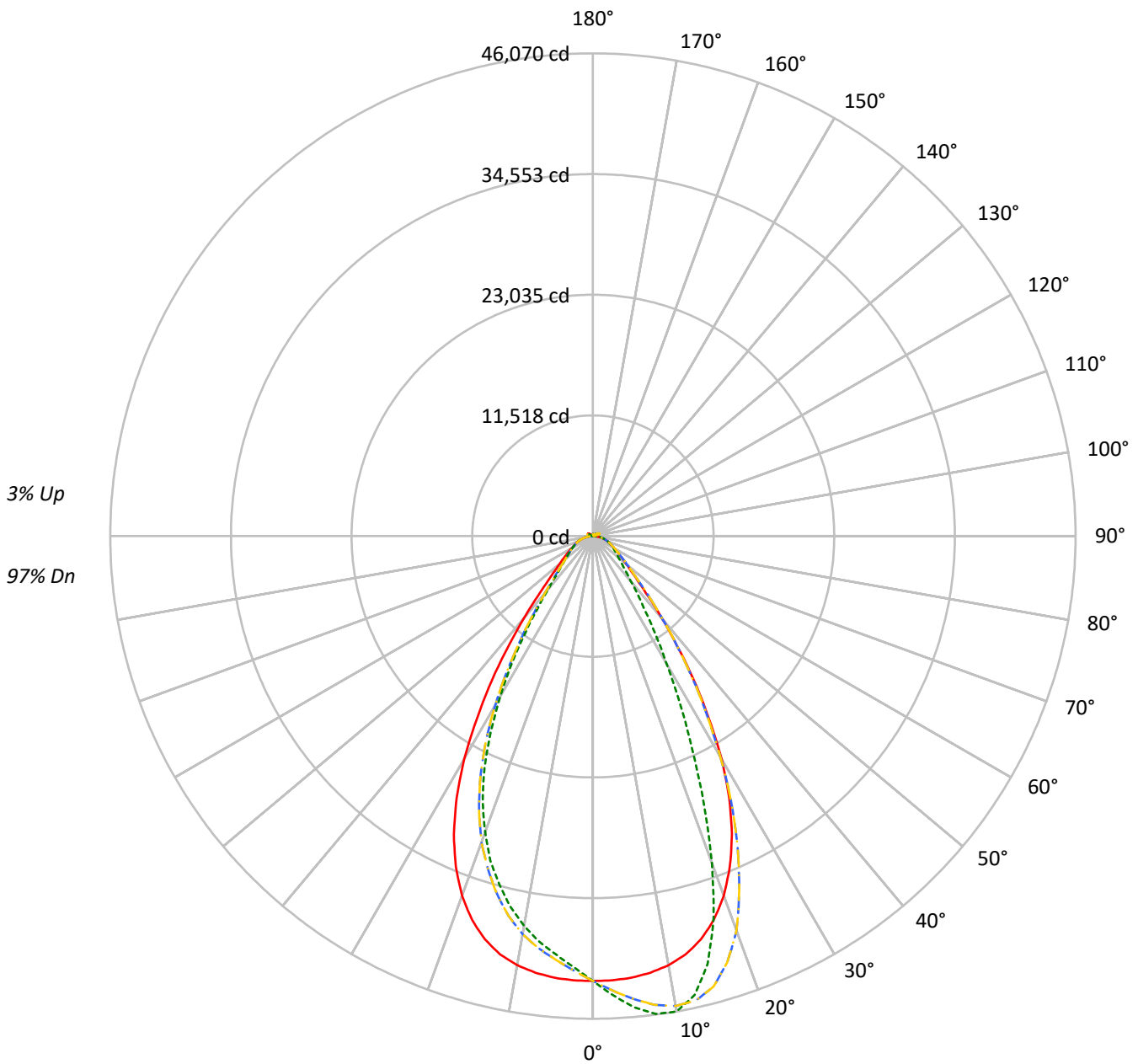
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 48961.1 lumens
Efficiency: N/A
Efficacy: 182.8 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): 267.9
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	104	104	104	99	99	99	99	99	99	97
1	111	108	105	102	108	105	102	100	101	98	96	96	94	93	92	91	90	92	91	90	87
2	104	98	93	89	102	96	92	88	92	89	85	89	86	83	86	83	81	86	83	81	79
3	98	90	84	79	95	88	83	78	85	81	77	82	78	75	80	76	74	80	76	74	72
4	92	83	76	71	90	82	75	71	79	74	70	76	72	68	74	70	67	74	70	67	65
5	86	77	70	65	84	76	69	64	73	68	64	71	66	63	69	65	62	69	65	62	60
6	82	71	64	59	80	70	64	59	68	63	58	67	62	58	65	61	57	65	61	57	55
7	77	66	60	55	75	66	59	55	64	58	54	62	57	54	61	56	53	61	56	53	51
8	73	62	55	51	71	61	55	51	60	54	50	59	54	50	57	53	49	57	53	49	48
9	69	58	52	47	68	58	51	47	56	51	47	55	50	46	54	50	46	54	50	46	45
10	66	55	48	44	64	54	48	44	53	48	44	52	47	43	51	47	43	51	47	43	42

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	199380	199380	199380	199380
5°	198167	211407	198167	187883
10°	195731	216835	195731	177816
15°	189952	201507	189952	164254
20°	177653	161581	177653	146304
25°	157237	111952	157237	122609
30°	127670	72833	127670	91736
35°	91569	47168	91569	61071
40°	59203	32511	59203	38514
45°	37563	25184	37563	27442
50°	27895	21400	27895	22858
55°	22775	19494	22775	20177
60°	19722	18569	19722	18682
65°	17978	17909	17978	17832
70°	17039	17548	17039	17321
75°	15935	16975	15935	16467
80°	13998	16026	13998	14983
85°	9057	11443	9057	10911

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 52812 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4037.0	8.2
10°-20°	10982.9	22.4
20°-30°	12880.6	26.3
30°-40°	8957.7	18.3
40°-50°	4451.5	9.1
50°-60°	2662.5	5.4
60°-70°	1874.0	3.8
70°-80°	1207.2	2.5
80°-90°	386.1	0.8
90°-100°	41.4	0.1
100°-110°	262.1	0.5
110°-120°	482.6	1.0
120°-130°	288.1	0.6
130°-140°	176.0	0.4
140°-150°	123.4	0.3
150°-160°	82.3	0.2
160°-170°	49.1	0.1
170°-180°	16.7	0.0
0°-30°	27900.5	57.0
0°-40°	36858.2	75.3
0°-60°	43972.2	89.8
0°-90°	47439.4	96.9
90°-120°	786.1	1.6
90°-150°	1373.6	2.8
90°-180°	1522.0	3.1
0°-180°	48961.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	42457	42457	42457	42457	42457	
5°	42312	45139	42312	40116	42312	4015
15°	39851	42275	39851	34460	39851	11137
25°	31400	22357	31400	24485	31400	14216
35°	16806	8657	16806	11209	16806	10492
45°	6078	4075	6078	4440	6078	4973
55°	3078	2634	3078	2727	3078	2815
65°	1876	1869	1876	1861	1876	1885
75°	1122	1196	1122	1160	1122	1178
85°	311	393	311	375	311	346
90°	12	17	12	12	12	20
95°	22	25	22	19	22	23
105°	121	66	121	92	121	162
115°	513	442	513	417	513	468
125°	330	349	330	302	330	304
135°	211	245	211	221	211	168
145°	194	203	194	188	194	121
155°	176	184	176	172	176	82
165°	172	180	172	169	172	49
175°	176	183	176	173	176	17
180°	177	177	177	177	177	



TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	42456.6	42456.6	42456.6	42456.6	42456.6	42456.6	42456.6	42456.6	42456.6	42456.6	42456.6
2.5°	42432.0	42980.5	43424.7	43717.7	43862.6	43717.7	43424.7	42980.5	42432.0	41886.6	41511.6
5°	42311.8	43410.4	44341.1	44950.1	45138.8	44950.1	44341.1	43410.4	42311.8	41273.6	40585.0
7.5°	42024.3	43736.0	45118.9	45829.8	46003.4	45829.8	45118.9	43736.0	42024.3	40554.7	39684.5
10°	41585.7	43941.4	45539.2	46048.8	46069.5	46048.8	45539.2	43941.4	41585.7	39605.7	38579.5
12.5°	40885.9	43868.2	45398.3	45231.1	44851.4	45231.1	45398.3	43868.2	40885.9	38446.6	37152.1
15°	39850.9	43434.3	44505.9	43145.3	42275.1	43145.3	44505.9	43434.3	39850.9	36881.4	35379.9
17.5°	38392.4	42622.2	42642.9	39951.2	38309.6	39951.2	42642.9	42622.2	38392.4	34967.5	33313.9
20°	36512.8	41319.8	40077.8	35154.6	33209.6	35154.6	40077.8	41319.8	36512.8	32704.9	31082.4
22.5°	34156.2	39563.5	36505.6	30329.2	27675.8	30329.2	36505.6	39563.5	34156.2	30073.7	28385.1
25°	31400.0	37411.6	32662.7	25071.6	22356.8	25071.6	32662.7	37411.6	31400.0	26938.5	25411.6
27.5°	28158.2	34684.1	28570.6	20487.5	17982.9	20487.5	28570.6	34684.1	28158.2	23701.5	22141.9
30°	24557.3	31187.5	24312.1	16315.8	14009.4	16315.8	24312.1	31187.5	24557.3	20064.8	18668.4
32.5°	20525.7	27760.1	20222.4	13073.2	11119.5	13073.2	20222.4	27760.1	20525.7	16594.5	15135.2
35°	16806.2	23472.2	16534.8	10272.4	8657.1	10272.4	16534.8	23472.2	16806.2	13318.4	11885.4
37.5°	13189.4	19420.7	13180.7	8271.8	7021.8	8271.8	13180.7	19420.7	13189.4	10354.4	9191.3
40°	10261.3	15185.3	10327.4	6603.1	5635.0	6603.1	10327.4	15185.3	10261.3	7878.5	7134.1
42.5°	7775.0	11611.5	8117.3	5419.2	4786.3	5419.2	8117.3	11611.5	7775.0	6207.4	5650.1
45°	6077.6	8544.8	6338.8	4572.2	4074.6	4572.2	6338.8	8544.8	6077.6	4998.9	4624.7
47.5°	4949.5	6603.9	5137.4	3921.7	3573.0	3921.7	5137.4	6603.9	4949.5	4228.2	3948.0
50°	4157.4	5067.3	4265.6	3423.3	3189.3	3423.3	4265.6	5067.3	4157.4	3620.8	3433.7
52.5°	3571.4	4132.7	3632.7	3050.8	2893.1	3050.8	3632.7	4132.7	3571.4	3167.8	3051.6
55°	3077.8	3474.3	3159.0	2743.5	2634.4	2743.5	3159.0	3474.3	3077.8	2819.1	2733.1
57.5°	2702.9	2947.3	2743.5	2481.5	2409.1	2481.5	2743.5	2947.3	2702.9	2508.6	2462.4
60°	2370.9	2552.4	2421.0	2253.0	2232.3	2253.0	2421.0	2552.4	2370.9	2257.0	2226.8
62.5°	2115.3	2230.0	2140.8	2047.6	2029.3	2047.6	2140.8	2230.0	2115.3	2027.7	2033.3
65°	1876.5	1983.2	1913.1	1862.9	1869.3	1862.9	1913.1	1983.2	1876.5	1835.9	1844.6
67.5°	1691.8	1747.5	1717.2	1688.6	1695.8	1688.6	1717.2	1747.5	1691.8	1652.0	1665.5
70°	1495.1	1554.8	1523.8	1527.8	1539.7	1527.8	1523.8	1554.8	1495.1	1483.2	1493.5
72.5°	1307.2	1353.4	1343.1	1352.6	1365.4	1352.6	1343.1	1353.4	1307.2	1305.6	1306.4
75°	1122.5	1157.6	1162.3	1175.9	1195.8	1175.9	1162.3	1157.6	1122.5	1110.6	1124.9
77.5°	921.1	960.9	976.1	994.4	1023.8	994.4	976.1	960.9	921.1	929.1	936.2
80°	736.4	754.7	788.2	801.7	843.1	801.7	788.2	754.7	736.4	722.9	733.2
82.5°	539.0	555.7	584.4	609.8	633.7	609.8	584.4	555.7	539.0	532.6	533.4
85°	311.3	336.8	355.9	386.1	393.3	386.1	355.9	336.8	311.3	318.5	311.3
87.5°	109.1	117.0	133.7	145.7	146.5	145.7	133.7	117.0	109.1	111.5	101.1
90°	11.5	19.8	33.8	21.3	17.1	21.3	33.8	19.8	11.5	19.8	30.6
92.5°	14.9	26.4	47.0	27.1	21.3	27.1	47.0	26.4	14.9	25.6	48.7
95°	22.3	32.2	59.4	29.6	24.6	29.6	59.4	32.2	22.3	33.9	67.8
97.5°	33.8	39.6	66.9	31.3	28.7	31.3	66.9	39.6	33.8	41.3	77.7
100°	44.6	44.6	120.6	35.4	32.0	35.4	120.6	44.6	44.6	51.2	120.7
102.5°	66.9	86.7	277.6	67.6	37.8	67.6	277.6	86.7	66.9	95.0	255.4
105°	120.6	195.8	486.8	167.6	65.9	167.6	486.8	195.8	120.6	197.5	454.6
107.5°	227.3	363.6	626.5	326.3	146.1	326.3	626.5	363.6	227.3	348.8	600.1
110°	362.8	507.5	683.5	445.4	289.9	445.4	683.5	507.5	362.8	478.5	629.0



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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°	471.9	565.3	667.8	493.3	399.0	493.3	667.8	565.3	471.9	528.1	602.5
115°	513.2	557.1	596.7	491.6	442.0	491.6	596.7	557.1	513.2	515.7	538.1
117.5°	495.9	509.9	515.7	461.9	444.5	461.9	515.7	509.9	495.9	464.5	457.1
120°	447.9	442.2	435.5	418.1	419.7	418.1	435.5	442.2	447.9	405.8	381.8
122.5°	388.4	376.0	368.5	374.2	385.8	374.2	368.5	376.0	388.4	346.2	328.1
125°	329.7	317.3	322.2	336.2	348.6	336.2	322.2	317.3	329.7	295.0	290.0
127.5°	280.9	275.1	288.3	304.0	314.7	304.0	288.3	275.1	280.9	258.6	262.8
130°	246.2	247.0	264.4	278.3	284.9	278.3	264.4	247.0	246.2	235.4	246.2
132.5°	224.6	230.5	247.0	259.3	263.4	259.3	247.0	230.5	224.6	222.1	235.4
135°	211.4	219.7	235.4	242.8	245.2	242.8	235.4	219.7	211.4	213.0	224.6
137.5°	203.9	212.3	223.8	230.4	229.5	230.4	223.8	212.3	203.9	207.2	216.3
140°	199.8	208.1	213.1	220.4	220.4	220.4	213.1	208.1	199.8	201.4	208.9
142.5°	195.6	203.1	205.6	211.3	210.5	211.3	205.6	203.1	195.6	197.3	202.2
145°	193.9	199.7	197.3	203.9	202.9	203.9	197.3	199.7	193.9	194.0	197.2
147.5°	189.8	194.0	191.5	197.2	196.3	197.2	191.5	194.0	189.8	189.8	191.3
150°	185.5	188.8	184.8	191.3	192.1	191.3	184.8	188.8	185.5	184.7	186.3
152.5°	179.7	183.0	179.7	187.1	187.1	187.1	179.7	183.0	179.7	178.9	180.5
155°	175.5	177.2	175.5	183.0	183.8	183.0	175.5	177.2	175.5	174.7	176.3
157.5°	173.0	174.6	173.8	180.4	181.2	180.4	173.8	174.6	173.0	173.0	173.8
160°	172.1	173.7	173.7	179.5	180.3	179.5	173.7	173.7	172.1	172.1	172.9
162.5°	172.0	172.0	172.8	178.6	180.2	178.6	172.8	172.0	172.0	172.0	172.8
165°	171.9	172.8	172.7	177.6	180.0	177.6	172.7	172.8	171.9	172.0	172.0
167.5°	172.7	171.9	173.5	178.4	180.8	178.4	173.5	171.9	172.7	172.7	172.7
170°	171.9	172.7	173.4	178.3	180.7	178.3	173.4	172.7	171.9	172.7	172.7
172.5°	174.3	174.3	175.0	179.0	182.2	179.0	175.0	174.3	174.3	174.3	175.1
175°	175.9	175.8	176.6	179.7	183.0	179.7	176.6	175.8	175.9	175.1	175.1
177.5°	175.0	176.6	178.1	181.4	185.4	181.4	178.1	176.6	175.0	175.1	175.1
180°	176.6	176.6	176.6	176.6	176.6	176.6	176.6	176.6	176.6	176.6	176.6



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	42456.6	42456.6	42456.6	42456.6	42456.6	42456.6
2.5°	41223.4	41196.4	41223.4	41511.6	41886.6	42432.0
5°	40265.7	40116.0	40265.7	40585.0	41273.6	42311.8
7.5°	39150.3	39063.6	39150.3	39684.5	40554.7	42024.3
10°	37976.0	37779.4	37976.0	38579.5	39605.7	41585.7
12.5°	36528.7	36268.4	36528.7	37152.1	38446.6	40885.9
15°	34688.0	34459.6	34688.0	35379.9	36881.4	39850.9
17.5°	32712.9	32505.9	32712.9	33313.9	34967.5	38392.4
20°	30232.1	30069.7	30232.1	31082.4	32704.9	36512.8
22.5°	27629.6	27477.5	27629.6	28385.1	30073.7	34156.2
25°	24567.7	24484.9	24567.7	25411.6	26938.5	31400.0
27.5°	21259.0	21118.1	21259.0	22141.9	23701.5	28158.2
30°	17878.6	17645.4	17878.6	18668.4	20064.8	24557.3
32.5°	14572.3	14404.3	14572.3	15135.2	16594.5	20525.7
35°	11376.7	11208.7	11376.7	11885.4	13318.4	16806.2
37.5°	8864.9	8567.9	8864.9	9191.3	10354.4	13189.4
40°	6723.3	6675.5	6723.3	7134.1	7878.5	10261.3
42.5°	5473.4	5343.6	5473.4	5650.1	6207.4	7775.0
45°	4491.0	4440.0	4491.0	4624.7	4998.9	6077.6
47.5°	3862.0	3884.3	3862.0	3948.0	4228.2	4949.5
50°	3393.1	3406.6	3393.1	3433.7	3620.8	4157.4
52.5°	3047.6	3035.6	3047.6	3051.6	3167.8	3571.4
55°	2741.9	2726.7	2741.9	2733.1	2819.1	3077.8
57.5°	2474.4	2485.5	2474.4	2462.4	2508.6	2702.9
60°	2235.5	2245.9	2235.5	2226.8	2257.0	2370.9
62.5°	2034.1	2040.5	2034.1	2033.3	2027.7	2115.3
65°	1854.2	1861.3	1854.2	1844.6	1835.9	1876.5
67.5°	1682.2	1682.2	1682.2	1665.5	1652.0	1691.8
70°	1520.6	1519.8	1520.6	1493.5	1483.2	1495.1
72.5°	1326.3	1345.5	1326.3	1306.4	1305.6	1307.2
75°	1137.7	1160.0	1137.7	1124.9	1110.6	1122.5
77.5°	946.6	980.8	946.6	936.2	929.1	921.1
80°	750.7	788.2	750.7	733.2	722.9	736.4
82.5°	554.9	582.8	554.9	533.4	532.6	539.0
85°	330.4	375.0	330.4	311.3	318.5	311.3
87.5°	105.9	135.3	105.9	101.1	111.5	109.1
90°	18.2	11.5	18.2	30.6	19.8	11.5
92.5°	27.3	16.5	27.3	48.7	25.6	14.9
95°	31.4	19.0	31.4	67.8	33.9	22.3
97.5°	34.7	24.7	34.7	77.7	41.3	33.8
100°	40.5	32.2	40.5	120.7	51.2	44.6
102.5°	85.1	53.7	85.1	255.4	95.0	66.9
105°	178.5	91.7	178.5	454.6	197.5	120.6
107.5°	319.0	157.8	319.0	600.1	348.8	227.3
110°	423.2	293.4	423.2	629.0	478.5	362.8



TEST NUMBER:

CATALOG NUMBER: EHBR1-48-UNV-TASM-L840-UPL15

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	454.6	395.9	454.6	602.5	528.1	471.9
115°	437.2	416.6	437.2	538.1	515.7	513.2
117.5°	399.2	402.5	399.2	457.1	464.5	495.9
120°	355.4	372.7	355.4	381.8	405.8	447.9
122.5°	315.7	335.5	315.7	328.1	346.2	388.4
125°	281.0	301.6	281.0	290.0	295.0	329.7
127.5°	257.0	271.0	257.0	262.8	258.6	280.9
130°	238.8	250.4	238.8	246.2	235.4	246.2
132.5°	226.4	233.8	226.4	235.4	222.1	224.6
135°	215.6	221.4	215.6	224.6	213.0	211.4
137.5°	206.5	211.5	206.5	216.3	207.2	203.9
140°	199.0	203.2	199.0	208.9	201.4	199.8
142.5°	190.7	194.0	190.7	202.2	197.3	195.6
145°	185.7	188.2	185.7	197.2	194.0	193.9
147.5°	181.4	183.1	181.4	191.3	189.8	189.8
150°	177.2	178.9	177.2	186.3	184.7	185.5
152.5°	172.2	174.7	172.2	180.5	178.9	179.7
155°	169.7	172.2	169.7	176.3	174.7	175.5
157.5°	168.8	171.2	168.8	173.8	173.0	173.0
160°	168.7	170.4	168.7	172.9	172.1	172.1
162.5°	167.9	169.5	167.9	172.8	172.0	172.0
165°	168.6	169.4	168.6	172.0	172.0	171.9
167.5°	168.6	169.4	168.6	172.7	172.7	172.7
170°	169.4	170.2	169.4	172.7	172.7	171.9
172.5°	171.0	171.8	171.0	175.1	174.3	174.3
175°	171.8	172.6	171.8	175.1	175.1	175.9
177.5°	173.4	174.2	173.4	175.1	175.1	175.0
180°	176.6	176.6	176.6	176.6	176.6	176.6



TEST NUMBER: CATALOG
 CATALOG NUMBER: EHBR1-48-UNV-TASM-L840-UPL15

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	19.32	20.48	19.74	20.86	21.26	18.64	19.80	19.06	20.18	20.57
	3H	20.87	21.90	21.31	22.30	22.74	20.49	21.52	20.93	21.92	22.36
	4H	21.51	22.47	21.97	22.89	23.35	21.27	22.23	21.73	22.65	23.11
	6H	21.99	22.87	22.46	23.31	23.78	21.92	22.80	22.39	23.24	23.71
	8H	22.14	22.98	22.63	23.43	23.92	22.14	22.98	22.63	23.43	23.91
	12H	22.22	23.01	22.71	23.46	23.97	22.27	23.07	22.76	23.51	24.02
4H	2H	19.74	20.70	20.20	21.12	21.58	19.22	20.18	19.68	20.60	21.06
	3H	21.54	22.33	22.01	22.80	23.28	21.28	22.07	21.75	22.54	23.02
	4H	22.31	23.03	22.81	23.51	24.03	22.19	22.90	22.68	23.38	23.90
	6H	22.93	23.54	23.45	24.05	24.59	22.96	23.57	23.48	24.08	24.62
	8H	23.13	23.70	23.65	24.21	24.75	23.23	23.80	23.75	24.31	24.85
	12H	23.23	23.74	23.78	24.28	24.83	23.40	23.90	23.94	24.44	24.99
8H	4H	22.57	23.14	23.09	23.64	24.19	22.47	23.04	22.99	23.55	24.09
	6H	23.31	23.77	23.86	24.33	24.88	23.37	23.84	23.93	24.39	24.95
	8H	23.58	23.99	24.15	24.56	25.13	23.73	24.14	24.30	24.71	25.28
	12H	23.75	24.12	24.32	24.67	25.31	23.98	24.34	24.55	24.89	25.53
12H	4H	22.58	23.08	23.12	23.62	24.17	22.48	22.98	23.02	23.53	24.07
	6H	23.35	23.77	23.93	24.34	24.90	23.42	23.83	23.99	24.40	24.97
	8H	23.67	24.03	24.24	24.58	25.23	23.82	24.19	24.39	24.74	25.38