

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



Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO COMMERCIAL

Report Number: P584045

Luminaire Tested: **HCC8S20D010SL-HM80520927-81WWBB**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584045
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HCC8S20D010SL-HM80520927-81WWBB
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

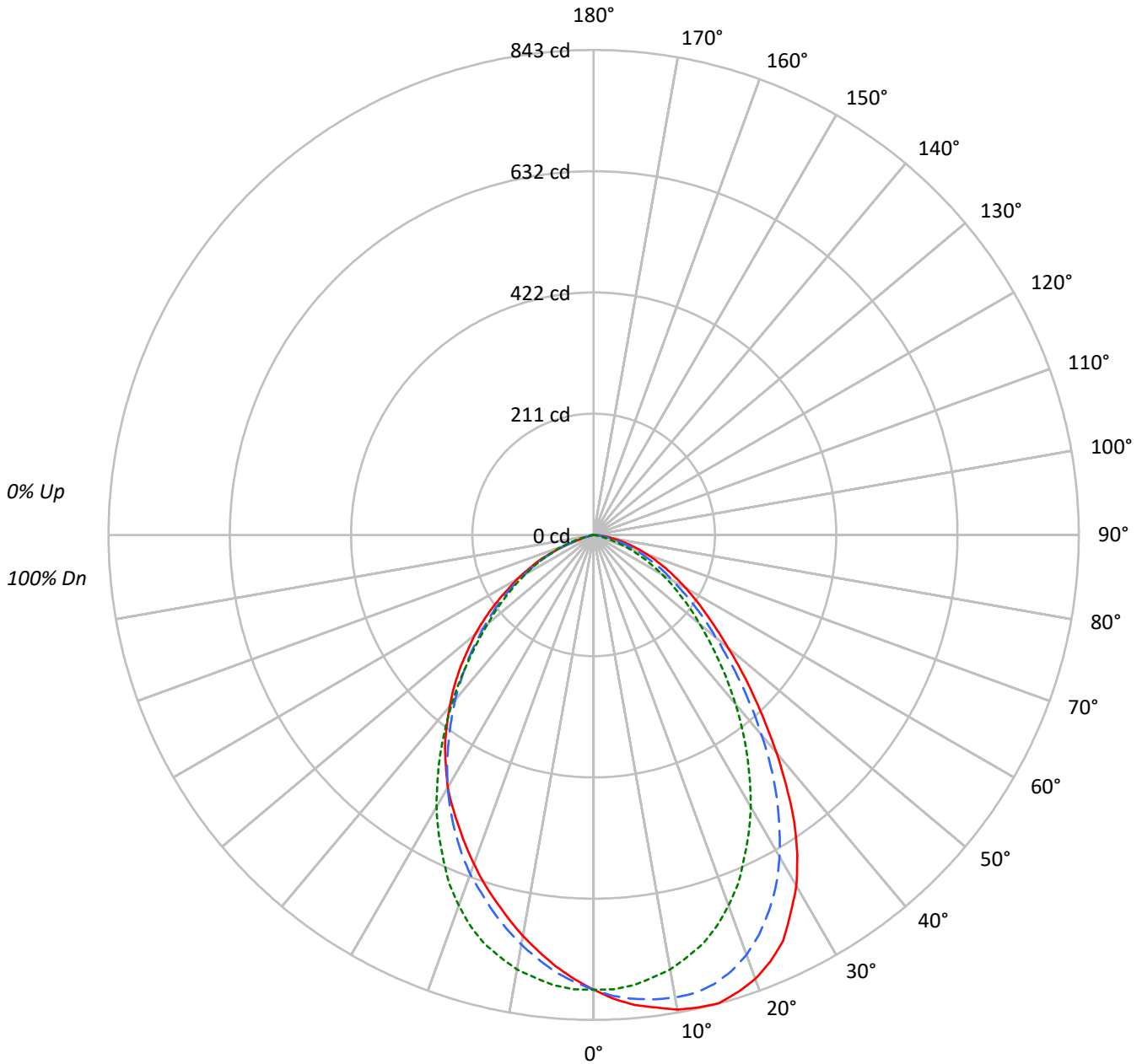
Lumens per Lamp: N/A
Luminaire Lumens: 1472.8 lumens
Efficiency: N/A
Efficacy: 73.6 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.07 / 1.16
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

Input Watts (W): 20
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: 25 FT



TEST NUMBER: P584045
CATALOG NUMBER: HCC8S20D010SL-HM80520927-81WWBB

Luminous Intensity Polar Plot



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



TEST NUMBER: P584045

CATALOG NUMBER: HCC8S20D010SL-HM80520927-81WWBB

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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77					77			
3	95	86	79	74	93	85	78	73	82	76	72	79	74	71	77	73	69	67					67			
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59					59			
5	82	70	63	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53					53			
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	58	53	49	47					47			
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43					43			
8	66	54	46	41	65	53	46	41	52	46	41	51	45	41	50	44	40	39					39			
9	62	50	43	37	61	50	42	37	48	42	37	47	41	37	46	41	37	35					35			
10	59	47	39	34	57	46	39	34	45	39	34	44	38	34	43	38	34	32					32			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	24379	24379	24379
5°	25389	24327	23302
10°	26236	24016	22166
15°	26899	23467	21016
20°	26955	22492	19971
25°	26498	21068	18938
30°	25081	19441	18056
35°	22865	17486	16951
40°	19889	15417	15655
45°	17060	13349	14330
50°	14574	11509	12871
55°	12774	9914	11182
60°	11372	8455	9405
65°	10091	6902	7501
70°	8953	5112	4265
75°	7458	2681	1263
80°	5878	835	213
85°	4175	425	0



TEST NUMBER: P584045
 CATALOG NUMBER: HCC8S20D010SL-HM80520927-81WWBB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.5	5.1
10°-20°	208.8	14.2
20°-30°	295.5	20.1
30°-40°	309.2	21.0
40°-50°	257.9	17.5
50°-60°	182.9	12.4
60°-70°	105.3	7.2
70°-80°	33.9	2.3
80°-90°	4.7	0.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	578.8	39.3
0°-40°	888.1	60.3
0°-60°	1328.9	90.2
0°-90°	1472.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1472.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	791	791	791	791	791	
5°	820	810	786	762	753	79
15°	843	808	735	677	658	237
25°	779	721	619	570	557	355
35°	607	554	464	440	450	377
45°	391	359	306	310	329	303
55°	238	213	184	194	208	215
65°	138	116	95	95	103	138
75°	63	46	22	11	11	68
85°	12	6	1	0	0	15
90°	0	0	0	0	0	

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



TEST NUMBER: P584045

CATALOG NUMBER: HCC8S20D010SL-HM80520927-81WWBB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	790.6	790.6	790.6	790.6	790.6	790.6	790.6	790.6	790.6	790.6	790.6
2.5°	807.2	806.0	804.8	806.0	804.8	806.0	804.8	804.8	803.6	802.5	802.5
5°	820.2	819.0	819.0	819.0	817.8	816.6	816.6	815.5	813.1	811.9	809.6
7.5°	828.5	829.6	829.6	829.6	827.3	827.3	824.9	822.6	820.2	817.8	814.3
10°	837.9	837.9	836.7	835.6	833.2	832.0	830.8	828.5	824.9	820.2	816.6
12.5°	841.5	841.5	840.3	837.9	836.7	835.6	834.4	830.8	826.1	820.2	815.5
15°	842.6	840.3	839.1	837.9	835.6	832.0	832.0	827.3	821.4	814.3	808.4
17.5°	833.2	834.4	832.0	829.6	826.1	823.7	820.2	816.6	809.6	801.3	795.4
20°	821.4	820.2	819.0	815.5	810.7	809.6	806.0	800.1	794.2	784.7	776.5
22.5°	802.5	801.3	798.9	796.5	791.8	789.5	785.9	778.8	770.5	761.1	751.6
25°	778.8	776.5	772.9	768.2	764.6	762.3	757.5	750.5	741.0	730.4	720.9
27.5°	741.0	744.5	742.2	735.1	731.5	726.8	725.6	716.2	707.9	697.3	686.6
30°	704.4	704.4	700.8	697.3	691.4	687.8	683.1	676.0	667.7	654.7	646.4
32.5°	658.3	657.1	652.3	651.2	646.4	639.3	638.2	628.7	620.4	611.0	600.3
35°	607.4	605.1	600.3	596.8	594.4	590.9	587.3	579.1	570.8	561.3	554.2
37.5°	549.5	549.5	548.3	542.4	540.1	537.7	534.1	526.0	521.3	511.8	504.7
40°	494.1	492.9	489.3	488.2	485.8	482.3	479.9	475.2	468.1	461.0	453.9
42.5°	439.7	440.9	436.2	437.3	432.6	430.2	429.1	422.0	418.4	411.3	405.4
45°	391.2	390.1	387.7	386.5	384.2	381.8	379.4	375.9	370.0	362.9	359.3
47.5°	346.3	342.8	342.8	341.6	340.4	335.7	334.5	331.0	327.4	320.3	315.6
50°	303.8	303.8	303.8	302.6	299.0	297.9	295.5	292.0	288.4	283.7	276.6
52.5°	269.5	269.5	269.5	268.3	263.6	262.4	261.2	256.5	251.8	248.2	243.5
55°	237.6	238.8	237.6	235.2	231.7	231.7	228.1	225.8	221.0	217.5	212.8
57.5°	210.4	210.4	208.0	206.8	204.5	203.3	200.9	198.6	192.7	189.1	183.2
60°	184.4	183.2	183.2	180.8	178.5	176.1	174.9	171.4	169.0	163.1	158.4
62.5°	160.8	160.8	158.4	158.4	153.7	153.7	152.5	148.9	145.4	139.5	137.1
65°	138.3	138.3	137.1	135.9	132.4	131.2	130.0	126.5	122.9	119.4	115.8
67.5°	118.2	118.2	115.8	114.7	112.3	111.1	108.7	106.4	102.8	99.3	95.7
70°	99.3	98.1	96.9	95.7	93.4	92.2	89.8	87.5	83.9	81.6	78.0
72.5°	80.4	80.4	79.2	76.8	75.6	74.5	73.3	70.9	67.4	63.8	61.5
75°	62.6	62.6	62.6	60.3	57.9	56.7	56.7	54.4	52.0	48.5	46.1
77.5°	48.5	47.3	46.1	46.1	43.7	42.6	41.4	40.2	36.6	35.5	33.1
80°	33.1	34.3	33.1	31.9	30.7	29.6	29.6	27.2	26.0	23.6	21.3
82.5°	22.5	21.3	21.3	20.1	20.1	18.9	18.9	16.5	15.4	14.2	13.0
85°	11.8	11.8	10.6	10.6	10.6	9.5	9.5	8.3	8.3	7.1	5.9
87.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	2.4	2.4	2.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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



TEST NUMBER: P584045

CATALOG NUMBER: HCC8S20D010SL-HM80520927-81WWBB

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	790.6	790.6	790.6	790.6	790.6	790.6	790.6	790.6	790.6	790.6	790.6
2.5°	801.3	798.9	797.7	797.7	796.5	795.4	794.2	793.0	790.6	790.6	788.3
5°	807.2	804.8	803.6	800.1	797.7	797.7	793.0	791.8	788.3	785.9	783.5
7.5°	811.9	807.2	803.6	800.1	797.7	795.4	790.6	785.9	781.2	776.5	774.1
10°	811.9	807.2	801.3	795.4	793.0	790.6	784.7	777.6	771.7	767.0	761.1
12.5°	809.6	802.5	795.4	790.6	785.9	782.4	775.3	768.2	761.1	751.6	746.9
15°	802.5	793.0	785.9	777.6	774.1	768.2	762.3	751.6	743.4	735.1	729.2
17.5°	788.3	776.5	768.2	759.9	754.0	750.5	741.0	731.5	722.1	712.6	705.5
20°	767.0	756.4	746.9	736.3	731.5	726.8	715.0	705.5	696.1	685.4	678.3
22.5°	741.0	730.4	717.4	709.1	702.0	696.1	685.4	674.8	665.3	655.9	646.4
25°	709.1	698.4	686.6	673.6	668.9	663.0	651.2	640.5	629.9	619.2	611.0
27.5°	674.8	660.6	651.2	637.0	632.3	626.3	613.3	601.5	592.1	583.8	574.3
30°	633.4	622.8	609.8	596.8	592.1	586.2	575.5	564.9	555.4	546.0	536.5
32.5°	588.5	577.9	564.9	555.4	548.3	543.6	533.0	523.6	514.2	504.7	496.4
35°	541.2	529.4	520.1	510.6	504.7	498.8	488.2	479.9	472.8	464.5	456.3
37.5°	492.9	484.6	475.2	464.5	458.6	453.9	445.6	436.2	430.2	423.2	417.2
40°	445.6	436.2	427.9	418.4	413.7	410.2	401.9	394.8	388.9	383.0	379.4
42.5°	397.2	388.9	380.6	374.7	371.1	367.6	361.7	353.4	349.9	344.0	340.4
45°	352.2	345.1	339.2	331.0	328.6	326.2	319.1	313.2	309.7	306.1	303.8
47.5°	309.7	305.0	297.9	293.1	289.6	287.2	282.5	277.8	274.2	271.9	269.5
50°	273.0	267.1	262.4	257.7	255.3	251.8	247.0	244.7	242.3	239.9	239.9
52.5°	238.8	232.9	228.1	224.6	222.2	219.9	216.3	215.1	212.8	212.8	211.6
55°	206.8	203.3	198.6	193.8	192.7	191.5	189.1	186.8	185.6	184.4	185.6
57.5°	179.7	176.1	171.4	167.8	166.7	165.5	164.3	161.9	160.8	160.8	160.8
60°	154.8	151.3	147.8	144.2	144.2	141.8	140.7	139.5	138.3	137.1	137.1
62.5°	132.4	128.8	125.3	122.9	121.7	120.6	118.2	117.0	115.8	115.8	114.7
65°	112.3	107.6	106.4	102.8	101.7	100.5	99.3	96.9	95.7	94.6	93.4
67.5°	92.2	89.8	86.3	83.9	82.7	81.6	80.4	78.0	76.8	75.6	73.3
70°	74.5	72.1	69.7	67.4	66.2	65.0	62.6	60.3	59.1	56.7	53.2
72.5°	57.9	55.6	53.2	50.8	49.6	48.5	46.1	43.7	41.4	39.0	36.6
75°	43.7	41.4	37.8	35.5	34.3	34.3	30.7	28.4	26.0	22.5	20.1
77.5°	30.7	27.2	26.0	23.6	22.5	20.1	17.7	15.4	13.0	11.8	9.5
80°	20.1	17.7	15.4	14.2	13.0	11.8	10.6	8.3	5.9	4.7	3.5
82.5°	11.8	10.6	9.5	8.3	7.1	5.9	4.7	4.7	3.5	2.4	1.2
85°	5.9	4.7	3.5	3.5	2.4	2.4	2.4	1.2	1.2	1.2	1.2
87.5°	2.4	1.2	1.2	1.2	1.2	1.2	1.2	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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



TEST NUMBER: P584045

CATALOG NUMBER: HCC8S20D010SL-HM80520927-81WWBB

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	790.6	790.6	790.6	790.6	790.6	790.6	790.6	790.6	790.6	790.6	790.6
2.5°	787.1	785.9	784.7	783.5	783.5	781.2	781.2	780.0	777.6	776.5	776.5
5°	780.0	776.5	774.1	772.9	771.7	768.2	767.0	764.6	762.3	759.9	758.7
7.5°	769.4	763.5	761.1	759.9	756.4	752.8	750.5	746.9	743.4	739.8	738.6
10°	756.4	750.5	744.5	742.2	738.6	736.3	731.5	726.8	723.3	719.7	716.2
12.5°	739.8	732.7	726.8	724.4	720.9	716.2	709.1	706.7	700.8	698.4	693.7
15°	720.9	712.6	706.7	703.2	699.6	692.5	687.8	683.1	677.2	674.8	670.1
17.5°	697.3	687.8	681.9	678.3	676.0	670.1	663.0	657.1	651.2	648.8	645.3
20°	668.9	663.0	654.7	651.2	648.8	641.7	634.6	632.3	627.5	622.8	619.2
22.5°	637.0	631.1	622.8	619.2	618.1	612.2	606.2	602.7	599.2	595.6	592.1
25°	603.9	596.8	589.7	587.3	585.0	580.2	575.5	573.2	569.6	567.2	564.9
27.5°	568.4	561.3	555.4	551.9	549.5	546.0	543.6	541.2	538.9	536.5	535.3
30°	530.6	523.6	518.9	516.5	514.2	513.0	509.4	508.3	507.1	504.7	505.9
32.5°	492.9	487.0	482.3	478.7	478.7	476.3	475.2	475.2	474.0	474.0	474.0
35°	451.5	448.0	444.4	443.2	442.1	440.9	439.7	440.9	439.7	440.9	442.1
37.5°	413.7	410.2	407.8	406.6	405.4	406.6	405.4	405.4	406.6	409.0	410.2
40°	374.7	372.3	370.0	371.1	370.0	370.0	370.0	373.5	374.7	375.9	377.1
42.5°	338.1	335.7	334.5	334.5	335.7	334.5	336.9	338.1	340.4	344.0	346.3
45°	302.6	301.4	301.4	302.6	301.4	303.8	303.8	306.1	309.7	312.0	314.4
47.5°	269.5	269.5	269.5	270.7	270.7	271.9	274.2	275.4	277.8	280.1	282.5
50°	238.8	239.9	241.1	241.1	241.1	243.5	245.9	247.0	248.2	249.4	252.9
52.5°	211.6	212.8	212.8	213.9	215.1	216.3	217.5	219.9	221.0	223.4	224.6
55°	185.6	185.6	187.9	189.1	189.1	189.1	191.5	191.5	193.8	195.0	197.4
57.5°	160.8	161.9	161.9	163.1	163.1	164.3	165.5	166.7	167.8	169.0	170.2
60°	137.1	137.1	137.1	138.3	139.5	140.7	139.5	141.8	141.8	144.2	145.4
62.5°	114.7	115.8	115.8	115.8	115.8	115.8	115.8	117.0	118.2	119.4	120.6
65°	93.4	93.4	93.4	92.2	93.4	92.2	93.4	94.6	94.6	95.7	96.9
67.5°	72.1	72.1	69.7	69.7	70.9	70.9	70.9	70.9	69.7	72.1	72.1
70°	52.0	50.8	49.6	48.5	48.5	47.3	47.3	46.1	46.1	46.1	46.1
72.5°	34.3	31.9	29.6	28.4	27.2	27.2	24.8	23.6	24.8	24.8	24.8
75°	17.7	15.4	14.2	13.0	11.8	11.8	10.6	10.6	10.6	10.6	10.6
77.5°	7.1	5.9	4.7	4.7	3.5	3.5	3.5	3.5	3.5	3.5	3.5
80°	2.4	2.4	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
85°	1.2	0.0	0.0	1.2	0.0	1.2	1.2	1.2	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P584045

CATALOG NUMBER: HCC8S20D010SL-HM80520927-81WWBB

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	790.6	790.6	790.6	790.6	790.6	790.6	790.6	790.6
2.5°	775.3	775.3	774.1	775.3	772.9	774.1	772.9	772.9
5°	757.5	755.2	755.2	755.2	754.0	754.0	752.8	752.8
7.5°	736.3	735.1	733.9	732.7	731.5	730.4	730.4	730.4
10°	715.0	712.6	712.6	711.4	709.1	707.9	707.9	707.9
12.5°	690.2	689.0	687.8	687.8	683.1	684.3	683.1	683.1
15°	666.5	665.3	665.3	661.8	659.4	659.4	659.4	658.3
17.5°	641.7	640.5	639.3	637.0	634.6	634.6	633.4	634.6
20°	615.7	614.5	612.2	612.2	611.0	609.8	607.4	608.6
22.5°	589.7	587.3	586.2	586.2	585.0	585.0	582.6	582.6
25°	562.5	561.3	560.1	561.3	559.0	559.0	556.6	556.6
27.5°	534.1	533.0	533.0	533.0	531.8	533.0	531.8	531.8
30°	505.9	505.9	504.7	504.7	505.9	504.7	505.9	507.1
32.5°	475.2	475.2	476.3	476.3	477.5	477.5	477.5	477.5
35°	443.2	445.6	445.6	446.8	448.0	449.2	449.2	450.3
37.5°	413.7	414.9	416.1	417.2	419.6	419.6	419.6	419.6
40°	381.8	383.0	385.3	384.2	388.9	390.1	388.9	388.9
42.5°	348.7	351.1	352.2	354.6	355.8	358.1	359.3	359.3
45°	318.0	319.1	321.5	323.9	325.0	328.6	328.6	328.6
47.5°	286.0	288.4	289.6	292.0	293.1	296.7	297.9	296.7
50°	255.3	257.7	260.0	260.0	263.6	264.8	267.1	268.3
52.5°	225.8	226.9	229.3	230.5	232.9	235.2	236.4	237.6
55°	197.4	198.6	200.9	200.9	204.5	205.7	208.0	208.0
57.5°	171.4	172.6	174.9	173.8	176.1	178.5	178.5	177.3
60°	146.6	146.6	146.6	148.9	150.1	151.3	152.5	152.5
62.5°	120.6	122.9	124.1	124.1	125.3	126.5	126.5	125.3
65°	96.9	99.3	100.5	100.5	101.7	101.7	101.7	102.8
67.5°	73.3	73.3	73.3	74.5	73.3	73.3	73.3	73.3
70°	46.1	46.1	46.1	46.1	44.9	46.1	46.1	47.3
72.5°	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8
75°	10.6	10.6	10.6	11.8	10.6	10.6	10.6	10.6
77.5°	4.7	3.5	4.7	4.7	3.5	3.5	3.5	3.5
80°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
85°	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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

Scaled Data Report



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

Scaled Data Report



— 0°-180° - - 45°-225° - - - - 90°-270°

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

Scaled Data Report



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

Scaled Data Report



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

Scaled Data Report



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

Scaled Data Report



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

Scaled Data Report



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

Scaled Data Report



(END OF REPORT)