

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: P593615

Luminaire Tested: **HCC8W20D010BZ-HM80520950-81WWBB**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P593615
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: HCC8W20D010BZ-HM80520950-81WWBB
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

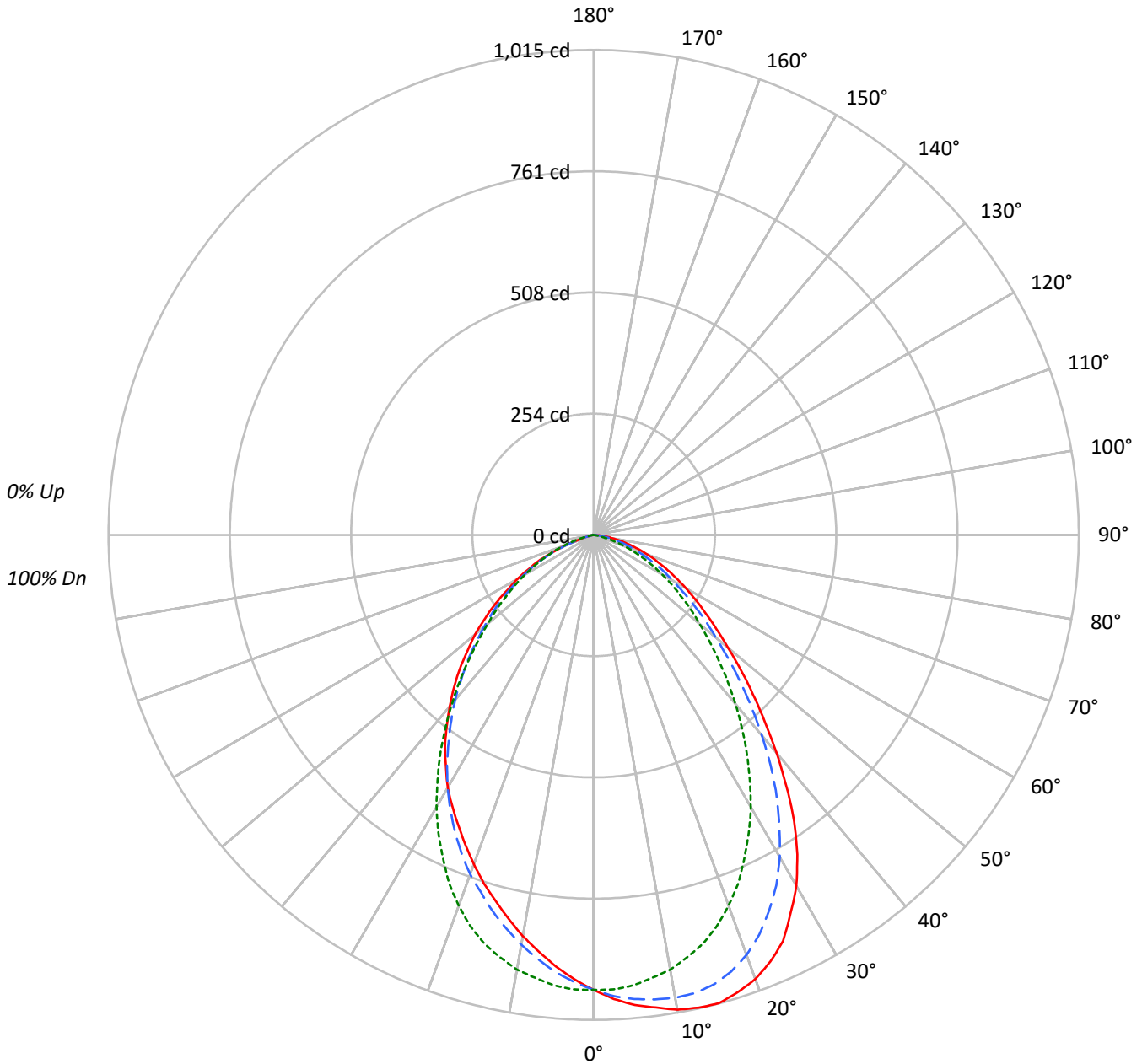
Lumens per Lamp: N/A
Luminaire Lumens: 1773.6 lumens
Efficiency: N/A
Efficacy: 88.7 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.07 / 1.16
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

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: P593615
CATALOG NUMBER: HCC8W20D010BZ-HM80520950-81WWBB

Luminous Intensity Polar Plot





TEST NUMBER: P593615

CATALOG NUMBER: HCC8W20D010BZ-HM80520950-81WWBB

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	29362	29362	29362
5°	30576	29298	28063
10°	31597	28923	26697
15°	32393	28262	25309
20°	32461	27089	24054
25°	31911	25375	22806
30°	30205	23411	21741
35°	27537	21054	20414
40°	23947	18561	18851
45°	20544	16079	17256
50°	17548	13859	15495
55°	15376	11935	13467
60°	13691	10182	11323
65°	12149	8303	9040
70°	10774	6158	5139
75°	8983	3229	1525
80°	7068	1012	249
85°	5024	495	0



TEST NUMBER: P593615
 CATALOG NUMBER: HCC8W20D010BZ-HM80520950-81WWBB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.7	5.1
10°-20°	251.5	14.2
20°-30°	355.9	20.1
30°-40°	372.4	21.0
40°-50°	310.6	17.5
50°-60°	220.2	12.4
60°-70°	126.9	7.2
70°-80°	40.8	2.3
80°-90°	5.6	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°	697.1	39.3
0°-40°	1069.5	60.3
0°-60°	1600.3	90.2
0°-90°	1773.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1773.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	952	952	952	952	952	
5°	988	975	946	918	907	95
15°	1015	974	885	816	793	285
25°	938	868	746	686	670	428
35°	732	668	559	529	542	454
45°	471	433	369	373	396	365
55°	286	256	222	233	250	258
65°	166	140	114	114	124	166
75°	75	56	27	13	13	82
85°	14	7	1	0	0	18
90°	0	0	0	0	0	

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



TEST NUMBER: P593615

CATALOG NUMBER: HCC8W20D010BZ-HM80520950-81WWBB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	952.2	952.2	952.2	952.2	952.2	952.2	952.2	952.2	952.2	952.2	952.2
2.5°	972.1	970.7	969.2	970.7	969.2	970.7	969.2	969.2	967.8	966.4	966.4
5°	987.8	986.4	986.4	986.4	985.0	983.5	983.5	982.1	979.2	977.8	974.9
7.5°	997.7	999.1	999.1	999.1	996.3	996.3	993.5	990.6	987.8	985.0	980.7
10°	1009.1	1009.1	1007.7	1006.2	1003.4	1002.0	1000.6	997.7	993.5	987.8	983.5
12.5°	1013.3	1013.3	1011.9	1009.1	1007.7	1006.2	1004.8	1000.6	994.9	987.8	982.1
15°	1014.7	1011.9	1010.5	1009.1	1006.2	1002.0	1002.0	996.3	989.2	980.7	973.5
17.5°	1003.4	1004.8	1002.0	999.1	994.9	992.1	987.8	983.5	974.9	965.0	957.9
20°	989.2	987.8	986.4	982.1	976.3	974.9	970.7	963.6	956.5	945.0	935.1
22.5°	966.4	965.0	962.1	959.3	953.6	950.8	946.5	937.9	928.0	916.6	905.2
25°	937.9	935.1	930.8	925.2	920.9	918.1	912.4	903.8	892.4	879.6	868.2
27.5°	892.4	896.7	893.8	885.3	881.1	875.3	873.9	862.5	852.6	839.7	826.9
30°	848.3	848.3	844.1	839.7	832.6	828.3	822.7	814.2	804.1	788.5	778.6
32.5°	792.8	791.3	785.7	784.3	778.6	770.0	768.5	757.2	747.3	735.8	723.0
35°	731.5	728.7	723.0	718.8	715.9	711.7	707.4	697.4	687.5	676.1	667.5
37.5°	661.8	661.8	660.4	653.3	650.5	647.6	643.4	633.3	627.6	616.3	607.8
40°	594.9	593.5	589.2	587.8	585.0	580.7	577.9	572.2	563.6	555.1	546.6
42.5°	529.4	530.8	525.2	526.6	520.9	518.1	516.7	508.1	503.9	495.3	488.2
45°	471.1	469.7	466.9	465.5	462.5	459.7	456.8	452.6	445.5	437.0	432.7
47.5°	417.0	412.8	412.8	411.3	409.9	404.2	402.8	398.6	394.2	385.7	380.0
50°	365.8	365.8	365.8	364.4	360.0	358.6	355.8	351.5	347.3	341.6	333.1
52.5°	324.5	324.5	324.5	323.0	317.4	315.9	314.5	308.9	303.2	298.9	293.3
55°	286.0	287.5	286.0	283.2	279.0	279.0	274.7	271.9	266.2	261.9	256.1
57.5°	253.3	253.3	250.5	249.0	246.2	244.8	242.0	239.1	232.0	227.8	220.6
60°	222.0	220.6	220.6	217.7	214.9	212.1	210.6	206.4	203.5	196.4	190.8
62.5°	193.6	193.6	190.8	190.8	185.0	185.0	183.6	179.3	175.1	168.0	165.1
65°	166.5	166.5	165.1	163.7	159.5	158.0	156.6	152.2	148.0	143.7	139.5
67.5°	142.3	142.3	139.5	138.1	135.2	133.8	131.0	128.1	123.9	119.5	115.2
70°	119.5	118.1	116.7	115.2	112.4	111.0	108.2	105.3	101.1	98.2	94.0
72.5°	96.8	96.8	95.4	92.6	91.1	89.7	88.3	85.3	81.1	76.8	74.0
75°	75.4	75.4	75.4	72.6	69.7	68.3	68.3	65.5	62.6	58.4	55.6
77.5°	58.4	57.0	55.6	55.6	52.7	51.2	49.8	48.3	44.1	42.7	39.8
80°	39.8	41.3	39.8	38.4	37.0	35.6	35.6	32.7	31.3	28.5	25.6
82.5°	27.1	25.6	25.6	24.2	24.2	22.8	22.8	20.0	18.6	17.0	15.6
85°	14.2	14.2	12.8	12.8	12.8	11.3	11.3	9.9	9.9	8.5	7.1
87.5°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	2.8	2.8	2.8
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: P593615

CATALOG NUMBER: HCC8W20D010BZ-HM80520950-81WWBB

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	952.2	952.2	952.2	952.2	952.2	952.2	952.2	952.2	952.2	952.2	952.2
2.5°	965.0	962.1	960.7	960.7	959.3	957.9	956.5	955.1	952.2	952.2	949.4
5°	972.1	969.2	967.8	963.6	960.7	960.7	955.1	953.6	949.4	946.5	943.6
7.5°	977.8	972.1	967.8	963.6	960.7	957.9	952.2	946.5	940.8	935.1	932.2
10°	977.8	972.1	965.0	957.9	955.1	952.2	945.0	936.5	929.4	923.7	916.6
12.5°	974.9	966.4	957.9	952.2	946.5	942.2	933.7	925.2	916.6	905.2	899.5
15°	966.4	955.1	946.5	936.5	932.2	925.2	918.1	905.2	895.2	885.3	878.2
17.5°	949.4	935.1	925.2	915.2	908.0	903.8	892.4	881.1	869.6	858.3	849.7
20°	923.7	910.8	899.5	886.7	881.1	875.3	861.1	849.7	838.3	825.5	817.0
22.5°	892.4	879.6	863.9	854.0	845.5	838.3	825.5	812.7	801.3	789.9	778.6
25°	854.0	841.1	826.9	811.3	805.5	798.4	784.3	771.4	758.6	745.8	735.8
27.5°	812.7	795.6	784.3	767.1	761.4	754.4	738.6	724.4	713.1	703.1	691.7
30°	762.9	750.1	734.4	718.8	713.1	706.0	693.1	680.4	668.9	657.5	646.2
32.5°	708.8	696.0	680.4	668.9	660.4	654.7	641.9	630.5	619.1	607.8	597.7
35°	651.9	637.7	626.2	614.9	607.8	600.6	587.8	577.9	569.4	559.3	549.4
37.5°	593.5	583.6	572.2	559.3	552.2	546.6	536.6	525.2	518.1	509.6	502.5
40°	536.6	525.2	515.2	503.9	498.1	493.8	483.9	475.4	468.3	461.1	456.8
42.5°	478.2	468.3	458.3	451.2	446.9	442.7	435.6	425.5	421.3	414.2	409.9
45°	424.1	415.6	408.5	398.6	395.7	392.8	384.3	377.2	372.9	368.7	365.8
47.5°	372.9	367.2	358.6	352.9	348.7	345.9	340.2	334.5	330.3	327.4	324.5
50°	328.8	321.6	315.9	310.3	307.4	303.2	297.5	294.7	291.7	288.9	288.9
52.5°	287.5	280.4	274.7	270.4	267.6	264.8	260.5	259.1	256.1	256.1	254.7
55°	249.0	244.8	239.1	233.4	232.0	230.6	227.8	224.9	223.4	222.0	223.4
57.5°	216.3	212.1	206.4	202.1	200.7	199.3	197.9	195.0	193.6	193.6	193.6
60°	186.4	182.1	177.9	173.6	173.6	170.8	169.4	168.0	166.5	165.1	165.1
62.5°	159.5	155.2	150.8	148.0	146.6	145.1	142.3	140.9	139.5	139.5	138.1
65°	135.2	129.5	128.1	123.9	122.5	121.0	119.5	116.7	115.2	113.8	112.4
67.5°	111.0	108.2	103.9	101.1	99.6	98.2	96.8	94.0	92.6	91.1	88.3
70°	89.7	86.9	83.9	81.1	79.7	78.2	75.4	72.6	71.2	68.3	64.1
72.5°	69.7	66.9	64.1	61.2	59.8	58.4	55.6	52.7	49.8	46.9	44.1
75°	52.7	49.8	45.5	42.7	41.3	41.3	37.0	34.2	31.3	27.1	24.2
77.5°	37.0	32.7	31.3	28.5	27.1	24.2	21.4	18.6	15.6	14.2	11.3
80°	24.2	21.4	18.6	17.0	15.6	14.2	12.8	9.9	7.1	5.7	4.3
82.5°	14.2	12.8	11.3	9.9	8.5	7.1	5.7	5.7	4.3	2.8	1.4
85°	7.1	5.7	4.3	4.3	2.8	2.8	2.8	1.4	1.4	1.4	1.4
87.5°	2.8	1.4	1.4	1.4	1.4	1.4	1.4	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: P593615

CATALOG NUMBER: HCC8W20D010BZ-HM80520950-81WWBB

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	952.2	952.2	952.2	952.2	952.2	952.2	952.2	952.2	952.2	952.2	952.2
2.5°	948.0	946.5	945.0	943.6	943.6	940.8	940.8	939.3	936.5	935.1	935.1
5°	939.3	935.1	932.2	930.8	929.4	925.2	923.7	920.9	918.1	915.2	913.8
7.5°	926.6	919.5	916.6	915.2	910.8	906.6	903.8	899.5	895.2	891.0	889.6
10°	910.8	903.8	896.7	893.8	889.6	886.7	881.1	875.3	871.0	866.8	862.5
12.5°	891.0	882.5	875.3	872.4	868.2	862.5	854.0	851.2	844.1	841.1	835.4
15°	868.2	858.3	851.2	846.9	842.5	834.0	828.3	822.7	815.6	812.7	807.0
17.5°	839.7	828.3	821.3	817.0	814.2	807.0	798.4	791.3	784.3	781.4	777.2
20°	805.5	798.4	788.5	784.3	781.4	772.8	764.3	761.4	755.8	750.1	745.8
22.5°	767.1	760.0	750.1	745.8	744.4	737.2	730.1	725.9	721.6	717.4	713.1
25°	727.3	718.8	710.3	707.4	704.5	698.8	693.1	690.3	686.0	683.2	680.4
27.5°	684.6	676.1	668.9	664.6	661.8	657.5	654.7	651.9	649.0	646.2	644.8
30°	639.1	630.5	624.8	622.0	619.1	617.7	613.5	612.0	610.6	607.8	609.2
32.5°	593.5	586.4	580.7	576.5	576.5	573.6	572.2	572.2	570.8	570.8	570.8
35°	543.7	539.5	535.2	533.8	532.3	530.8	529.4	530.8	529.4	530.8	532.3
37.5°	498.1	493.8	491.0	489.6	488.2	489.6	488.2	488.2	489.6	492.4	493.8
40°	451.2	448.3	445.5	446.9	445.5	445.5	445.5	449.8	451.2	452.6	454.0
42.5°	407.1	404.2	402.8	402.8	404.2	402.8	405.7	407.1	409.9	414.2	417.0
45°	364.4	363.0	363.0	364.4	363.0	365.8	365.8	368.7	372.9	375.8	378.6
47.5°	324.5	324.5	324.5	325.9	325.9	327.4	330.3	331.7	334.5	337.3	340.2
50°	287.5	288.9	290.3	290.3	290.3	293.3	296.1	297.5	298.9	300.3	304.6
52.5°	254.7	256.1	256.1	257.6	259.1	260.5	261.9	264.8	266.2	269.0	270.4
55°	223.4	223.4	226.4	227.8	227.8	227.8	230.6	230.6	233.4	234.9	237.7
57.5°	193.6	195.0	195.0	196.4	196.4	197.9	199.3	200.7	202.1	203.5	205.0
60°	165.1	165.1	165.1	166.5	168.0	169.4	168.0	170.8	170.8	173.6	175.1
62.5°	138.1	139.5	139.5	139.5	139.5	139.5	139.5	140.9	142.3	143.7	145.1
65°	112.4	112.4	112.4	111.0	112.4	111.0	112.4	113.8	113.8	115.2	116.7
67.5°	86.9	86.9	83.9	83.9	85.3	85.3	85.3	85.3	83.9	86.9	86.9
70°	62.6	61.2	59.8	58.4	58.4	57.0	57.0	55.6	55.6	55.6	55.6
72.5°	41.3	38.4	35.6	34.2	32.7	32.7	29.9	28.5	29.9	29.9	29.9
75°	21.4	18.6	17.0	15.6	14.2	14.2	12.8	12.8	12.8	12.8	12.8
77.5°	8.5	7.1	5.7	5.7	4.3	4.3	4.3	4.3	4.3	4.3	4.3
80°	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
82.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
85°	1.4	0.0	0.0	1.4	0.0	1.4	1.4	1.4	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

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



TEST NUMBER: P593615

CATALOG NUMBER: HCC8W20D010BZ-HM80520950-81WWBB

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	952.2	952.2	952.2	952.2	952.2	952.2	952.2	952.2
2.5°	933.7	933.7	932.2	933.7	930.8	932.2	930.8	930.8
5°	912.4	909.4	909.4	909.4	908.0	908.0	906.6	906.6
7.5°	886.7	885.3	883.9	882.5	881.1	879.6	879.6	879.6
10°	861.1	858.3	858.3	856.8	854.0	852.6	852.6	852.6
12.5°	831.2	829.8	828.3	828.3	822.7	824.1	822.7	822.7
15°	802.7	801.3	801.3	797.0	794.2	794.2	794.2	792.8
17.5°	772.8	771.4	770.0	767.1	764.3	764.3	762.9	764.3
20°	741.6	740.2	737.2	737.2	735.8	734.4	731.5	733.0
22.5°	710.3	707.4	706.0	706.0	704.5	704.5	701.6	701.6
25°	677.5	676.1	674.7	676.1	673.3	673.3	670.3	670.3
27.5°	643.4	641.9	641.9	641.9	640.5	641.9	640.5	640.5
30°	609.2	609.2	607.8	607.8	609.2	607.8	609.2	610.6
32.5°	572.2	572.2	573.6	573.6	575.0	575.0	575.0	575.0
35°	533.8	536.6	536.6	538.0	539.5	540.9	540.9	542.3
37.5°	498.1	499.6	501.0	502.5	505.3	505.3	505.3	505.3
40°	459.7	461.1	463.9	462.5	468.3	469.7	468.3	468.3
42.5°	419.8	422.7	424.1	426.9	428.4	431.3	432.7	432.7
45°	382.8	384.3	387.1	389.9	391.4	395.7	395.7	395.7
47.5°	344.4	347.3	348.7	351.5	352.9	357.2	358.6	357.2
50°	307.4	310.3	313.1	313.1	317.4	318.8	321.6	323.0
52.5°	271.9	273.3	276.1	277.5	280.4	283.2	284.6	286.0
55°	237.7	239.1	242.0	242.0	246.2	247.6	250.5	250.5
57.5°	206.4	207.8	210.6	209.2	212.1	214.9	214.9	213.5
60°	176.5	176.5	176.5	179.3	180.7	182.1	183.6	183.6
62.5°	145.1	148.0	149.4	149.4	150.8	152.2	152.2	150.8
65°	116.7	119.5	121.0	121.0	122.5	122.5	122.5	123.9
67.5°	88.3	88.3	88.3	89.7	88.3	88.3	88.3	88.3
70°	55.6	55.6	55.6	55.6	54.1	55.6	55.6	57.0
72.5°	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9
75°	12.8	12.8	12.8	14.2	12.8	12.8	12.8	12.8
77.5°	5.7	4.3	5.7	5.7	4.3	4.3	4.3	4.3
80°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
82.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
85°	0.0	1.4	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)