

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: P584081

Luminaire Tested: **HCC8S20D010MW-HM80520935-81WWWB**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584081
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-18)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HCC8S20D010MW-HM80520935-81WWWB
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

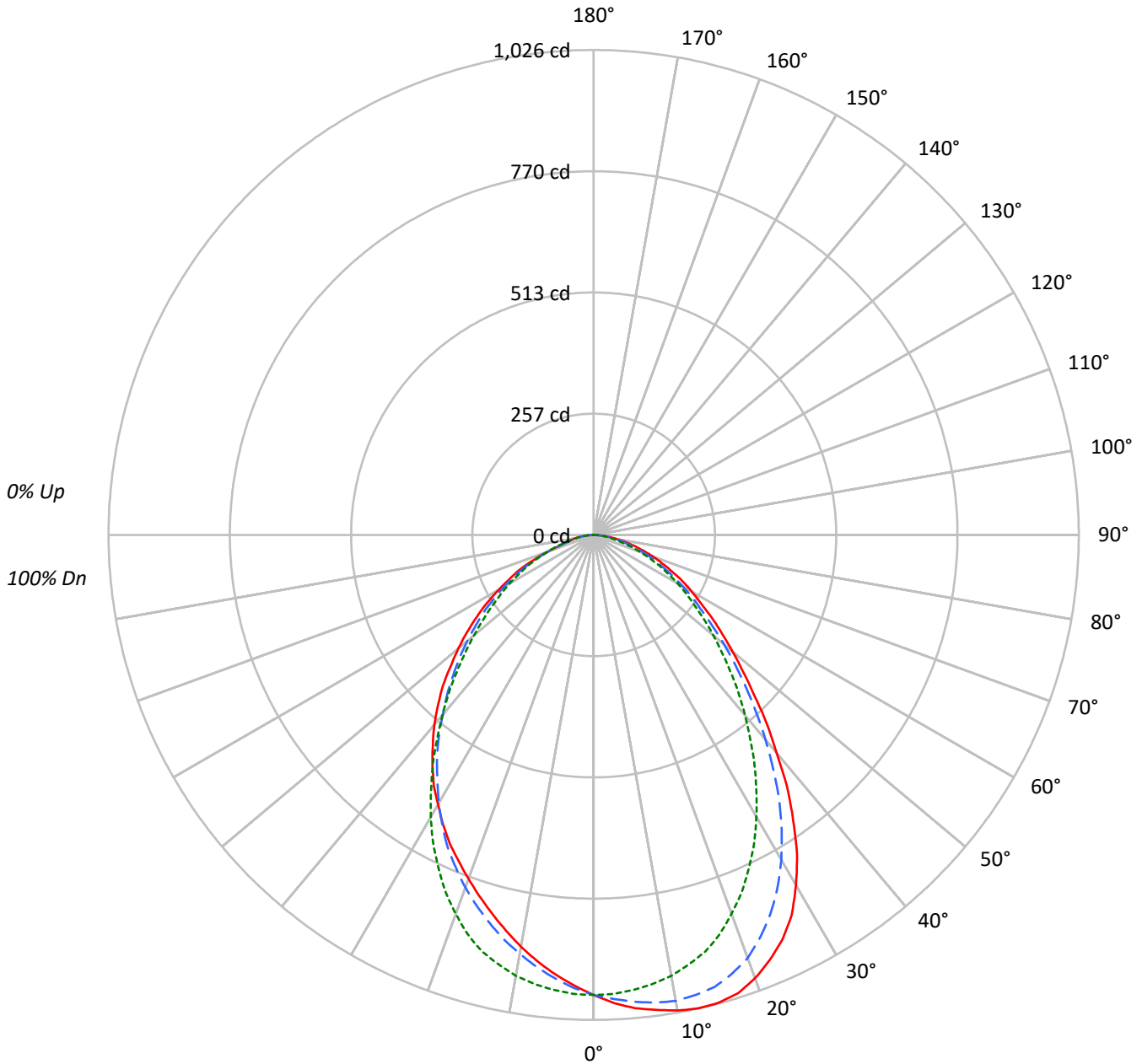
Lumens per Lamp: N/A
Luminaire Lumens: 1957.5 lumens
Efficiency: N/A
Efficacy: 97.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.09 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

Input Watts (W): 20
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: 25 FT



TEST NUMBER: P584081
CATALOG NUMBER: HCC8S20D010MW-HM80520935-81WWWB

Luminous Intensity Polar Plot





TEST NUMBER: P584081

CATALOG NUMBER: HCC8S20D010MW-HM80520935-81WWWB

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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87					87			
2	102	94	88	83	99	93	87	82	89	85	81	86	82	79	83	80	77	75					75			
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65					65			
4	87	76	68	62	84	75	67	61	72	66	61	70	64	60	68	63	59	57					57			
5	80	69	60	54	78	67	60	54	65	59	54	64	58	53	62	57	52	50					50			
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45					45			
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40					40			
8	65	52	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37					37			
9	61	48	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33					33			
10	57	45	38	33	56	44	37	33	44	37	32	43	37	32	42	36	32	30					30			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	30013	30013	30013
5°	31112	29914	28886
10°	31991	29652	27705
15°	32703	29131	26481
20°	32756	27991	25406
25°	32129	26433	24508
30°	30472	24515	23429
35°	27684	22327	22376
40°	24209	20034	21093
45°	20980	17845	19655
50°	18374	15850	17908
55°	16349	14048	16204
60°	14746	12618	14234
65°	13316	11098	12411
70°	11964	9350	9232
75°	10544	7411	6910
80°	8843	6126	6641
85°	6864	5378	5838



TEST NUMBER: P584081
 CATALOG NUMBER: HCC8S20D010MW-HM80520935-81WWWB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.8	4.7
10°-20°	258.6	13.2
20°-30°	369.6	18.9
30°-40°	392.7	20.1
40°-50°	338.1	17.3
50°-60°	252.8	12.9
60°-70°	161.2	8.2
70°-80°	73.4	3.7
80°-90°	19.2	1.0
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°	720.0	36.8
0°-40°	1112.7	56.8
0°-60°	1703.6	87.0
0°-90°	1957.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1957.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	973	973	973	973	973	
5°	1005	991	966	942	933	96
15°	1024	990	912	850	830	289
25°	944	885	777	730	720	432
35°	735	684	593	578	594	458
45°	481	455	409	420	451	374
55°	304	279	261	283	301	273
65°	182	162	152	159	170	182
75°	88	76	62	57	58	94
85°	19	16	15	16	16	23
90°	0	0	0	0	0	

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



TEST NUMBER: P584081

CATALOG NUMBER: HCC8S20D010MW-HM80520935-81WWWB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	973.3	973.3	973.3	973.3	973.3	973.3	973.3	973.3	973.3	973.3	973.3
2.5°	991.2	988.5	989.9	988.5	989.9	989.9	987.1	987.1	987.1	987.1	983.0
5°	1005.1	1003.6	1003.6	1002.3	1000.9	1002.3	1000.9	999.5	996.8	995.4	991.2
7.5°	1013.3	1013.3	1013.3	1013.3	1012.0	1010.6	1009.2	1006.5	1003.6	1000.9	998.2
10°	1021.7	1023.0	1021.7	1020.3	1018.9	1016.2	1014.7	1012.0	1007.9	1003.6	1000.9
12.5°	1025.9	1025.9	1024.4	1024.4	1021.7	1020.3	1016.2	1012.0	1007.9	1003.6	996.8
15°	1024.4	1024.4	1023.0	1021.7	1017.5	1016.2	1013.3	1009.2	1002.3	996.8	989.9
17.5°	1016.2	1014.7	1012.0	1012.0	1006.5	1005.1	1002.3	996.8	989.9	981.5	973.3
20°	998.2	998.2	996.8	995.4	989.9	985.7	983.0	976.1	970.5	960.8	952.6
22.5°	973.3	976.1	973.3	970.5	963.6	962.3	958.1	949.7	941.5	930.5	920.8
25°	944.3	942.9	941.5	938.7	933.2	930.5	924.9	916.6	908.2	895.8	884.8
27.5°	906.9	901.4	901.4	895.8	891.7	887.6	884.8	876.5	865.5	855.8	841.9
30°	855.8	857.2	850.2	848.9	841.9	839.2	833.7	825.4	815.7	804.6	793.6
32.5°	800.5	796.3	796.3	790.8	785.2	781.1	779.8	770.1	761.8	750.7	739.7
35°	735.4	735.4	731.3	730.0	724.4	721.6	717.5	712.0	702.3	692.7	684.4
37.5°	671.8	669.1	667.7	665.0	660.9	656.7	656.7	647.0	645.6	634.6	623.5
40°	601.4	604.1	601.4	597.3	595.8	593.1	591.7	586.2	582.0	572.3	565.5
42.5°	541.9	539.2	539.2	537.8	532.3	532.3	529.5	526.7	519.8	517.0	508.7
45°	481.1	483.9	479.8	481.1	475.6	475.6	475.6	470.1	464.5	460.4	454.8
47.5°	428.6	430.0	430.0	425.8	424.5	424.5	421.6	418.9	414.8	409.2	405.1
50°	383.0	384.4	381.5	380.1	377.4	376.0	376.0	370.6	367.7	362.2	359.4
52.5°	341.5	341.5	340.1	340.1	335.9	335.9	333.2	329.1	326.2	323.5	316.5
55°	304.1	304.1	302.7	301.4	301.4	297.3	295.9	291.7	289.0	283.4	279.3
57.5°	268.2	269.6	268.2	266.8	265.5	264.1	261.3	257.2	254.4	250.2	247.5
60°	239.1	239.1	237.8	236.4	233.7	232.3	230.8	228.1	224.0	221.2	217.0
62.5°	211.6	210.2	208.7	207.3	204.6	204.6	201.9	199.0	194.9	192.2	189.4
65°	182.5	182.5	181.1	181.1	179.8	176.9	175.5	174.2	168.7	167.3	161.7
67.5°	156.3	157.6	154.8	154.8	152.1	152.1	150.7	146.6	145.1	142.4	139.6
70°	132.7	132.7	132.7	131.3	128.6	127.2	125.8	123.0	121.6	118.9	116.1
72.5°	109.2	109.2	107.8	107.8	106.5	105.1	103.7	100.9	100.9	98.1	95.4
75°	88.5	88.5	87.1	85.7	84.3	84.3	83.0	81.6	78.8	77.4	76.0
77.5°	67.7	67.7	67.7	66.3	65.0	65.0	65.0	62.2	59.5	59.5	58.0
80°	49.8	49.8	48.3	48.3	47.0	47.0	47.0	45.6	44.2	42.9	41.5
82.5°	33.2	33.2	33.2	33.2	31.8	31.8	31.8	30.4	29.1	29.1	29.1
85°	19.4	19.4	19.4	19.4	18.0	18.0	18.0	18.0	18.0	16.5	16.5
87.5°	8.3	6.9	8.3	6.9	8.3	6.9	8.3	6.9	6.9	6.9	6.9
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: P584081

CATALOG NUMBER: HCC8S20D010MW-HM80520935-81WWWB

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	973.3	973.3	973.3	973.3	973.3	973.3	973.3	973.3	973.3	973.3	973.3
2.5°	984.4	983.0	981.5	980.2	980.2	978.8	976.1	974.7	973.3	971.8	971.8
5°	989.9	988.5	985.7	983.0	981.5	978.8	976.1	973.3	970.5	966.4	965.0
7.5°	994.1	989.9	987.1	981.5	980.2	977.4	973.3	969.1	963.6	958.1	953.9
10°	994.1	988.5	984.4	977.4	974.7	971.8	966.4	959.4	952.6	947.0	940.0
12.5°	991.2	984.4	977.4	970.5	966.4	962.3	953.9	947.0	938.7	930.5	924.9
15°	981.5	973.3	965.0	956.7	952.6	947.0	938.7	929.1	920.8	912.5	902.8
17.5°	963.6	955.3	945.6	935.9	930.5	926.3	913.8	906.9	894.4	886.1	877.9
20°	940.0	930.5	917.9	908.2	901.4	897.3	887.6	875.2	865.5	853.0	844.7
22.5°	909.7	897.3	884.8	875.2	868.2	862.6	850.2	837.8	829.5	818.4	808.7
25°	873.7	861.3	848.9	835.1	828.1	822.6	811.6	800.5	789.5	776.9	768.7
27.5°	830.8	817.0	806.0	793.6	786.6	778.3	765.9	754.8	743.8	735.4	724.4
30°	783.9	768.7	757.7	745.1	738.3	731.3	718.9	707.8	698.2	688.5	683.0
32.5°	727.2	716.2	705.1	692.7	687.1	683.0	670.5	659.4	648.4	640.1	635.9
35°	673.3	660.9	651.2	640.1	633.2	629.1	617.9	608.3	602.8	593.1	587.6
37.5°	616.6	607.0	595.8	584.9	580.6	576.5	568.2	558.5	550.2	543.4	540.5
40°	557.2	548.8	539.2	532.3	528.1	524.0	517.0	510.2	504.6	497.7	494.9
42.5°	500.5	494.9	486.6	478.4	474.2	472.8	464.5	459.0	456.3	453.4	450.7
45°	449.3	441.0	435.4	430.0	425.8	423.0	418.9	414.8	411.9	409.2	406.5
47.5°	399.5	392.7	387.1	383.0	378.8	377.4	374.7	370.6	367.7	367.7	367.7
50°	353.9	348.3	342.9	340.1	338.8	335.9	333.2	331.8	330.4	330.4	330.4
52.5°	313.8	308.3	304.1	301.4	301.4	298.6	295.9	294.4	294.4	294.4	294.4
55°	276.5	272.3	269.6	266.8	264.1	262.6	262.6	262.6	261.3	261.3	262.6
57.5°	243.4	240.5	236.4	233.7	232.3	232.3	230.8	229.5	230.8	232.3	233.7
60°	212.9	210.2	208.7	204.6	204.6	204.6	203.2	203.2	203.2	204.6	206.0
62.5°	185.2	183.9	181.1	179.8	178.4	178.4	176.9	176.9	176.9	176.9	178.4
65°	160.4	157.6	154.8	154.8	154.8	153.4	153.4	150.7	152.1	152.1	150.7
67.5°	136.9	134.2	132.7	131.3	129.9	129.9	128.6	127.2	125.8	125.8	125.8
70°	114.8	111.9	111.9	109.2	109.2	107.8	106.5	106.5	105.1	103.7	102.4
72.5°	92.7	91.3	89.8	88.5	88.5	88.5	87.1	85.7	84.3	83.0	80.1
75°	73.3	73.3	70.6	69.1	69.1	67.7	66.3	65.0	63.6	62.2	60.9
77.5°	56.7	55.3	52.5	51.2	51.2	51.2	49.8	48.3	47.0	45.6	44.2
80°	41.5	40.1	38.7	37.4	37.4	37.4	35.9	35.9	34.5	34.5	34.5
82.5°	27.7	27.7	26.2	26.2	26.2	26.2	24.9	24.9	24.9	24.9	24.9
85°	16.5	16.5	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2
87.5°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
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: P584081

CATALOG NUMBER: HCC8S20D010MW-HM80520935-81WWWB

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	973.3	973.3	973.3	973.3	973.3	973.3	973.3	973.3	973.3	973.3	973.3
2.5°	969.1	969.1	966.4	965.0	963.6	965.0	962.3	960.8	959.4	959.4	958.1
5°	960.8	959.4	953.9	952.6	951.2	949.7	947.0	944.3	941.5	940.0	938.7
7.5°	949.7	945.6	940.0	938.7	937.3	933.2	929.1	926.3	922.1	920.8	917.9
10°	934.6	929.1	924.9	920.8	917.9	913.8	909.7	905.5	900.0	898.7	894.4
12.5°	916.6	909.7	901.4	900.0	895.8	890.3	884.8	880.7	876.5	873.7	869.6
15°	894.4	887.6	879.3	875.2	871.0	866.9	859.9	854.3	850.2	846.1	841.9
17.5°	868.2	859.9	853.0	848.9	846.1	839.2	833.7	826.7	822.6	818.4	814.3
20°	836.4	829.5	819.8	815.7	814.3	808.7	801.9	799.0	793.6	789.5	786.6
22.5°	800.5	793.6	785.2	782.5	776.9	774.2	767.2	764.5	761.8	757.7	756.2
25°	760.4	753.4	746.6	745.1	741.0	738.3	734.1	730.0	730.0	725.9	725.9
27.5°	718.9	712.0	706.5	703.6	702.3	699.5	695.4	694.1	692.7	691.2	691.2
30°	674.7	666.4	663.6	662.3	660.9	658.0	656.7	653.9	655.3	656.7	655.3
32.5°	627.6	624.9	619.4	616.6	617.9	616.6	613.8	616.6	615.2	617.9	619.4
35°	582.0	579.3	576.5	576.5	573.7	573.7	573.7	575.2	577.9	579.3	582.0
37.5°	537.8	533.7	532.3	530.8	532.3	532.3	532.3	535.0	537.8	540.5	544.7
40°	490.8	488.0	488.0	488.0	488.0	492.2	490.8	493.6	496.3	500.5	504.6
42.5°	446.6	446.6	448.0	448.0	448.0	448.0	450.7	454.8	459.0	463.1	467.2
45°	405.1	405.1	405.1	407.8	407.8	409.2	414.8	417.5	420.3	424.5	428.6
47.5°	366.4	366.4	367.7	369.1	370.6	373.3	376.0	380.1	384.4	387.1	391.2
50°	330.4	331.8	334.5	337.3	337.3	338.8	342.9	345.6	348.3	352.6	353.9
52.5°	295.9	298.6	301.4	302.7	304.1	307.0	308.3	312.4	313.8	318.0	319.4
55°	264.1	265.5	269.6	270.9	270.9	273.8	276.5	279.3	283.4	283.4	286.2
57.5°	235.0	236.4	239.1	240.5	239.1	243.4	244.7	247.5	248.8	251.6	252.9
60°	206.0	208.7	210.2	210.2	211.6	212.9	215.7	215.7	218.4	221.2	221.2
62.5°	178.4	179.8	181.1	182.5	183.9	182.5	186.6	186.6	189.4	190.8	193.5
65°	152.1	153.4	153.4	154.8	154.8	156.3	156.3	157.6	159.0	161.7	163.1
67.5°	125.8	125.8	125.8	127.2	125.8	127.2	127.2	128.6	128.6	131.3	132.7
70°	102.4	100.9	99.5	99.5	99.5	99.5	98.1	99.5	99.5	100.9	100.9
72.5°	78.8	77.4	76.0	74.7	74.7	73.3	71.9	73.3	73.3	74.7	74.7
75°	59.5	56.7	56.7	56.7	55.3	55.3	55.3	56.7	56.7	56.7	58.0
77.5°	44.2	44.2	42.9	42.9	42.9	44.2	44.2	45.6	45.6	45.6	45.6
80°	33.2	34.5	34.5	34.5	34.5	35.9	35.9	35.9	35.9	37.4	37.4
82.5°	24.9	24.9	24.9	24.9	26.2	26.2	26.2	26.2	26.2	26.2	26.2
85°	15.2	16.5	16.5	15.2	16.5	16.5	16.5	16.5	16.5	16.5	16.5
87.5°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
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: P584081

CATALOG NUMBER: HCC8S20D010MW-HM80520935-81WWWB

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	973.3	973.3	973.3	973.3	973.3	973.3	973.3	973.3
2.5°	956.7	956.7	956.7	956.7	955.3	955.3	955.3	953.9
5°	935.9	935.9	935.9	933.2	934.6	934.6	931.8	933.2
7.5°	915.2	913.8	912.5	912.5	911.1	909.7	908.2	909.7
10°	891.7	887.6	887.6	886.1	886.1	883.4	883.4	884.8
12.5°	865.5	862.6	862.6	861.3	859.9	858.5	857.2	857.2
15°	839.2	836.4	835.1	833.7	832.2	829.5	830.8	829.5
17.5°	812.9	808.7	808.7	807.4	806.0	803.3	803.3	801.9
20°	782.5	781.1	778.3	779.8	778.3	775.6	774.2	774.2
22.5°	752.1	752.1	750.7	750.7	749.3	748.0	746.6	746.6
25°	723.0	721.6	723.0	723.0	718.9	718.9	718.9	720.3
27.5°	689.8	691.2	689.8	689.8	689.8	689.8	691.2	689.8
30°	656.7	656.7	656.7	658.0	660.9	659.4	659.4	658.0
32.5°	620.8	622.1	622.1	623.5	624.9	627.6	627.6	629.1
35°	584.9	587.6	589.0	587.6	591.7	591.7	594.4	594.4
37.5°	547.5	548.8	551.6	553.1	555.8	557.2	558.5	558.5
40°	507.4	512.9	514.3	515.7	519.8	519.8	521.1	524.0
42.5°	470.1	475.6	476.9	478.4	481.1	485.2	483.9	486.6
45°	434.1	438.3	439.6	441.0	445.1	446.6	446.6	450.7
47.5°	395.4	398.2	399.5	402.4	405.1	407.8	410.6	409.2
50°	356.7	360.9	363.6	365.0	369.1	370.6	371.9	373.3
52.5°	322.1	324.9	326.2	327.7	331.8	333.2	334.5	337.3
55°	289.0	290.3	293.1	291.7	295.9	297.3	298.6	301.4
57.5°	255.8	257.2	258.5	258.5	261.3	264.1	265.5	266.8
60°	224.0	226.7	228.1	228.1	228.1	230.8	230.8	230.8
62.5°	194.9	194.9	196.3	196.3	199.0	199.0	199.0	199.0
65°	164.5	166.0	167.3	167.3	170.1	168.7	171.4	170.1
67.5°	132.7	132.7	135.5	135.5	134.2	135.5	135.5	135.5
70°	100.9	100.9	102.4	102.4	102.4	102.4	102.4	102.4
72.5°	74.7	74.7	74.7	76.0	74.7	74.7	76.0	74.7
75°	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0
77.5°	45.6	45.6	47.0	47.0	47.0	47.0	47.0	47.0
80°	37.4	37.4	37.4	37.4	38.7	37.4	37.4	37.4
82.5°	27.7	26.2	27.7	26.2	27.7	27.7	27.7	27.7
85°	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5
87.5°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
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)