

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: P584063

Luminaire Tested: **HCC8W20D010BZ-HM80520930-81WWW**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584063
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HCC8W20D010BZ-HM80520930-81WWW
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

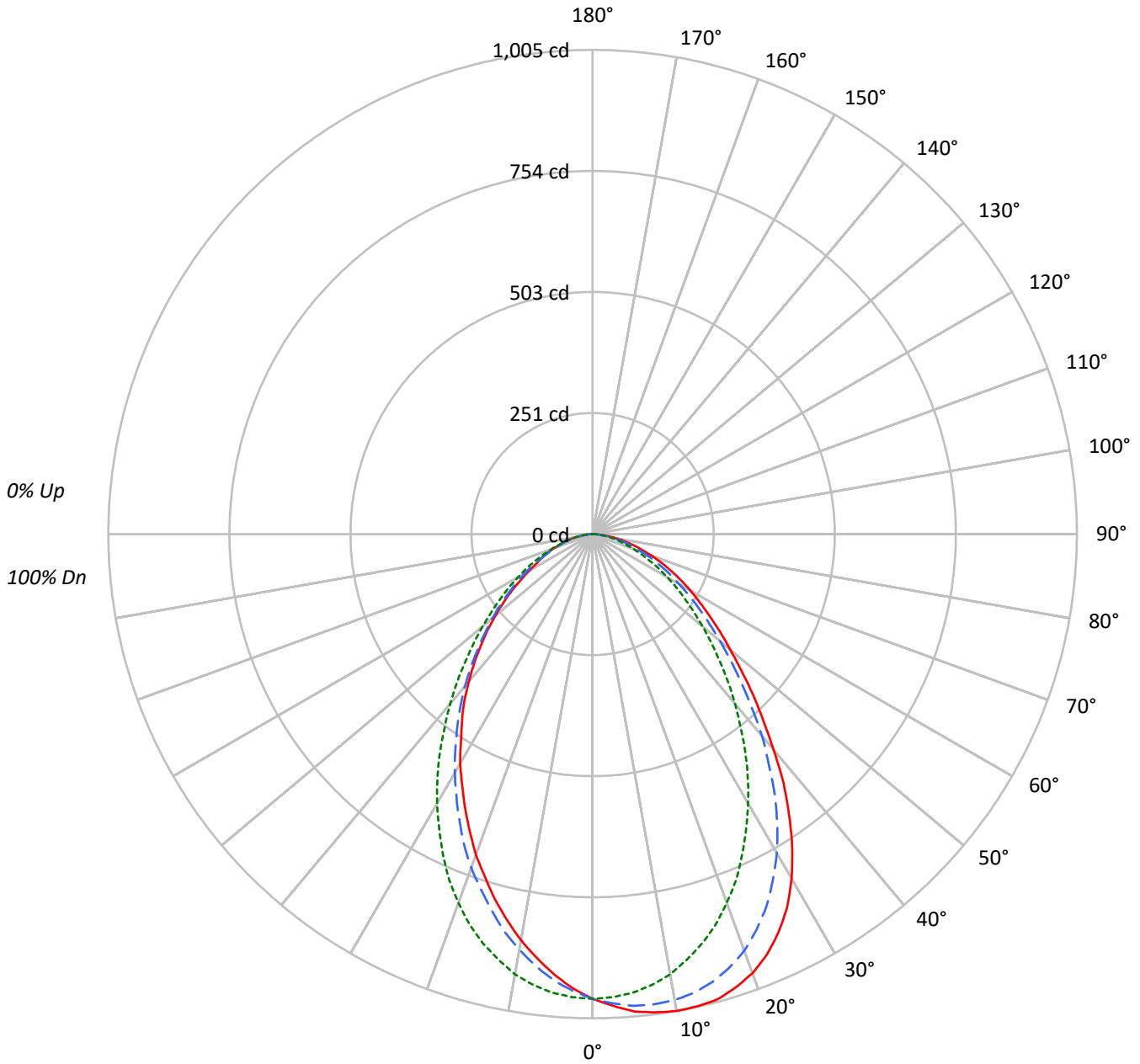
Lumens per Lamp: N/A
Luminaire Lumens: 1780.3 lumens
Efficiency: N/A
Efficacy: 89.0 lumens/watt
Spacing Criteria (0/90/45): 1.09 / 1.04 / 1.13
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

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: P584063
CATALOG NUMBER: HCC8W20D010BZ-HM80520930-81WWW

Luminous Intensity Polar Plot





TEST NUMBER: P584063

CATALOG NUMBER: HCC8W20D010BZ-HM80520930-81WWW

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87								
2	102	95	89	84	99	93	88	83	90	85	81	86	83	79	83	80	78	76								
3	94	85	78	72	92	83	77	71	81	75	70	78	73	69	75	71	68	66								
4	87	76	69	63	85	75	68	62	73	67	62	71	65	61	68	64	60	58								
5	81	69	61	55	79	68	61	55	66	60	54	64	59	54	63	57	53	51								
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46								
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41								
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38								
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34								
10	58	46	39	34	57	45	38	34	44	38	33	44	38	33	43	37	33	32								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	29745	29745	29745
5°	30793	29577	28400
10°	31475	29058	26803
15°	31924	28077	25028
20°	31824	26718	23237
25°	31040	24984	21330
30°	29408	22977	19573
35°	26754	20791	17791
40°	23500	18493	16069
45°	20488	16266	14326
50°	17831	14258	12622
55°	15908	12526	10973
60°	14450	10978	9368
65°	12988	9544	8500
70°	11558	8141	7673
75°	10139	6863	6553
80°	8613	5576	5807
85°	6475	4175	4635



TEST NUMBER: P584063
 CATALOG NUMBER: HCC8W20D010BZ-HM80520930-81WWW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.4	5.1
10°-20°	249.0	14.0
20°-30°	345.6	19.4
30°-40°	357.3	20.1
40°-50°	299.2	16.8
50°-60°	217.2	12.2
60°-70°	137.0	7.7
70°-80°	67.9	3.8
80°-90°	16.9	0.9
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°	684.9	38.5
0°-40°	1042.2	58.5
0°-60°	1558.5	87.5
0°-90°	1780.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1780.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	965	965	965	965	965	
5°	995	983	956	929	918	95
15°	1000	962	880	809	784	281
25°	912	853	734	654	627	418
35°	711	658	552	490	473	443
45°	470	436	373	336	328	363
55°	296	270	233	213	204	267
65°	178	156	131	115	116	177
75°	85	71	58	55	55	91
85°	18	14	12	13	13	22
90°	0	0	0	0	0	

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



TEST NUMBER: P584063

CATALOG NUMBER: HCC8W20D010BZ-HM80520930-81WWW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	964.6	964.6	964.6	964.6	964.6	964.6	964.6	964.6	964.6	964.6	964.6
2.5°	980.4	980.4	981.7	980.4	980.4	980.4	979.1	979.1	977.8	977.8	975.2
5°	994.8	992.2	994.8	992.2	992.2	992.2	990.9	988.2	986.9	984.3	983.0
7.5°	1001.3	1000.0	1000.0	998.7	998.7	997.4	996.1	994.8	989.6	988.2	984.3
10°	1005.2	1003.9	1003.9	1002.6	1000.0	1000.0	997.4	996.1	989.6	986.9	981.7
12.5°	1003.9	1003.9	1003.9	1002.6	998.7	997.4	994.8	990.9	985.6	980.4	975.2
15°	1000.0	1000.0	997.4	996.1	992.2	989.6	988.2	981.7	976.5	969.8	962.0
17.5°	986.9	986.9	985.6	983.0	979.1	976.5	973.8	967.2	962.0	951.5	943.7
20°	969.8	968.5	967.2	963.3	959.4	958.1	954.2	945.0	938.5	930.6	920.2
22.5°	945.0	943.7	942.4	939.8	933.2	930.6	928.0	921.5	909.7	901.9	888.7
25°	912.3	912.3	909.7	905.8	899.1	896.5	892.6	886.1	875.6	863.8	853.4
27.5°	874.3	873.0	869.1	866.5	861.2	857.3	850.8	842.9	832.5	823.3	810.1
30°	825.9	825.9	823.3	819.4	812.9	810.1	804.9	795.8	785.3	773.5	764.4
32.5°	770.9	770.9	767.0	764.4	760.5	753.9	752.6	742.2	733.0	723.9	713.3
35°	710.7	712.0	709.4	704.2	697.6	697.6	695.0	685.8	675.4	666.2	658.4
37.5°	650.5	646.6	645.3	642.7	638.8	633.6	630.8	626.9	617.8	611.2	599.5
40°	583.8	585.1	582.5	579.9	578.5	574.6	573.3	566.8	560.1	552.3	547.1
42.5°	523.5	523.5	523.5	520.9	518.3	514.4	513.1	509.2	501.3	496.1	488.2
45°	469.8	465.9	465.9	464.6	463.3	460.7	456.8	454.1	448.9	445.0	435.8
47.5°	417.5	418.9	417.5	416.2	412.3	411.0	409.7	404.5	399.2	395.3	388.8
50°	371.7	374.3	371.7	371.7	369.1	367.8	365.1	361.2	357.3	350.8	344.2
52.5°	333.8	333.8	332.5	331.2	327.2	324.6	323.3	322.0	315.5	310.2	305.0
55°	295.9	297.2	297.2	293.1	291.8	289.2	287.9	284.0	281.4	273.5	269.6
57.5°	263.1	261.8	263.1	260.5	257.8	255.2	253.9	251.3	247.4	242.2	236.9
60°	234.3	231.7	231.7	230.4	227.8	226.5	223.9	219.9	216.0	210.8	206.8
62.5°	205.5	204.1	202.8	201.5	198.9	197.6	196.3	192.4	188.5	184.5	180.6
65°	178.0	178.0	176.7	174.1	172.8	171.5	170.2	167.5	162.3	159.7	155.8
67.5°	153.2	151.9	151.9	149.2	146.6	145.3	145.3	142.7	138.8	134.9	132.1
70°	128.2	129.5	128.2	126.9	124.3	124.3	121.7	120.4	115.1	113.8	109.9
72.5°	106.0	106.0	104.7	104.7	102.1	100.8	100.8	98.2	95.5	92.9	90.3
75°	85.1	85.1	85.1	83.8	82.5	79.8	79.8	78.5	75.9	73.3	70.7
77.5°	66.8	65.5	65.5	64.2	62.9	61.5	61.5	60.2	57.6	56.3	53.7
80°	48.5	47.2	47.2	47.2	44.4	45.9	44.4	43.1	41.8	40.5	39.2
82.5°	31.4	32.7	32.7	31.4	30.1	30.1	30.1	28.8	28.8	27.5	26.1
85°	18.3	18.3	18.3	18.3	17.0	17.0	17.0	15.7	15.7	15.7	14.4
87.5°	7.8	7.8	7.8	7.8	7.8	7.8	6.5	6.5	6.5	6.5	6.5
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: P584063

CATALOG NUMBER: HCC8W20D010BZ-HM80520930-81WWW

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	964.6	964.6	964.6	964.6	964.6	964.6	964.6	964.6	964.6	964.6	964.6
2.5°	975.2	972.5	971.1	969.8	969.8	968.5	967.2	964.6	964.6	962.0	960.7
5°	980.4	976.5	973.8	971.1	969.8	967.2	964.6	960.7	959.4	955.5	951.5
7.5°	981.7	975.2	972.5	967.2	964.6	962.0	956.8	952.8	947.6	943.7	938.5
10°	976.5	971.1	964.6	958.1	956.8	952.8	945.0	939.8	933.2	928.0	920.2
12.5°	968.5	960.7	954.2	946.3	942.4	938.5	930.6	922.8	913.6	904.5	896.5
15°	955.5	946.3	937.2	928.0	922.8	918.9	909.7	900.6	891.3	879.5	871.7
17.5°	935.9	925.4	916.2	904.5	899.1	895.2	883.5	873.0	861.2	849.5	841.6
20°	911.0	897.8	887.4	874.3	870.4	863.8	852.1	840.3	827.2	814.2	804.9
22.5°	878.2	865.2	853.4	840.3	833.8	827.2	815.5	801.0	787.9	777.5	768.3
25°	840.3	828.5	814.2	802.3	794.5	786.6	773.5	761.8	750.0	734.3	725.2
27.5°	798.4	784.0	773.5	757.9	750.0	744.8	730.4	714.6	704.2	689.8	679.3
30°	751.3	738.2	726.5	710.7	702.8	697.6	684.5	670.2	659.7	645.3	634.9
32.5°	701.5	687.2	672.8	662.3	653.2	647.9	633.6	624.3	611.2	599.5	587.7
35°	647.9	633.6	623.0	608.6	603.4	598.2	586.4	574.6	562.9	552.3	543.1
37.5°	590.3	579.9	568.1	557.5	553.6	548.4	534.0	523.5	514.4	503.9	496.1
40°	534.0	524.8	517.0	506.5	500.0	496.1	485.6	476.5	465.9	459.4	451.5
42.5°	483.0	472.6	464.6	456.8	450.2	446.3	437.2	430.6	422.8	416.2	407.1
45°	429.3	424.1	414.9	408.4	404.5	399.2	392.7	384.9	378.2	373.0	366.5
47.5°	382.1	376.9	370.4	362.5	359.9	356.0	349.5	344.2	339.0	333.8	327.2
50°	339.0	332.5	327.2	322.0	319.4	315.5	308.9	306.3	302.4	297.2	293.1
52.5°	299.8	294.6	289.2	282.7	281.4	278.8	274.8	269.6	265.7	263.1	260.5
55°	264.4	259.2	255.2	250.0	248.7	246.1	240.9	238.2	235.6	233.0	230.4
57.5°	233.0	227.8	222.5	219.9	217.3	214.7	213.4	209.5	206.8	205.5	202.8
60°	204.1	198.9	195.0	191.1	189.8	188.5	185.8	183.2	180.6	178.0	176.7
62.5°	176.7	171.5	168.8	166.2	163.6	163.6	161.0	158.4	155.8	154.5	151.9
65°	151.9	149.2	145.3	141.4	140.1	140.1	136.2	134.9	133.4	130.8	128.2
67.5°	128.2	125.6	121.7	120.4	119.1	117.8	116.5	113.8	111.2	109.9	107.3
70°	107.3	104.7	102.1	100.8	99.5	98.2	95.5	94.2	91.6	90.3	89.0
72.5°	86.4	85.1	82.5	81.2	79.8	78.5	77.2	75.9	73.3	72.0	70.7
75°	69.4	68.1	65.5	64.2	62.9	62.9	61.5	58.9	57.6	57.6	56.3
77.5°	52.4	51.1	49.8	48.5	47.2	47.2	45.9	44.4	43.1	43.1	41.8
80°	37.9	36.6	35.3	35.3	35.3	34.0	32.7	32.7	31.4	31.4	30.1
82.5°	24.8	24.8	23.5	23.5	23.5	22.2	22.2	20.9	20.9	20.9	20.9
85°	14.4	14.4	14.4	13.1	13.1	13.1	13.1	13.1	13.1	11.8	13.1
87.5°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	5.2	5.2	5.2
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: P584063

CATALOG NUMBER: HCC8W20D010BZ-HM80520930-81WWW

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	964.6	964.6	964.6	964.6	964.6	964.6	964.6	964.6	964.6	964.6	964.6
2.5°	959.4	958.1	955.5	955.5	952.8	952.8	951.5	950.2	948.9	947.6	946.3
5°	950.2	945.0	942.4	941.1	938.5	937.2	933.2	930.6	929.3	926.7	924.1
7.5°	933.2	928.0	922.8	921.5	920.2	914.9	911.0	907.1	904.5	901.9	899.1
10°	913.6	908.4	901.9	899.1	896.5	890.0	884.8	880.8	875.6	870.4	869.1
12.5°	890.0	882.1	874.3	871.7	867.8	861.2	856.0	849.5	845.5	839.0	837.7
15°	862.5	853.4	846.9	840.3	837.7	831.2	822.0	816.8	808.8	806.2	799.7
17.5°	829.9	820.7	811.6	808.8	804.9	795.8	786.6	780.1	772.2	768.3	764.4
20°	795.8	784.0	774.8	772.2	767.0	759.2	750.0	743.5	736.9	729.1	725.2
22.5°	756.5	743.5	735.6	729.1	727.8	718.5	708.1	702.8	697.6	691.1	685.8
25°	713.3	701.5	692.4	687.2	684.5	676.7	668.9	662.3	654.5	650.5	644.0
27.5°	668.9	661.0	649.2	644.0	640.1	633.6	624.3	620.4	612.5	607.3	603.4
30°	625.6	613.8	607.3	600.8	596.8	590.3	582.5	578.5	572.0	566.8	562.9
32.5°	578.5	570.7	561.6	558.8	553.6	547.1	541.8	535.3	530.1	524.8	523.5
35°	535.3	524.8	515.7	513.1	509.2	502.6	500.0	496.1	489.5	488.2	483.0
37.5°	488.2	483.0	472.6	468.5	467.2	462.0	456.8	454.1	450.2	446.3	445.0
40°	443.7	437.2	431.9	428.0	425.4	421.5	416.2	414.9	412.3	407.1	405.8
42.5°	401.9	395.3	390.1	388.8	384.9	380.8	378.2	374.3	373.0	371.7	369.1
45°	361.2	357.3	352.1	350.8	349.5	344.2	341.6	339.0	336.4	335.1	332.5
47.5°	324.6	320.7	316.8	315.5	312.9	311.5	307.6	306.3	302.4	301.1	299.8
50°	289.2	286.6	284.0	282.7	280.1	278.8	276.1	273.5	270.9	269.6	268.3
52.5°	257.8	255.2	252.6	251.3	250.0	247.4	244.8	242.2	240.9	239.5	238.2
55°	227.8	225.2	223.9	222.5	221.2	219.9	216.0	214.7	213.4	212.1	209.5
57.5°	200.2	197.6	195.0	195.0	193.7	192.4	189.8	187.2	187.2	184.5	181.9
60°	175.4	172.8	170.2	168.8	167.5	164.9	163.6	162.3	161.0	159.7	157.1
62.5°	149.2	147.9	145.3	145.3	142.7	141.4	140.1	138.8	137.5	134.9	133.4
65°	126.9	125.6	123.0	121.7	121.7	120.4	117.8	116.5	115.1	115.1	113.8
67.5°	106.0	104.7	102.1	100.8	100.8	99.5	98.2	98.2	96.8	95.5	96.8
70°	87.7	85.1	85.1	83.8	83.8	82.5	81.2	81.2	81.2	82.5	82.5
72.5°	69.4	68.1	66.8	66.8	66.8	66.8	65.5	65.5	66.8	68.1	68.1
75°	55.0	53.7	53.7	53.7	52.4	52.4	53.7	53.7	55.0	55.0	55.0
77.5°	40.5	40.5	40.5	40.5	40.5	40.5	41.8	41.8	43.1	43.1	43.1
80°	30.1	30.1	30.1	30.1	30.1	31.4	31.4	31.4	31.4	31.4	32.7
82.5°	20.9	20.9	20.9	20.9	20.9	20.9	20.9	22.2	22.2	22.2	22.2
85°	11.8	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1
87.5°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
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: P584063

CATALOG NUMBER: HCC8W20D010BZ-HM80520930-81WWW

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	964.6	964.6	964.6	964.6	964.6	964.6	964.6	964.6
2.5°	945.0	945.0	945.0	946.3	943.7	943.7	943.7	943.7
5°	922.8	921.5	920.2	921.5	918.9	918.9	917.5	917.5
7.5°	895.2	893.9	892.6	892.6	890.0	890.0	888.7	887.4
10°	865.2	862.5	863.8	861.2	859.9	858.6	857.3	856.0
12.5°	832.5	829.9	828.5	825.9	823.3	822.0	823.3	820.7
15°	797.1	793.2	791.8	789.2	786.6	785.3	785.3	784.0
17.5°	757.9	755.2	753.9	751.3	750.0	747.4	746.1	744.8
20°	721.1	714.6	715.9	713.3	712.0	706.8	706.8	708.1
22.5°	680.6	676.7	674.1	671.5	670.2	667.5	667.5	666.2
25°	640.1	636.2	634.9	632.1	630.8	628.2	626.9	626.9
27.5°	600.8	595.5	595.5	592.9	590.3	589.0	587.7	586.4
30°	558.8	554.9	553.6	553.6	552.3	552.3	548.4	549.7
32.5°	519.6	517.0	515.7	513.1	513.1	511.8	511.8	507.8
35°	480.4	476.5	477.8	475.2	473.9	472.6	473.9	472.6
37.5°	442.4	439.8	439.8	437.2	437.2	435.8	434.5	437.2
40°	404.5	403.2	401.9	400.5	401.9	400.5	397.9	399.2
42.5°	366.5	366.5	365.1	365.1	363.8	363.8	363.8	363.8
45°	332.5	331.2	331.2	329.9	329.9	329.9	329.9	328.5
47.5°	298.5	297.2	297.2	297.2	295.9	295.9	294.6	295.9
50°	265.7	265.7	264.4	264.4	265.7	264.4	263.1	263.1
52.5°	235.6	235.6	234.3	234.3	233.0	231.7	233.0	233.0
55°	208.2	206.8	205.5	205.5	204.1	202.8	202.8	204.1
57.5°	181.9	180.6	179.3	179.3	176.7	175.4	175.4	175.4
60°	157.1	154.5	154.5	153.2	153.2	151.9	151.9	151.9
62.5°	133.4	132.1	132.1	132.1	132.1	130.8	130.8	130.8
65°	113.8	113.8	113.8	115.1	115.1	116.5	116.5	116.5
67.5°	98.2	99.5	99.5	99.5	100.8	100.8	100.8	99.5
70°	83.8	83.8	83.8	85.1	85.1	85.1	85.1	85.1
72.5°	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4
75°	55.0	56.3	56.3	56.3	55.0	56.3	56.3	55.0
77.5°	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1
80°	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7
82.5°	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
85°	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1
87.5°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
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)