

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: P584046

Luminaire Tested: **HCC8W20D010BZ-HM80520927-81WWW**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584046
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-HM80520927-81WWW
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

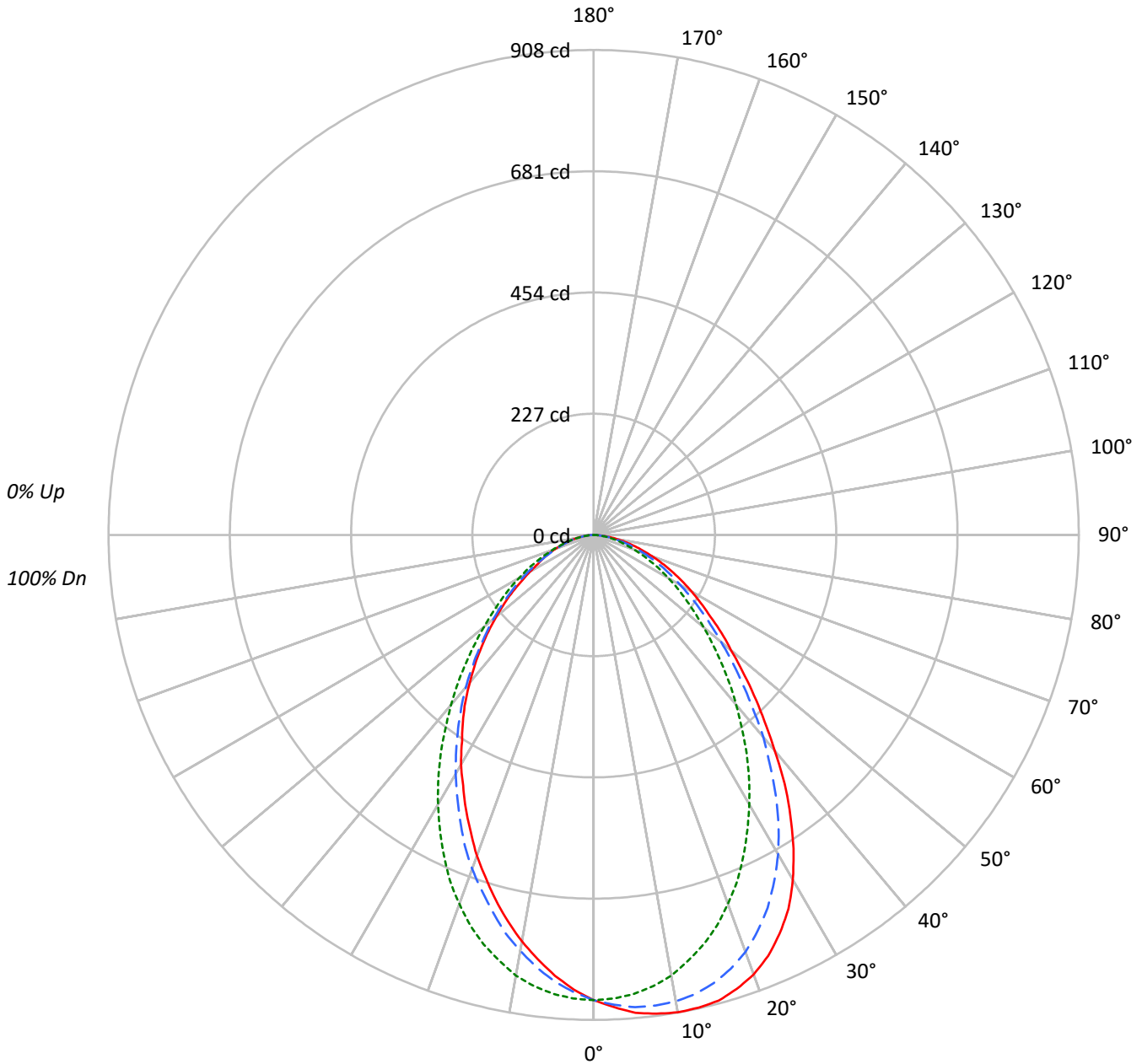
Lumens per Lamp: N/A
Luminaire Lumens: 1607.6 lumens
Efficiency: N/A
Efficacy: 80.4 lumens/watt
Spacing Criteria (0/90/45): 1.09 / 1.04 / 1.13
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

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: P584046
CATALOG NUMBER: HCC8W20D010BZ-HM80520927-81WWW

Luminous Intensity Polar Plot





TEST NUMBER: P584046

CATALOG NUMBER: HCC8W20D010BZ-HM80520927-81WWW

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	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°	26858	26858	26858
5°	27803	26704	25645
10°	28422	26236	24201
15°	28824	25354	22599
20°	28736	24123	20979
25°	28026	22558	19261
30°	26552	20744	17672
35°	24156	18773	16063
40°	21218	16701	14512
45°	18503	14692	12939
50°	16104	12871	11398
55°	14360	11311	9914
60°	13050	9917	8455
65°	11733	8624	7676
70°	10440	7357	6924
75°	9150	6195	5909
80°	7760	5043	5256
85°	5838	3750	4175



TEST NUMBER: P584046
 CATALOG NUMBER: HCC8W20D010BZ-HM80520927-81WWW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.6	5.1
10°-20°	224.8	14.0
20°-30°	312.0	19.4
30°-40°	322.6	20.1
40°-50°	270.2	16.8
50°-60°	196.1	12.2
60°-70°	123.8	7.7
70°-80°	61.3	3.8
80°-90°	15.2	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°	618.4	38.5
0°-40°	941.0	58.5
0°-60°	1407.3	87.5
0°-90°	1607.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1607.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	871	871	871	871	871	
5°	898	888	863	839	828	86
15°	903	869	794	730	708	254
25°	824	770	663	591	566	377
35°	642	594	499	442	427	400
45°	424	394	337	304	297	328
55°	267	244	210	193	184	241
65°	161	141	118	104	105	160
75°	77	64	52	50	50	82
85°	16	13	11	12	12	20
90°	0	0	0	0	0	

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



TEST NUMBER: P584046

CATALOG NUMBER: HCC8W20D010BZ-HM80520927-81WWW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	871.0	871.0	871.0	871.0	871.0	871.0	871.0	871.0	871.0	871.0	871.0
2.5°	885.2	885.2	886.4	885.2	885.2	885.2	884.0	884.0	882.8	882.8	880.5
5°	898.2	895.8	898.2	895.8	895.8	895.8	894.7	892.3	891.1	888.7	887.6
7.5°	904.1	902.9	902.9	901.7	901.7	900.6	899.4	898.2	893.5	892.3	888.7
10°	907.7	906.5	906.5	905.3	902.9	902.9	900.6	899.4	893.5	891.1	886.4
12.5°	906.5	906.5	906.5	905.3	901.7	900.6	898.2	894.7	889.9	885.2	880.5
15°	902.9	902.9	900.6	899.4	895.8	893.5	892.3	886.4	881.7	875.7	868.7
17.5°	891.1	891.1	889.9	887.6	884.0	881.7	879.3	873.4	868.7	859.2	852.1
20°	875.7	874.6	873.4	869.8	866.3	865.1	861.6	853.3	847.4	840.3	830.8
22.5°	853.3	852.1	850.9	848.6	842.6	840.3	837.9	832.0	821.4	814.3	802.5
25°	823.7	823.7	821.4	817.8	811.9	809.6	806.0	800.1	790.6	780.0	770.5
27.5°	789.5	788.3	784.7	782.4	777.6	774.1	768.2	761.1	751.6	743.4	731.5
30°	745.7	745.7	743.4	739.8	733.9	731.5	726.8	718.5	709.1	698.4	690.2
32.5°	696.1	696.1	692.5	690.2	686.6	680.7	679.5	670.1	661.8	653.5	644.1
35°	641.7	642.9	640.5	635.8	629.9	629.9	627.5	619.2	609.8	601.5	594.4
37.5°	587.3	583.8	582.6	580.2	576.7	572.0	569.6	566.1	557.8	551.9	541.2
40°	527.1	528.2	525.9	523.5	522.3	518.8	517.6	511.7	505.8	498.7	494.0
42.5°	472.8	472.8	472.8	470.4	468.1	464.5	463.3	459.8	452.7	448.0	440.9
45°	424.3	420.8	420.8	419.6	418.4	416.1	412.5	410.2	405.4	401.9	393.6
47.5°	377.1	378.2	377.1	375.9	372.3	371.1	370.0	365.2	360.5	357.0	351.1
50°	335.7	338.1	335.7	335.7	333.3	332.1	329.8	326.2	322.7	316.8	310.9
52.5°	301.4	301.4	300.2	299.0	295.5	293.1	292.0	290.8	284.9	280.1	275.4
55°	267.1	268.3	268.3	264.8	263.6	261.2	260.0	256.5	254.1	247.0	243.5
57.5°	237.6	236.4	237.6	235.2	232.9	230.5	229.3	226.9	223.4	218.7	213.9
60°	211.6	209.2	209.2	208.0	205.7	204.5	202.1	198.6	195.0	190.3	186.8
62.5°	185.6	184.4	183.2	182.0	179.7	178.5	177.3	173.8	170.2	166.7	163.1
65°	160.8	160.8	159.6	157.2	156.0	154.8	153.7	151.3	146.6	144.2	140.7
67.5°	138.3	137.1	137.1	134.7	132.4	131.2	131.2	128.8	125.3	121.7	119.4
70°	115.8	117.0	115.8	114.7	112.3	112.3	109.9	108.7	104.0	102.8	99.3
72.5°	95.7	95.7	94.6	94.6	92.2	91.0	91.0	88.6	86.3	83.9	81.6
75°	76.8	76.8	76.8	75.6	74.5	72.1	72.1	70.9	68.6	66.2	63.8
77.5°	60.3	59.1	59.1	57.9	56.7	55.6	55.6	54.4	52.0	50.8	48.5
80°	43.7	42.6	42.6	42.6	40.2	41.4	40.2	39.0	37.8	36.6	35.5
82.5°	28.4	29.6	29.6	28.4	27.2	27.2	27.2	26.0	26.0	24.8	23.6
85°	16.5	16.5	16.5	16.5	15.4	15.4	15.4	14.2	14.2	14.2	13.0
87.5°	7.1	7.1	7.1	7.1	7.1	7.1	5.9	5.9	5.9	5.9	5.9
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: P584046

CATALOG NUMBER: HCC8W20D010BZ-HM80520927-81WWW

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	871.0	871.0	871.0	871.0	871.0	871.0	871.0	871.0	871.0	871.0	871.0
2.5°	880.5	878.1	876.9	875.7	875.7	874.6	873.4	871.0	871.0	868.7	867.5
5°	885.2	881.7	879.3	876.9	875.7	873.4	871.0	867.5	866.3	862.7	859.2
7.5°	886.4	880.5	878.1	873.4	871.0	868.7	863.9	860.4	855.6	852.1	847.4
10°	881.7	876.9	871.0	865.1	863.9	860.4	853.3	848.6	842.6	837.9	830.8
12.5°	874.6	867.5	861.6	854.5	850.9	847.4	840.3	833.2	824.9	816.6	809.6
15°	862.7	854.5	846.2	837.9	833.2	829.6	821.4	813.1	804.8	794.2	787.1
17.5°	845.0	835.6	827.3	816.6	811.9	808.4	797.7	788.3	777.6	767.0	759.9
20°	822.6	810.7	801.3	789.5	785.9	780.0	769.4	758.7	746.9	735.1	726.8
22.5°	793.0	781.2	770.5	758.7	752.8	746.9	736.3	723.3	711.4	702.0	693.7
25°	758.7	748.1	735.1	724.4	717.4	710.3	698.4	687.8	677.2	663.0	654.7
27.5°	720.9	707.9	698.4	684.3	677.2	672.4	659.4	645.3	635.8	622.8	613.3
30°	678.3	666.5	655.9	641.7	634.6	629.9	618.1	605.1	595.6	582.6	573.2
32.5°	633.4	620.4	607.4	598.0	589.7	585.0	572.0	563.7	551.9	541.2	530.6
35°	585.0	572.0	562.5	549.5	544.8	540.1	529.4	518.8	508.1	498.7	490.5
37.5°	533.0	523.5	512.9	503.4	499.9	495.1	482.3	472.8	464.5	455.1	448.0
40°	482.3	474.0	466.9	457.4	451.5	448.0	438.5	430.2	420.8	414.9	407.8
42.5°	436.2	426.7	419.6	412.5	406.6	403.1	394.8	388.9	381.8	375.9	367.6
45°	387.7	383.0	374.7	368.8	365.2	360.5	354.6	347.5	341.6	336.9	331.0
47.5°	345.1	340.4	334.5	327.4	325.0	321.5	315.6	310.9	306.1	301.4	295.5
50°	306.1	300.2	295.5	290.8	288.4	284.9	279.0	276.6	273.0	268.3	264.8
52.5°	270.7	266.0	261.2	255.3	254.1	251.8	248.2	243.5	239.9	237.6	235.2
55°	238.8	234.0	230.5	225.8	224.6	222.2	217.5	215.1	212.8	210.4	208.0
57.5°	210.4	205.7	200.9	198.6	196.2	193.8	192.7	189.1	186.8	185.6	183.2
60°	184.4	179.7	176.1	172.6	171.4	170.2	167.8	165.5	163.1	160.8	159.6
62.5°	159.6	154.8	152.5	150.1	147.8	147.8	145.4	143.0	140.7	139.5	137.1
65°	137.1	134.7	131.2	127.7	126.5	126.5	122.9	121.7	120.6	118.2	115.8
67.5°	115.8	113.5	109.9	108.7	107.6	106.4	105.2	102.8	100.5	99.3	96.9
70°	96.9	94.6	92.2	91.0	89.8	88.6	86.3	85.1	82.7	81.6	80.4
72.5°	78.0	76.8	74.5	73.3	72.1	70.9	69.7	68.6	66.2	65.0	63.8
75°	62.6	61.5	59.1	57.9	56.7	56.7	55.6	53.2	52.0	52.0	50.8
77.5°	47.3	46.1	44.9	43.7	42.6	42.6	41.4	40.2	39.0	39.0	37.8
80°	34.3	33.1	31.9	31.9	31.9	30.7	29.6	29.6	28.4	28.4	27.2
82.5°	22.5	22.5	21.3	21.3	21.3	20.1	20.1	18.9	18.9	18.9	18.9
85°	13.0	13.0	13.0	11.8	11.8	11.8	11.8	11.8	11.8	10.6	11.8
87.5°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	4.7	4.7	4.7
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: P584046

CATALOG NUMBER: HCC8W20D010BZ-HM80520927-81WWW

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	871.0	871.0	871.0	871.0	871.0	871.0	871.0	871.0	871.0	871.0	871.0
2.5°	866.3	865.1	862.7	862.7	860.4	860.4	859.2	858.0	856.8	855.6	854.5
5°	858.0	853.3	850.9	849.7	847.4	846.2	842.6	840.3	839.1	836.7	834.4
7.5°	842.6	837.9	833.2	832.0	830.8	826.1	822.6	819.0	816.6	814.3	811.9
10°	824.9	820.2	814.3	811.9	809.6	803.6	798.9	795.4	790.6	785.9	784.7
12.5°	803.6	796.5	789.5	787.1	783.5	777.6	772.9	767.0	763.5	757.5	756.4
15°	778.8	770.5	764.6	758.7	756.4	750.5	742.2	737.4	730.4	728.0	722.1
17.5°	749.3	741.0	732.7	730.4	726.8	718.5	710.3	704.4	697.3	693.7	690.2
20°	718.5	707.9	699.6	697.3	692.5	685.4	677.2	671.3	665.3	658.3	654.7
22.5°	683.1	671.3	664.2	658.3	657.1	648.8	639.3	634.6	629.9	624.0	619.2
25°	644.1	633.4	625.2	620.4	618.1	611.0	603.9	598.0	590.9	587.3	581.4
27.5°	603.9	596.8	586.2	581.4	577.9	572.0	563.7	560.1	553.1	548.3	544.8
30°	564.9	554.2	548.3	542.4	538.9	533.0	525.9	522.3	516.4	511.7	508.1
32.5°	522.3	515.2	507.0	504.6	499.9	494.0	489.3	483.4	478.7	474.0	472.8
35°	483.4	474.0	465.7	463.3	459.8	453.9	451.5	448.0	442.1	440.9	436.2
37.5°	440.9	436.2	426.7	423.2	422.0	417.2	412.5	410.2	406.6	403.1	401.9
40°	400.7	394.8	390.1	386.5	384.2	380.6	375.9	374.7	372.3	367.6	366.4
42.5°	362.9	357.0	352.2	351.1	347.5	344.0	341.6	338.1	336.9	335.7	333.3
45°	326.2	322.7	318.0	316.8	315.6	310.9	308.5	306.1	303.8	302.6	300.2
47.5°	293.1	289.6	286.0	284.9	282.5	281.3	277.8	276.6	273.0	271.9	270.7
50°	261.2	258.9	256.5	255.3	252.9	251.8	249.4	247.0	244.7	243.5	242.3
52.5°	232.9	230.5	228.1	226.9	225.8	223.4	221.0	218.7	217.5	216.3	215.1
55°	205.7	203.3	202.1	200.9	199.8	198.6	195.0	193.8	192.7	191.5	189.1
57.5°	180.8	178.5	176.1	176.1	174.9	173.8	171.4	169.0	169.0	166.7	164.3
60°	158.4	156.0	153.7	152.5	151.3	148.9	147.8	146.6	145.4	144.2	141.8
62.5°	134.7	133.6	131.2	131.2	128.8	127.7	126.5	125.3	124.1	121.7	120.6
65°	114.7	113.5	111.1	109.9	109.9	108.7	106.4	105.2	104.0	104.0	102.8
67.5°	95.7	94.6	92.2	91.0	91.0	89.8	88.6	88.6	87.5	86.3	87.5
70°	79.2	76.8	76.8	75.6	75.6	74.5	73.3	73.3	73.3	74.5	74.5
72.5°	62.6	61.5	60.3	60.3	60.3	60.3	59.1	59.1	60.3	61.5	61.5
75°	49.6	48.5	48.5	48.5	47.3	47.3	48.5	48.5	49.6	49.6	49.6
77.5°	36.6	36.6	36.6	36.6	36.6	36.6	37.8	37.8	39.0	39.0	39.0
80°	27.2	27.2	27.2	27.2	27.2	28.4	28.4	28.4	28.4	28.4	29.6
82.5°	18.9	18.9	18.9	18.9	18.9	18.9	18.9	20.1	20.1	20.1	20.1
85°	10.6	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8
87.5°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
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: P584046

CATALOG NUMBER: HCC8W20D010BZ-HM80520927-81WWW

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	871.0	871.0	871.0	871.0	871.0	871.0	871.0	871.0
2.5°	853.3	853.3	853.3	854.5	852.1	852.1	852.1	852.1
5°	833.2	832.0	830.8	832.0	829.6	829.6	828.5	828.5
7.5°	808.4	807.2	806.0	806.0	803.6	803.6	802.5	801.3
10°	781.2	778.8	780.0	777.6	776.5	775.3	774.1	772.9
12.5°	751.6	749.3	748.1	745.7	743.4	742.2	743.4	741.0
15°	719.7	716.2	715.0	712.6	710.3	709.1	709.1	707.9
17.5°	684.3	681.9	680.7	678.3	677.2	674.8	673.6	672.4
20°	651.2	645.3	646.4	644.1	642.9	638.2	638.2	639.3
22.5°	614.5	611.0	608.6	606.2	605.1	602.7	602.7	601.5
25°	577.9	574.3	573.2	570.8	569.6	567.2	566.1	566.1
27.5°	542.4	537.7	537.7	535.3	533.0	531.8	530.6	529.4
30°	504.6	501.0	499.9	499.9	498.7	498.7	495.1	496.3
32.5°	469.3	466.9	465.7	463.3	463.3	462.2	462.2	458.6
35°	433.8	430.2	431.4	429.1	427.9	426.7	427.9	426.7
37.5°	399.5	397.2	397.2	394.8	394.8	393.6	392.4	394.8
40°	365.2	364.1	362.9	361.7	362.9	361.7	359.3	360.5
42.5°	331.0	331.0	329.8	329.8	328.6	328.6	328.6	328.6
45°	300.2	299.0	299.0	297.9	297.9	297.9	297.9	296.7
47.5°	269.5	268.3	268.3	268.3	267.1	267.1	266.0	267.1
50°	239.9	239.9	238.8	238.8	239.9	238.8	237.6	237.6
52.5°	212.8	212.8	211.6	211.6	210.4	209.2	210.4	210.4
55°	187.9	186.8	185.6	185.6	184.4	183.2	183.2	184.4
57.5°	164.3	163.1	161.9	161.9	159.6	158.4	158.4	158.4
60°	141.8	139.5	139.5	138.3	138.3	137.1	137.1	137.1
62.5°	120.6	119.4	119.4	119.4	119.4	118.2	118.2	118.2
65°	102.8	102.8	102.8	104.0	104.0	105.2	105.2	105.2
67.5°	88.6	89.8	89.8	89.8	91.0	91.0	91.0	89.8
70°	75.6	75.6	75.6	76.8	76.8	76.8	76.8	76.8
72.5°	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
75°	49.6	50.8	50.8	50.8	49.6	50.8	50.8	49.6
77.5°	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0
80°	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6
82.5°	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
85°	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8
87.5°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
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)