

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: P583838

Luminaire Tested: **HCC8W15D010MB-HM80520827-81RWWC**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P583838
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-14)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HCC8W15D010MB-HM80520827-81RWWC
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

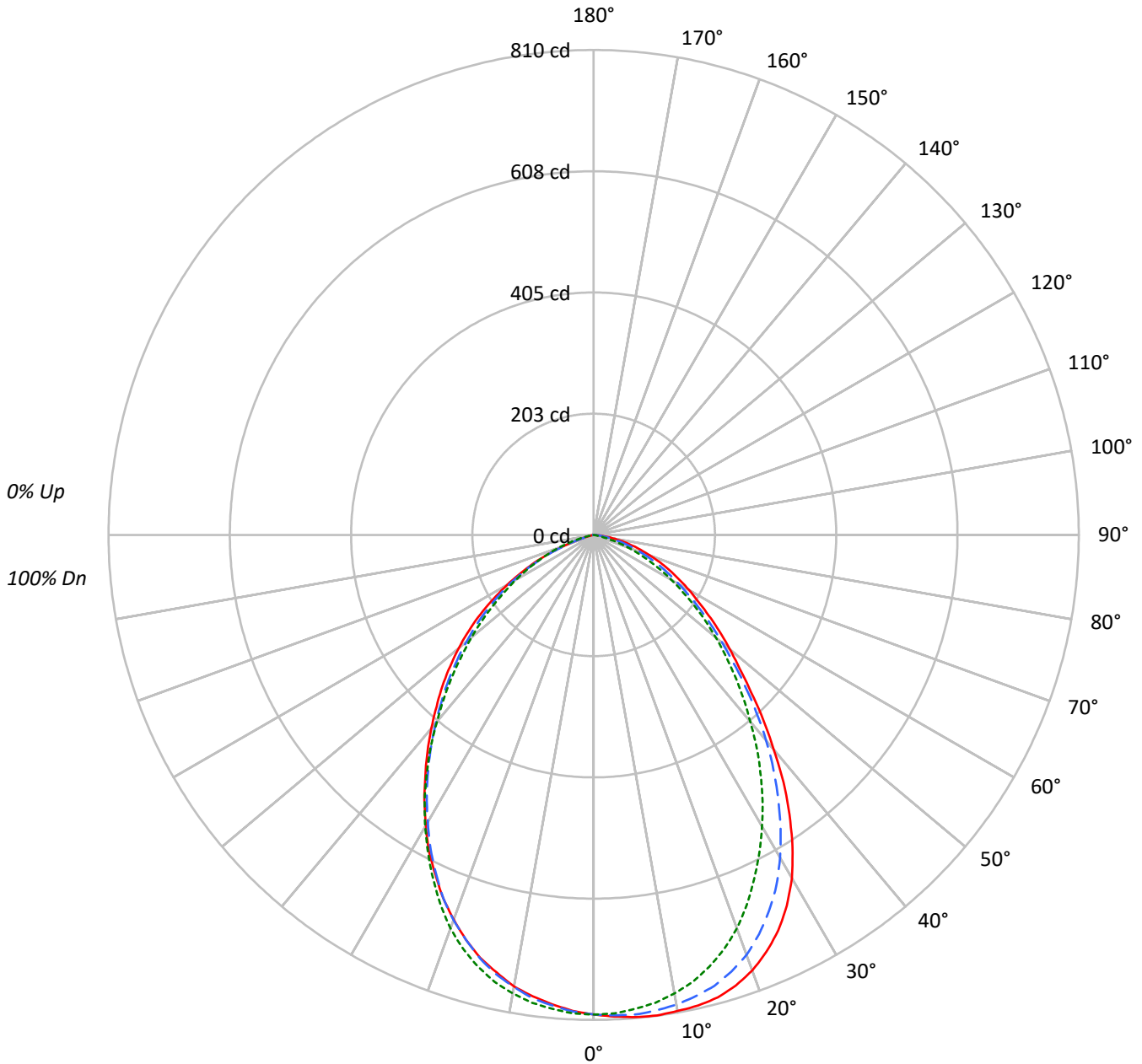
Lumens per Lamp: N/A
Luminaire Lumens: 1522.3 lumens
Efficiency: N/A
Efficacy: 108.7 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.08 / 1.17
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

Input Watts (W): 14
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: P583838
CATALOG NUMBER: HCC8W15D010MB-HM80520827-81RWWC

Luminous Intensity Polar Plot



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



TEST NUMBER: P583838

CATALOG NUMBER: HCC8W15D010MB-HM80520827-81RWWC

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	85	100	94	89	84	91	86	82	87	84	81	84	82	79	77					77			
3	95	86	79	73	93	84	78	73	82	76	72	79	74	70	76	73	69	67					67			
4	88	77	70	64	86	76	69	64	74	68	63	72	66	62	69	65	61	59					59			
5	81	70	62	56	80	69	62	56	67	61	56	65	59	55	63	58	54	52					52			
6	76	64	56	50	74	63	55	50	61	55	50	60	54	49	58	53	49	47					47			
7	71	59	51	45	69	58	50	45	56	50	45	55	49	44	54	48	44	42					42			
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38					38			
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35					35			
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32					32			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	24700	24700	24700
5°	25023	24596	24364
10°	25281	24345	23976
15°	25536	23828	23349
20°	25406	22951	22426
25°	24814	21578	21285
30°	23568	20029	19950
35°	21457	18276	18434
40°	18811	16355	16963
45°	16227	14552	15577
50°	14210	12775	14104
55°	12586	10978	12419
60°	11342	9232	10287
65°	10222	7413	7880
70°	8962	5401	4337
75°	7637	2800	1144
80°	5878	746	195
85°	3786	0	0



TEST NUMBER: P583838
 CATALOG NUMBER: HCC8W15D010MB-HM80520827-81RWWC

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.6	5.0
10°-20°	212.4	14.0
20°-30°	301.5	19.8
30°-40°	317.4	20.9
40°-50°	270.0	17.7
50°-60°	195.1	12.8
60°-70°	111.0	7.3
70°-80°	35.0	2.3
80°-90°	4.3	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°	589.5	38.7
0°-40°	906.9	59.6
0°-60°	1372.1	90.1
0°-90°	1522.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1522.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	801	801	801	801	801	
5°	808	804	795	789	787	77
15°	800	780	746	732	731	225
25°	729	693	634	624	626	334
35°	570	537	486	482	490	355
45°	372	358	334	342	357	289
55°	234	217	204	216	231	211
65°	140	121	102	100	108	139
75°	64	49	24	11	10	69
85°	11	6	0	0	0	14
90°	0	0	0	0	0	

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



TEST NUMBER: P583838

CATALOG NUMBER: HCC8W15D010MB-HM80520827-81RWWC

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	801.0	801.0	801.0	801.0	801.0	801.0	801.0	801.0	801.0	801.0	801.0
2.5°	805.2	806.3	804.2	804.2	806.3	804.2	805.2	805.2	804.2	804.2	803.1
5°	808.4	807.4	807.4	807.4	808.4	806.3	805.2	806.3	804.2	804.2	804.2
7.5°	809.5	809.5	808.4	807.4	807.4	807.4	806.3	805.2	804.2	802.0	801.0
10°	807.4	807.4	808.4	806.3	806.3	804.2	804.2	802.0	802.0	799.9	796.6
12.5°	805.2	804.2	804.2	802.0	802.0	799.9	799.9	796.6	795.7	792.4	789.2
15°	799.9	798.8	796.6	795.7	794.6	793.5	791.3	790.2	787.1	782.8	779.5
17.5°	789.2	788.1	787.1	784.9	782.8	781.7	780.6	777.5	773.1	770.0	764.6
20°	774.2	773.1	773.1	770.0	768.9	765.7	764.6	760.4	757.1	750.7	746.4
22.5°	753.8	754.9	752.9	750.7	748.5	745.3	743.2	738.9	733.6	727.2	721.8
25°	729.3	730.4	728.2	726.1	722.9	720.7	718.7	712.2	706.9	699.4	693.0
27.5°	698.3	698.3	698.3	696.1	690.8	689.7	687.6	681.2	673.7	667.3	660.8
30°	661.9	660.8	660.8	657.7	655.5	651.3	648.0	642.7	637.3	629.9	622.4
32.5°	618.0	619.1	616.0	613.8	610.6	610.6	606.4	602.0	595.6	588.2	580.7
35°	570.0	571.0	568.9	567.8	562.5	561.4	560.3	555.0	550.7	545.4	536.8
37.5°	520.8	519.7	518.6	518.6	515.4	513.3	511.2	507.9	501.5	497.3	493.0
40°	467.3	467.3	467.3	466.2	465.1	463.1	462.0	459.8	455.6	451.3	448.0
42.5°	419.2	419.2	418.1	417.1	414.9	416.0	413.8	411.7	407.4	404.3	402.1
45°	372.1	372.1	372.1	373.2	371.0	367.9	367.9	365.7	363.5	361.5	358.2
47.5°	330.4	333.7	331.5	330.4	331.5	327.3	327.3	325.1	322.9	320.8	316.6
50°	296.2	296.2	296.2	294.0	293.1	293.1	289.8	287.6	286.5	284.5	280.2
52.5°	265.2	263.1	263.1	262.0	260.9	258.8	258.8	256.7	252.3	250.3	247.0
55°	234.1	234.1	233.2	232.1	231.0	229.9	228.8	225.7	223.5	220.3	217.1
57.5°	206.4	208.6	207.5	205.3	203.2	203.2	201.0	198.9	195.7	192.4	189.3
60°	183.9	182.9	182.9	181.8	179.7	178.6	177.5	174.4	171.1	167.9	164.7
62.5°	160.4	160.4	160.4	158.2	156.2	155.1	154.0	151.8	147.6	144.4	142.2
65°	140.1	139.1	138.0	136.9	135.8	133.6	132.6	130.5	127.2	124.0	120.9
67.5°	119.8	118.7	118.7	117.6	114.5	113.4	113.4	110.1	106.9	103.8	100.5
70°	99.4	99.4	99.4	97.4	96.3	95.2	94.1	91.9	88.8	85.6	82.3
72.5°	82.3	81.2	81.2	80.3	77.0	75.9	74.8	72.7	69.5	67.4	65.2
75°	64.1	64.1	63.1	62.1	61.0	59.9	58.8	56.6	53.5	50.2	49.2
77.5°	49.2	48.1	48.1	47.0	44.9	43.9	43.9	41.7	38.4	36.4	34.2
80°	33.1	34.2	33.1	32.1	31.0	29.9	28.9	27.8	25.7	23.5	21.3
82.5°	20.4	21.3	20.4	20.4	19.3	18.2	18.2	16.0	14.9	13.9	12.8
85°	10.7	10.7	10.7	10.7	9.6	9.6	9.6	8.6	7.5	6.4	6.4
87.5°	3.3	4.2	3.3	3.3	3.3	3.3	3.3	3.3	2.2	2.2	2.2
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: P583838

CATALOG NUMBER: HCC8W15D010MB-HM80520827-81RWWC

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	801.0	801.0	801.0	801.0	801.0	801.0	801.0	801.0	801.0	801.0	801.0
2.5°	804.2	803.1	802.0	802.0	802.0	802.0	802.0	801.0	799.9	799.9	799.9
5°	802.0	802.0	802.0	801.0	799.9	799.9	797.7	796.6	795.7	794.6	793.5
7.5°	799.9	797.7	796.6	795.7	794.6	794.6	792.4	790.2	790.2	788.1	786.0
10°	793.5	792.4	790.2	788.1	787.1	786.0	783.9	780.6	779.5	777.5	775.3
12.5°	786.0	783.9	781.7	777.5	776.4	775.3	771.0	767.8	765.7	764.6	759.3
15°	776.4	772.0	768.9	763.5	762.4	760.4	757.1	753.8	749.6	746.4	744.3
17.5°	759.3	754.9	749.6	744.3	742.2	742.2	736.7	732.5	727.2	725.0	720.7
20°	738.9	733.6	729.3	722.9	719.6	716.5	713.2	706.9	702.5	699.4	694.0
22.5°	715.4	707.9	702.5	696.1	690.8	687.6	682.3	677.0	671.5	668.4	664.1
25°	685.5	679.0	670.5	664.1	660.8	656.6	650.2	644.8	639.5	634.2	632.0
27.5°	652.3	643.7	636.2	628.8	625.6	622.4	614.9	608.5	604.2	598.9	596.7
30°	616.0	607.4	598.9	592.4	589.2	583.8	579.6	572.1	566.7	562.5	557.2
32.5°	574.3	567.8	560.3	550.7	548.6	544.3	537.9	534.7	528.3	525.0	520.8
35°	529.4	525.0	517.5	510.1	506.8	504.8	499.4	493.0	488.7	485.5	483.3
37.5°	486.6	481.2	473.7	468.4	466.2	463.1	456.6	453.4	449.1	447.1	442.7
40°	440.5	435.2	429.9	426.7	423.4	421.4	417.1	413.8	409.6	406.3	405.2
42.5°	395.7	392.5	388.1	383.9	382.8	379.6	377.5	374.3	371.0	370.1	366.8
45°	355.0	351.9	347.5	343.3	342.2	340.1	339.0	335.8	333.7	333.7	333.7
47.5°	314.4	311.1	306.9	304.7	305.8	301.6	301.6	300.5	298.4	298.4	299.4
50°	278.0	273.8	272.7	270.5	268.4	266.3	267.4	264.1	264.1	266.3	265.2
52.5°	243.8	239.6	238.5	236.3	235.2	235.2	234.1	234.1	233.2	234.1	234.1
55°	212.8	209.5	207.5	205.3	204.2	204.2	204.2	203.2	202.1	204.2	205.3
57.5°	185.0	183.9	181.8	178.6	177.5	176.4	175.3	175.3	175.3	175.3	176.4
60°	160.4	158.2	156.2	152.9	152.9	151.8	150.7	149.7	149.7	149.7	149.7
62.5°	139.1	135.8	132.6	130.5	129.4	128.3	127.2	125.1	125.1	125.1	125.1
65°	117.6	114.5	112.3	110.1	108.0	108.0	105.9	104.8	102.7	101.6	99.4
67.5°	97.4	95.2	93.0	89.8	88.8	87.7	85.6	84.5	81.2	80.3	79.2
70°	79.2	75.9	73.7	71.7	70.6	68.4	66.3	64.1	62.1	59.9	57.7
72.5°	62.1	58.8	56.6	54.6	52.4	52.4	49.2	47.0	43.9	41.7	38.4
75°	46.0	42.8	40.6	37.5	36.4	35.3	32.1	29.9	26.8	23.5	21.3
77.5°	31.0	28.9	26.8	23.5	21.3	21.3	18.2	16.0	13.9	10.7	9.6
80°	19.3	17.1	14.9	12.8	12.8	10.7	9.6	7.5	5.3	4.2	3.3
82.5°	10.7	9.6	8.6	6.4	6.4	5.3	4.2	3.3	2.2	1.1	1.1
85°	5.3	4.2	3.3	3.3	2.2	2.2	2.2	1.1	1.1	0.0	0.0
87.5°	2.2	1.1	1.1	1.1	1.1	1.1	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: P583838

CATALOG NUMBER: HCC8W15D010MB-HM80520827-81RWWC

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	801.0	801.0	801.0	801.0	801.0	801.0	801.0	801.0	801.0	801.0	801.0
2.5°	798.8	798.8	797.7	797.7	797.7	796.6	797.7	796.6	796.6	796.6	797.7
5°	794.6	792.4	792.4	791.3	791.3	790.2	791.3	790.2	789.2	788.1	789.2
7.5°	786.0	783.9	782.8	781.7	781.7	781.7	780.6	779.5	780.6	777.5	779.5
10°	774.2	773.1	771.0	770.0	768.9	770.0	768.9	766.7	766.7	766.7	765.7
12.5°	759.3	757.1	756.0	754.9	752.9	752.9	753.8	751.8	751.8	749.6	749.6
15°	741.1	738.9	736.7	736.7	734.7	734.7	733.6	733.6	732.5	731.4	731.4
17.5°	718.7	715.4	713.2	714.3	713.2	712.2	712.2	710.1	709.0	710.1	710.1
20°	691.9	689.7	687.6	688.7	686.5	685.5	686.5	683.4	684.4	684.4	684.4
22.5°	661.9	660.8	657.7	657.7	655.5	654.4	655.5	655.5	656.6	655.5	655.5
25°	628.8	626.6	624.6	624.6	623.5	622.4	623.5	624.6	623.5	624.6	624.6
27.5°	593.5	590.3	590.3	588.2	588.2	589.2	588.2	589.2	590.3	590.3	592.4
30°	555.0	553.9	552.9	551.8	551.8	552.9	552.9	552.9	553.9	556.1	556.1
32.5°	518.6	516.5	514.4	514.4	516.5	515.4	516.5	516.5	518.6	518.6	520.8
35°	479.1	479.1	476.9	478.0	478.0	478.0	478.0	480.2	482.2	483.3	485.5
37.5°	442.7	439.5	440.5	440.5	441.6	440.5	443.8	443.8	446.0	446.0	448.0
40°	403.2	403.2	404.3	403.2	404.3	404.3	406.3	408.5	409.6	411.7	412.8
42.5°	365.7	367.9	365.7	366.8	367.9	369.0	370.1	371.0	375.4	377.5	380.7
45°	331.5	332.6	333.7	334.7	333.7	335.8	336.8	339.0	342.2	343.3	344.4
47.5°	298.4	299.4	300.5	301.6	301.6	303.7	304.7	306.9	309.1	310.2	311.1
50°	266.3	268.4	269.4	269.4	270.5	272.7	274.9	274.9	276.9	280.2	281.2
52.5°	237.4	237.4	239.6	240.6	241.7	241.7	244.9	245.9	247.0	249.2	251.2
55°	205.3	208.6	209.5	209.5	211.7	213.9	215.0	216.1	216.1	220.3	220.3
57.5°	177.5	178.6	180.8	180.8	180.8	183.9	183.9	186.1	187.1	188.2	190.4
60°	149.7	151.8	151.8	152.9	151.8	154.0	155.1	157.3	158.2	159.3	160.4
62.5°	124.0	124.0	125.1	125.1	125.1	125.1	127.2	127.2	129.4	130.5	131.6
65°	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	100.5	100.5	102.7
67.5°	77.0	75.9	73.7	74.8	73.7	73.7	72.7	72.7	73.7	73.7	75.9
70°	55.6	54.6	52.4	52.4	51.3	50.2	49.2	48.1	47.0	47.0	47.0
72.5°	36.4	34.2	31.0	29.9	29.9	27.8	25.7	24.6	24.6	24.6	24.6
75°	18.2	16.0	13.9	12.8	12.8	10.7	11.8	10.7	10.7	10.7	10.7
77.5°	7.5	5.3	4.2	4.2	4.2	3.3	3.3	3.3	3.3	3.3	3.3
80°	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
82.5°	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	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	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: P583838

CATALOG NUMBER: HCC8W15D010MB-HM80520827-81RWWC

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	801.0	801.0	801.0	801.0	801.0	801.0	801.0	801.0
2.5°	796.6	796.6	794.6	795.7	795.7	795.7	795.7	795.7
5°	787.1	788.1	787.1	788.1	788.1	787.1	787.1	787.1
7.5°	777.5	778.6	777.5	778.6	778.6	778.6	777.5	777.5
10°	765.7	765.7	765.7	765.7	765.7	764.6	765.7	765.7
12.5°	749.6	749.6	749.6	750.7	750.7	749.6	749.6	748.5
15°	732.5	730.4	731.4	732.5	731.4	731.4	731.4	731.4
17.5°	709.0	710.1	709.0	709.0	709.0	709.0	710.1	709.0
20°	684.4	684.4	685.5	684.4	684.4	684.4	684.4	683.4
22.5°	656.6	655.5	655.5	656.6	656.6	655.5	656.6	656.6
25°	625.6	626.6	625.6	625.6	626.6	626.6	626.6	625.6
27.5°	592.4	593.5	594.5	593.5	593.5	593.5	594.5	595.6
30°	558.2	560.3	558.2	558.2	560.3	559.2	560.3	560.3
32.5°	521.9	525.0	523.0	525.0	525.0	526.1	525.0	526.1
35°	485.5	488.7	488.7	488.7	489.7	490.8	490.8	489.7
37.5°	451.3	452.4	452.4	454.5	455.6	456.6	456.6	455.6
40°	416.0	418.1	419.2	419.2	419.2	421.4	423.4	421.4
42.5°	381.7	382.8	383.9	383.9	386.1	387.2	388.1	388.1
45°	348.6	350.8	351.9	352.9	353.9	356.1	355.0	357.2
47.5°	314.4	317.6	318.7	319.7	321.9	322.9	324.0	325.1
50°	283.4	285.5	285.5	287.6	290.9	290.9	293.1	294.0
52.5°	252.3	253.4	254.5	255.6	257.7	259.8	259.8	262.0
55°	222.4	223.5	223.5	224.6	225.7	229.9	231.0	231.0
57.5°	191.5	191.5	193.5	194.6	195.7	197.9	197.9	197.9
60°	161.5	162.6	162.6	163.6	164.7	166.8	167.9	166.8
62.5°	131.6	132.6	132.6	133.6	135.8	136.9	135.8	135.8
65°	103.8	104.8	104.8	105.9	108.0	108.0	106.9	108.0
67.5°	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9
70°	48.1	47.0	46.0	47.0	47.0	47.0	46.0	48.1
72.5°	23.5	24.6	24.6	24.6	24.6	24.6	24.6	23.5
75°	10.7	10.7	9.6	9.6	9.6	10.7	10.7	9.6
77.5°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
80°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	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)