

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO COMMERCIAL

Report Number: P775655

Luminaire Tested: HCDJBS510CSD-HCD42TRMB-1000lm-2700K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P775655
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B051)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL510CSD-HCD42TRMB-1000lm-2700K
Description: 4 INCH ROUND NARROW MATTE BLACK TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 472.0 lumens
Efficiency: N/A
Efficacy: 47.2 lumens/watt
Spacing Criteria (0/90/45): 0.95 / 0.94 / 0.88
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

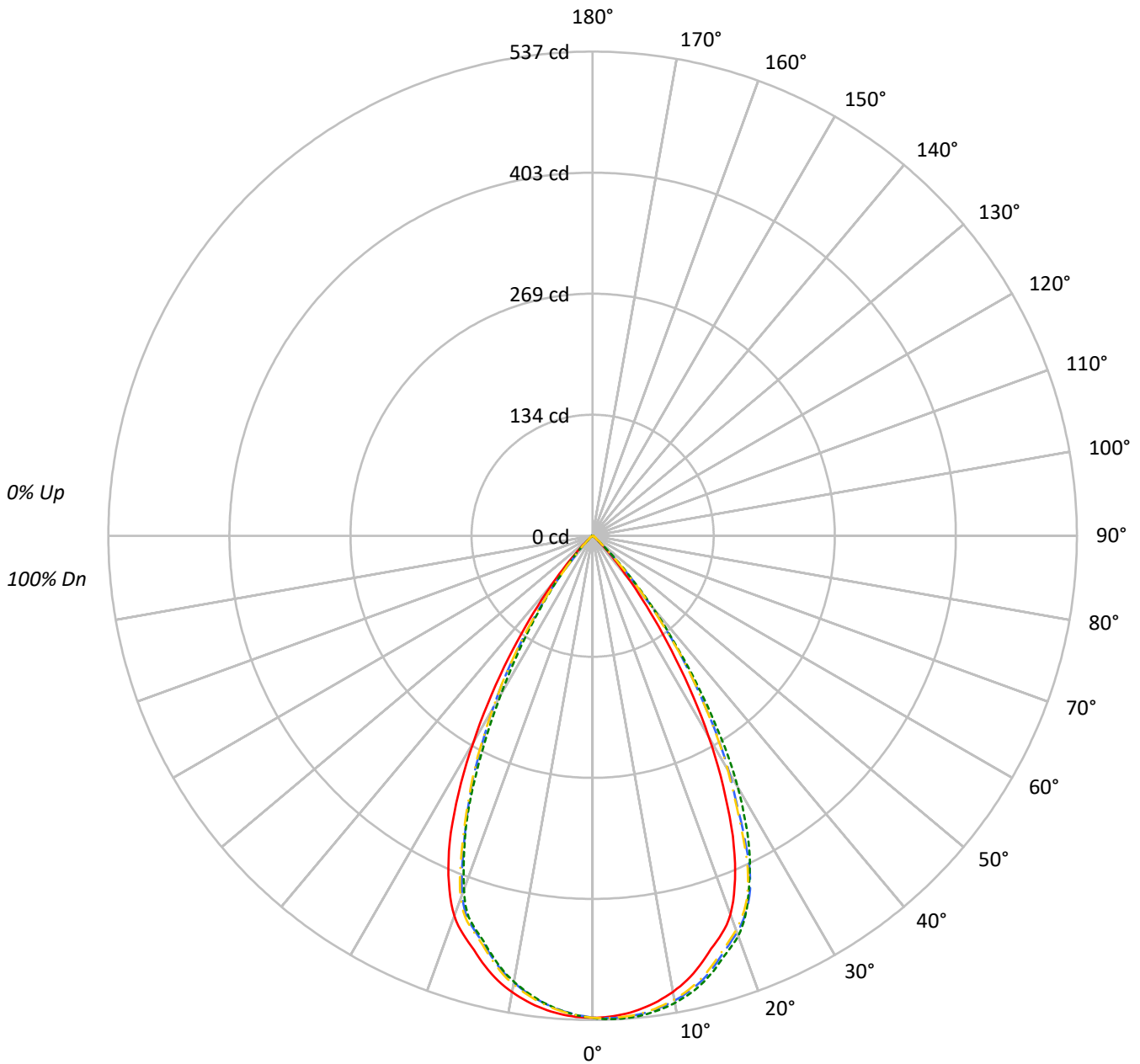
Input Watts (W): 10
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P775655

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMB-1000lm-2700K

Luminous Intensity Polar Plot





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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	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	100	100	100	100		
	1	114	111	109	106	111	109	107	105	105	103	101	101	100	98	98	97	96	94	94	94	94	94	94		
	2	108	103	100	96	106	102	98	95	99	96	93	96	93	91	93	91	89	88	88	88	88	88	88		
	3	103	97	92	88	101	95	91	87	93	89	86	90	87	85	88	85	83	82	82	82	82	82	82		
	4	98	91	85	81	96	89	84	81	87	83	80	85	82	79	83	80	78	76	76	76	76	76	76		
	5	93	85	79	75	91	84	79	75	82	78	74	81	77	73	79	76	73	71	71	71	71	71	71		
	6	89	80	74	70	87	79	74	70	78	73	69	76	72	69	75	71	68	67	67	67	67	67	67		
	7	84	75	69	65	83	74	69	65	73	68	65	72	68	64	71	67	64	63	63	63	63	63	63		
	8	80	71	65	61	79	70	65	61	69	64	61	68	64	60	67	63	60	59	59	59	59	59	59		
	9	76	67	61	57	75	67	61	57	66	61	57	65	60	57	64	60	57	55	55	55	55	55	55		
	10	73	63	58	54	72	63	58	54	62	57	54	61	57	54	61	56	53	52	52	52	52	52	52		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	67267	67267	67267	67267
5°	66879	67663	66905	66210
10°	65634	67218	65672	64190
15°	63047	65666	63216	60741
20°	59838	63240	60066	55901
25°	51059	57238	52072	44296
30°	37434	46793	38451	29631
35°	22123	31295	23690	16884
40°	10153	16691	11319	7672
45°	3132	5678	3577	2243
50°	999	1136	1018	861
55°	614	702	614	527
60°	378	428	403	352
65°	268	268	268	238
70°	184	184	184	147
75°	97	146	97	97
80°	72	72	72	72
85°	0	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 5927 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.0	10.6
10°-20°	136.1	28.8
20°-30°	165.1	35.0
30°-40°	97.3	20.6
40°-50°	19.6	4.1
50°-60°	2.7	0.6
60°-70°	0.9	0.2
70°-80°	0.3	0.1
80°-90°	0.0	0.0
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°	351.2	74.4
0°-40°	448.6	95.0
0°-60°	470.8	99.7
0°-90°	472.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	472.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	534	534	534	534	534	
5°	529	536	530	524	529	50
15°	484	504	485	466	484	136
25°	368	412	375	319	368	165
35°	144	204	154	110	144	92
45°	18	32	20	13	18	17
55°	3	3	3	2	3	3
65°	1	1	1	1	1	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5
0.5°	534.6	534.9	534.6	534.4	535.5	535.1	534.8	534.7	534.6	534.5	533.7
1°	534.4	534.9	534.9	534.8	535.9	535.5	535.1	534.8	534.5	534.1	533.0
1.5°	534.2	534.9	535.2	535.2	536.2	535.8	535.2	534.7	534.2	533.6	532.3
2°	533.8	534.7	535.3	535.4	536.4	536.0	535.3	534.6	533.9	533.1	531.4
2.5°	533.3	534.5	535.3	535.5	536.6	536.1	535.2	534.4	533.4	532.4	530.4
3°	532.7	534.1	535.2	535.6	536.6	536.1	535.1	534.0	532.9	531.6	529.4
3.5°	532.1	533.7	535.1	535.5	536.5	535.9	534.8	533.6	532.2	530.7	528.3
4°	531.3	533.1	534.8	535.3	536.3	535.7	534.5	533.0	531.4	529.7	527.0
4.5°	530.4	532.5	534.5	535.1	536.0	535.4	534.0	532.4	530.6	528.7	525.6
5°	529.4	531.7	534.0	534.7	535.6	534.9	533.5	531.7	529.6	527.5	524.1
5.5°	528.3	530.9	533.4	534.3	535.1	534.4	532.8	530.9	528.5	526.2	522.6
6°	527.1	529.9	532.7	533.7	534.5	533.7	532.0	529.9	527.3	524.8	520.9
6.5°	525.8	528.9	531.9	533.0	533.9	533.0	531.1	528.8	526.0	523.2	519.1
7°	524.5	527.7	531.0	532.2	533.0	532.1	530.2	527.6	524.7	521.6	517.1
7.5°	522.9	526.4	530.0	531.4	532.1	531.1	529.2	526.4	523.2	519.8	515.1
8°	521.3	525.0	529.0	530.4	531.1	530.1	527.9	525.0	521.5	518.0	513.0
8.5°	519.5	523.5	527.7	529.3	530.0	528.9	526.6	523.5	519.8	516.1	510.7
9°	517.7	521.9	526.4	528.1	528.8	527.7	525.2	521.9	518.0	514.0	508.4
9.5°	515.7	520.1	525.0	526.8	527.5	526.3	523.7	520.2	516.0	511.9	505.8
10°	513.6	518.3	523.5	525.4	526.0	524.9	522.1	518.4	513.9	509.5	503.2
10.5°	511.3	516.3	521.9	523.9	524.5	523.2	520.4	516.4	511.7	507.1	500.5
11°	509.1	514.3	520.1	522.2	522.8	521.5	518.5	514.3	509.5	504.5	497.6
11.5°	506.6	512.1	518.2	520.5	521.0	519.6	516.5	512.1	507.0	501.8	494.4
12°	503.9	509.7	516.2	518.7	519.1	517.7	514.4	509.8	504.4	498.9	491.1
12.5°	501.0	507.1	514.1	516.6	517.1	515.5	512.1	507.3	501.6	495.8	487.6
13°	497.9	504.5	511.7	514.5	514.8	513.3	509.7	504.7	498.7	492.6	483.9
13.5°	494.6	501.5	509.4	512.2	512.4	510.8	507.1	501.8	495.5	489.2	480.1
14°	491.2	498.5	506.8	509.7	509.9	508.2	504.3	498.8	492.2	485.5	476.0
14.5°	487.6	495.2	504.0	507.0	507.0	505.2	501.4	495.6	488.8	481.7	472.1
15°	483.9	491.7	501.0	504.1	504.0	502.3	498.2	492.3	485.2	477.9	468.2
15.5°	480.2	488.1	497.8	501.0	501.0	499.1	494.9	488.8	481.5	474.1	464.7
16°	476.7	484.6	494.4	497.8	497.7	495.8	491.5	485.2	477.8	470.4	461.3
16.5°	473.5	481.1	490.9	494.4	494.2	492.4	488.0	481.7	474.4	467.0	457.9
17°	470.2	477.9	487.4	491.1	490.9	489.0	484.5	478.3	471.1	463.8	454.5
17.5°	467.1	474.7	484.1	487.7	487.7	485.8	481.2	475.1	467.9	460.5	451.1
18°	463.9	471.6	480.8	484.6	484.8	482.7	478.2	471.9	464.6	457.1	447.1
18.5°	460.5	468.3	477.7	481.6	481.7	479.7	474.9	468.5	461.2	453.5	442.5
19°	456.5	465.1	474.5	478.5	478.7	476.6	471.7	465.4	457.5	449.3	436.9
19.5°	451.9	461.5	471.4	475.3	475.7	473.5	468.5	461.8	453.3	444.3	430.5
20°	446.8	457.4	468.1	472.3	472.2	470.1	465.1	458.0	448.5	438.6	423.0
20.5°	440.9	452.8	464.7	468.8	468.2	466.3	461.4	453.8	443.0	432.3	414.6
21°	434.5	447.9	460.9	464.9	463.6	461.9	457.4	449.1	437.2	425.2	404.9



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CATALOG NUMBER: HCDJBL510CSD-HCD42TRMB-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	412.4	429.4	447.5	450.3	446.9	446.2	443.1	432.2	416.3	399.7	373.6
23°	404.4	422.1	442.0	444.5	440.3	439.8	437.5	425.5	409.0	390.1	363.3
23.5°	396.2	414.4	435.9	438.0	433.2	432.9	430.9	418.0	401.1	380.1	353.1
24°	387.1	406.2	429.1	430.8	426.2	425.9	423.7	410.1	392.9	370.0	343.5
24.5°	377.6	397.5	421.4	423.4	419.3	418.2	415.4	401.9	384.2	359.9	333.8
25°	367.7	388.5	412.3	415.4	412.2	410.6	406.6	393.1	375.0	350.3	324.1
25.5°	357.2	378.9	402.6	407.6	405.1	403.0	396.5	383.7	365.0	340.8	314.3
26°	346.5	368.5	391.5	399.2	397.6	395.2	385.5	373.7	354.7	331.5	304.3
26.5°	335.4	357.3	379.7	390.6	389.6	386.5	373.8	363.1	343.9	321.9	294.0
27°	324.3	345.7	367.4	381.3	381.1	377.5	362.5	351.9	333.2	312.2	283.4
27.5°	313.3	333.5	355.3	371.9	371.6	368.0	351.0	340.2	321.9	302.4	272.3
28°	302.4	321.0	343.5	361.4	361.9	358.2	340.0	327.7	310.5	292.3	261.4
28.5°	291.4	308.6	332.5	350.7	351.8	347.4	329.2	315.7	299.6	281.9	250.8
29°	280.1	296.4	322.0	339.3	342.1	336.3	319.5	303.9	287.8	271.0	240.6
29.5°	268.9	284.0	312.1	327.7	332.1	324.8	309.4	292.4	276.1	259.4	230.5
30°	257.6	272.5	302.1	315.8	322.0	313.4	299.5	281.3	264.6	248.2	220.5
30.5°	246.4	260.6	292.1	304.5	311.2	301.9	289.5	270.1	253.4	236.7	210.8
31°	234.6	249.3	281.4	293.3	300.3	290.9	279.2	259.1	241.9	225.5	201.0
31.5°	223.0	237.7	270.5	282.2	288.4	279.9	268.1	248.2	230.5	214.4	191.2
32°	211.3	226.5	259.1	271.5	276.4	269.2	256.9	237.1	219.2	203.8	181.3
32.5°	199.6	215.6	247.6	261.2	264.1	258.2	245.7	225.8	208.3	193.4	170.8
33°	187.9	204.8	235.8	250.7	251.8	247.7	234.4	214.2	197.0	183.2	160.5
33.5°	176.3	194.0	224.4	240.0	239.8	236.6	223.2	203.1	186.0	172.9	150.4
34°	165.0	183.8	213.6	229.1	227.7	225.8	212.6	192.4	175.2	162.4	140.6
34.5°	154.2	173.5	203.3	218.2	215.7	214.5	202.7	181.9	164.7	151.9	130.8
35°	144.0	163.4	192.9	206.9	203.7	203.5	192.4	171.8	154.2	141.4	121.5
35.5°	134.2	153.8	183.1	195.7	192.1	192.8	182.6	162.0	144.2	131.2	112.5
36°	124.7	144.8	173.3	184.6	180.8	182.0	172.5	152.8	134.5	121.1	103.8
36.5°	115.4	135.8	163.5	174.1	169.6	171.1	162.3	143.7	125.2	111.5	95.2
37°	106.6	126.7	153.4	163.7	158.9	160.4	151.9	134.8	115.7	102.2	86.6
37.5°	98.3	118.0	143.5	153.7	148.7	149.9	141.6	125.9	107.2	94.1	78.0
38°	90.2	109.2	133.4	143.8	138.8	139.7	131.5	117.3	98.9	86.1	69.5
38.5°	82.4	100.6	123.7	133.7	129.2	129.5	121.7	108.7	91.4	78.0	61.6
39°	75.2	92.2	114.6	124.2	119.8	119.8	112.1	100.2	83.9	70.0	54.3
39.5°	68.3	84.1	105.8	114.7	110.6	110.2	103.2	92.2	76.4	63.4	47.6
40°	61.8	76.4	97.7	105.3	101.6	101.1	95.3	84.3	68.9	56.6	41.7
40.5°	55.7	69.0	89.6	96.1	93.5	92.5	87.4	76.4	62.2	50.4	36.5
41°	49.9	62.0	82.0	87.0	85.4	84.0	79.5	68.5	56.1	44.6	32.0
41.5°	44.7	55.6	74.5	78.5	77.3	75.5	71.6	61.5	50.2	39.2	28.1
42°	39.8	49.6	67.1	70.4	69.2	66.9	63.7	55.0	44.8	34.3	24.9
42.5°	35.3	44.0	59.9	62.9	62.3	59.5	56.5	48.7	39.8	30.1	22.1
43°	31.7	38.7	52.7	55.8	55.4	52.5	49.5	42.9	35.2	26.3	19.4
43.5°	28.2	34.3	46.0	49.2	49.2	46.1	43.0	37.7	30.9	23.0	17.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	17.6	22.6	29.9	33.3	31.9	30.0	27.1	24.2	20.1	15.2	11.4
45.5°	15.1	18.8	25.8	29.2	27.0	25.7	22.9	20.7	17.2	13.1	10.2
46°	12.8	15.9	21.8	25.1	22.8	21.8	19.4	17.4	14.5	11.2	9.1
46.5°	10.7	13.3	17.7	21.0	19.0	18.4	16.3	14.7	12.2	10.1	7.9
47°	9.0	11.0	14.9	17.0	15.7	15.3	13.6	12.2	10.9	8.9	6.8
47.5°	7.5	9.1	12.3	14.1	12.9	12.7	12.3	10.9	9.6	7.8	5.6
48°	6.5	7.5	10.2	11.6	11.5	11.3	11.0	9.6	8.3	6.7	5.2
48.5°	5.9	6.5	8.4	9.4	10.0	10.0	9.7	8.4	7.0	5.6	5.0
49°	5.6	5.9	7.1	7.7	8.6	8.6	8.4	7.1	5.7	5.3	4.8
49.5°	5.3	5.6	6.3	6.6	7.2	7.2	7.0	5.9	5.4	5.0	4.6
50°	5.1	5.3	5.8	6.0	5.8	5.9	5.7	5.5	5.2	4.8	4.3
50.5°	4.8	5.1	5.5	5.6	5.5	5.6	5.5	5.3	4.9	4.6	4.1
51°	4.6	4.8	5.3	5.4	5.3	5.3	5.2	5.0	4.7	4.3	3.8
51.5°	4.3	4.6	5.0	5.1	5.0	5.0	4.9	4.7	4.4	4.1	3.6
52°	4.1	4.3	4.8	4.9	4.8	4.8	4.7	4.4	4.1	3.8	3.4
52.5°	3.8	4.0	4.5	4.6	4.5	4.5	4.4	4.2	3.9	3.6	3.2
53°	3.6	3.8	4.2	4.3	4.2	4.2	4.1	3.9	3.6	3.4	3.0
53.5°	3.4	3.5	3.9	4.0	3.9	3.9	3.8	3.7	3.4	3.2	2.8
54°	3.2	3.3	3.7	3.8	3.7	3.7	3.6	3.4	3.2	3.0	2.7
54.5°	3.0	3.1	3.5	3.6	3.4	3.4	3.4	3.2	3.0	2.8	2.5
55°	2.8	3.0	3.2	3.3	3.2	3.2	3.2	3.0	2.8	2.7	2.4
55.5°	2.6	2.8	3.0	3.1	3.0	3.0	3.0	2.8	2.7	2.5	2.2
56°	2.5	2.6	2.8	2.9	2.8	2.8	2.8	2.7	2.5	2.4	2.1
56.5°	2.3	2.4	2.7	2.7	2.7	2.7	2.6	2.5	2.4	2.2	2.0
57°	2.2	2.3	2.5	2.6	2.5	2.5	2.5	2.4	2.2	2.1	1.9
57.5°	2.0	2.1	2.3	2.4	2.3	2.3	2.3	2.2	2.1	2.0	1.8
58°	1.9	2.0	2.2	2.3	2.2	2.2	2.2	2.1	2.0	1.9	1.7
58.5°	1.8	1.9	2.1	2.1	2.1	2.1	2.0	2.0	1.9	1.8	1.6
59°	1.7	1.8	1.9	2.0	1.9	1.9	1.9	1.9	1.8	1.7	1.5
59.5°	1.6	1.7	1.8	1.9	1.8	1.8	1.8	1.7	1.7	1.6	1.4
60°	1.5	1.6	1.7	1.8	1.7	1.7	1.7	1.6	1.6	1.5	1.3
60.5°	1.4	1.5	1.6	1.7	1.6	1.6	1.6	1.5	1.5	1.4	1.3
61°	1.4	1.4	1.5	1.6	1.5	1.5	1.5	1.5	1.4	1.3	1.2
61.5°	1.3	1.3	1.4	1.5	1.4	1.4	1.4	1.4	1.3	1.2	1.1
62°	1.2	1.2	1.4	1.4	1.4	1.4	1.3	1.3	1.2	1.2	1.1
62.5°	1.1	1.2	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.1	1.0
63°	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.0
63.5°	1.0	1.0	1.1	1.2	1.1	1.1	1.1	1.1	1.0	1.0	0.9
64°	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.0	1.0	0.9	0.9
64.5°	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.8
65°	0.9	0.9	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.8	0.8
65.5°	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.7
66°	0.8	0.8	0.8	0.9	0.8	0.8	0.8	0.8	0.8	0.7	0.7



TEST NUMBER: P775655

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMB-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6
68°	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.5
68.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5
69°	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5
69.5°	0.5	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5
70°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4
70.5°	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4
71°	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4
71.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
72°	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3
72.5°	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
73°	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3
73.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
74°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
74.5°	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
75°	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
75.5°	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
76°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
76.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
77°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
77.5°	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
78°	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
78.5°	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
79°	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
79.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
80°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
80.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
81°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
81.5°	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
82°	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
82.5°	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
83°	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
83.5°	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84.5°	0.0	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
85.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87°	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
88°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P775655

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMB-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P775655

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMB-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	534.5	534.5	534.5	534.5	534.5	534.5
0.5°	533.2	534.3	534.0	534.0	534.2	534.6
1°	532.4	533.6	533.4	533.4	533.9	534.4
1.5°	531.6	532.8	532.6	532.8	533.4	534.2
2°	530.6	531.8	531.7	532.0	532.8	533.8
2.5°	529.5	530.8	530.7	531.1	532.1	533.3
3°	528.4	529.7	529.6	530.2	531.3	532.7
3.5°	527.1	528.4	528.4	529.1	530.5	532.1
4°	525.7	527.1	527.1	527.9	529.4	531.3
4.5°	524.3	525.6	525.7	526.6	528.3	530.4
5°	522.6	524.1	524.2	525.3	527.1	529.4
5.5°	521.0	522.4	522.5	523.8	525.9	528.3
6°	519.1	520.6	520.8	522.2	524.4	527.1
6.5°	517.3	518.7	519.0	520.4	522.9	525.8
7°	515.2	516.7	517.0	518.7	521.3	524.5
7.5°	513.0	514.6	515.0	516.7	519.5	522.9
8°	510.8	512.3	512.8	514.6	517.7	521.3
8.5°	508.4	510.0	510.5	512.4	515.7	519.5
9°	505.9	507.5	508.1	510.2	513.6	517.7
9.5°	503.4	505.0	505.6	507.7	511.4	515.7
10°	500.6	502.3	502.9	505.3	509.1	513.6
10.5°	497.8	499.4	500.1	502.6	506.6	511.3
11°	494.6	496.4	497.2	499.7	503.9	509.1
11.5°	491.4	493.1	493.9	496.6	501.1	506.6
12°	488.0	489.8	490.5	493.4	498.1	503.9
12.5°	484.3	486.1	486.8	489.7	494.8	501.0
13°	480.5	482.2	482.9	486.1	491.5	497.9
13.5°	476.5	478.3	479.1	482.3	487.8	494.6
14°	472.3	474.2	475.0	478.3	484.1	491.2
14.5°	468.3	470.1	470.9	474.4	480.2	487.6
15°	464.6	466.2	467.0	470.3	476.4	483.9
15.5°	461.1	462.6	463.5	466.7	472.6	480.2
16°	457.6	459.2	460.1	463.3	469.2	476.7
16.5°	454.1	455.8	456.6	460.0	466.0	473.5
17°	450.7	452.4	453.2	456.7	462.8	470.2
17.5°	447.0	448.8	449.7	453.4	459.5	467.1
18°	442.2	444.7	445.7	449.8	456.2	463.9
18.5°	436.8	439.2	440.5	445.6	452.4	460.5
19°	430.6	433.1	434.9	440.5	447.9	456.5
19.5°	423.5	425.8	428.1	434.6	442.7	451.9
20°	415.5	417.4	420.5	427.5	436.7	446.8
20.5°	406.8	408.5	412.0	419.7	429.7	440.9
21°	397.6	399.2	402.9	410.8	421.9	434.5



TEST NUMBER: P775655

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMB-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	366.4	371.5	372.7	379.8	394.0	412.4
23°	355.5	362.3	362.3	368.9	383.5	404.4
23.5°	344.5	352.3	351.7	358.1	373.5	396.2
24°	334.0	341.8	340.6	347.4	363.5	387.1
24.5°	323.1	330.7	329.5	337.4	353.9	377.6
25°	312.5	319.0	318.6	327.0	344.6	367.7
25.5°	302.2	307.6	307.6	317.0	335.3	357.2
26°	292.0	295.7	296.3	306.9	325.8	346.5
26.5°	281.4	284.3	285.2	297.0	316.1	335.4
27°	270.9	272.3	274.4	286.4	305.9	324.3
27.5°	260.2	260.6	263.6	275.7	295.3	313.3
28°	249.9	249.2	252.7	264.6	283.9	302.4
28.5°	239.3	237.5	242.5	253.5	272.5	291.4
29°	228.7	225.7	231.7	242.6	260.4	280.1
29.5°	218.1	214.7	221.2	232.2	249.4	268.9
30°	207.6	203.9	210.4	221.6	237.8	257.6
30.5°	196.9	193.2	199.7	211.3	227.0	246.4
31°	186.5	183.0	188.4	201.1	216.2	234.6
31.5°	176.0	173.4	177.6	191.5	205.7	223.0
32°	165.9	163.8	167.3	181.8	195.3	211.3
32.5°	155.8	154.5	157.4	172.1	185.4	199.6
33°	146.3	145.1	147.9	162.0	175.1	187.9
33.5°	136.8	135.6	138.8	152.1	164.6	176.3
34°	127.7	126.7	129.8	142.3	153.9	165.0
34.5°	119.0	118.1	121.2	132.4	143.6	154.2
35°	110.4	109.9	112.6	122.9	133.1	144.0
35.5°	102.0	102.1	104.7	113.7	122.9	134.2
36°	94.7	95.0	96.7	104.8	113.1	124.7
36.5°	87.5	87.9	89.0	96.2	103.8	115.4
37°	80.2	81.3	81.7	87.8	95.0	106.6
37.5°	73.0	74.8	74.8	79.6	86.6	98.3
38°	65.7	68.4	68.4	71.6	78.6	90.2
38.5°	59.8	62.5	62.2	64.0	70.9	82.4
39°	53.9	56.9	56.5	56.9	63.7	75.2
39.5°	48.4	51.6	51.1	50.2	56.9	68.3
40°	43.1	46.7	46.0	43.9	50.2	61.8
40.5°	38.5	41.9	41.1	38.5	44.3	55.7
41°	33.9	37.6	36.5	34.1	38.8	49.9
41.5°	29.9	34.0	33.0	30.7	34.0	44.7
42°	26.2	30.5	29.5	27.3	30.6	39.8
42.5°	23.0	27.0	26.1	24.0	27.2	35.3
43°	20.1	23.5	22.6	20.6	23.8	31.7
43.5°	17.5	20.0	19.1	18.2	20.4	28.2



TEST NUMBER: P775655

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMB-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	11.6	12.6	12.2	12.2	13.6	17.6
45.5°	10.2	10.6	10.3	10.6	11.9	15.1
46°	8.7	8.8	8.8	9.1	10.2	12.8
46.5°	7.3	7.3	7.4	7.8	8.7	10.7
47°	5.9	6.3	6.3	6.7	7.4	9.0
47.5°	5.4	5.7	5.7	6.0	6.5	7.5
48°	5.1	5.3	5.4	5.6	5.9	6.5
48.5°	4.9	5.1	5.1	5.3	5.5	5.9
49°	4.7	4.9	4.9	5.1	5.3	5.6
49.5°	4.4	4.6	4.7	4.8	5.1	5.3
50°	4.2	4.4	4.4	4.6	4.8	5.1
50.5°	3.9	4.1	4.2	4.3	4.6	4.8
51°	3.7	3.9	3.9	4.1	4.3	4.6
51.5°	3.5	3.7	3.7	3.8	4.1	4.3
52°	3.3	3.4	3.5	3.6	3.8	4.1
52.5°	3.1	3.2	3.3	3.4	3.6	3.8
53°	2.9	3.0	3.1	3.2	3.4	3.6
53.5°	2.8	2.9	2.9	3.0	3.2	3.4
54°	2.6	2.7	2.7	2.9	3.0	3.2
54.5°	2.5	2.5	2.6	2.7	2.8	3.0
55°	2.3	2.4	2.4	2.5	2.7	2.8
55.5°	2.2	2.3	2.3	2.4	2.5	2.6
56°	2.1	2.1	2.2	2.3	2.4	2.5
56.5°	1.9	2.0	2.0	2.1	2.2	2.3
57°	1.8	1.9	1.9	2.0	2.1	2.2
57.5°	1.7	1.8	1.8	1.9	2.0	2.0
58°	1.6	1.7	1.7	1.8	1.9	1.9
58.5°	1.6	1.6	1.6	1.7	1.8	1.8
59°	1.5	1.5	1.5	1.6	1.7	1.7
59.5°	1.4	1.4	1.5	1.5	1.6	1.6
60°	1.3	1.4	1.4	1.4	1.5	1.5
60.5°	1.2	1.3	1.3	1.3	1.4	1.4
61°	1.2	1.2	1.2	1.3	1.3	1.4
61.5°	1.1	1.1	1.2	1.2	1.2	1.3
62°	1.1	1.1	1.1	1.1	1.2	1.2
62.5°	1.0	1.0	1.0	1.1	1.1	1.1
63°	0.9	1.0	1.0	1.0	1.0	1.1
63.5°	0.9	0.9	0.9	1.0	1.0	1.0
64°	0.8	0.9	0.9	0.9	0.9	1.0
64.5°	0.8	0.8	0.8	0.8	0.9	0.9
65°	0.8	0.8	0.8	0.8	0.8	0.9
65.5°	0.7	0.7	0.7	0.8	0.8	0.8
66°	0.7	0.7	0.7	0.7	0.7	0.8



TEST NUMBER: P775655

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMB-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	0.6	0.6	0.6	0.6	0.6	0.6
68°	0.5	0.6	0.6	0.6	0.6	0.6
68.5°	0.5	0.5	0.5	0.5	0.5	0.6
69°	0.5	0.5	0.5	0.5	0.5	0.5
69.5°	0.4	0.5	0.5	0.5	0.5	0.5
70°	0.4	0.4	0.4	0.4	0.5	0.5
70.5°	0.4	0.4	0.4	0.4	0.4	0.4
71°	0.4	0.4	0.4	0.4	0.4	0.4
71.5°	0.4	0.4	0.4	0.4	0.4	0.4
72°	0.3	0.3	0.3	0.3	0.3	0.3
72.5°	0.3	0.3	0.3	0.3	0.3	0.3
73°	0.3	0.3	0.3	0.3	0.3	0.3
73.5°	0.3	0.3	0.3	0.3	0.3	0.3
74°	0.3	0.3	0.3	0.3	0.3	0.3
74.5°	0.2	0.2	0.2	0.2	0.2	0.2
75°	0.2	0.2	0.2	0.2	0.2	0.2
75.5°	0.2	0.2	0.2	0.2	0.2	0.2
76°	0.2	0.2	0.2	0.2	0.2	0.2
76.5°	0.2	0.2	0.2	0.2	0.2	0.2
77°	0.2	0.2	0.2	0.2	0.2	0.2
77.5°	0.1	0.2	0.2	0.2	0.1	0.1
78°	0.1	0.1	0.1	0.1	0.1	0.1
78.5°	0.1	0.1	0.1	0.1	0.1	0.1
79°	0.1	0.1	0.1	0.1	0.1	0.1
79.5°	0.1	0.1	0.1	0.1	0.1	0.1
80°	0.1	0.1	0.1	0.1	0.1	0.1
80.5°	0.1	0.1	0.1	0.1	0.1	0.1
81°	0.1	0.1	0.1	0.1	0.1	0.1
81.5°	0.1	0.1	0.1	0.1	0.0	0.0
82°	0.1	0.1	0.1	0.1	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0
83°	0.0	0.0	0.0	0.0	0.0	0.0
83.5°	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	0.0
84.5°	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
85.5°	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0
86.5°	0.0	0.0	0.0	0.0	0.0	0.0
87°	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
88°	0.0	0.0	0.0	0.0	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P775655

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMB-1000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.0	0.0	0.0	0.0	0.0

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Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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— 0°-180° - - 45°-225° - - - - 90°-270° - · - 135°-315°

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21.5°	427.5	442.3	456.8	460.4	458.6	457.2	453.0	444.0	430.6	417.3	394.8
22°	420.0	436.1	452.2	455.7	453.0	451.9	448.4	438.5	423.6	408.8	384.2



44°	24.7	30.4	39.7	43.1	42.9	40.1	37.1	32.7	26.9	20.1	15.1
44.5°	21.1	26.5	34.0	37.4	37.2	34.8	31.8	28.2	23.3	17.5	13.2



66.5°	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.6
67°	0.7	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.6



89°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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21.5°	387.8	389.9	393.3	401.0	413.3	427.5
22°	377.5	380.5	383.2	390.7	403.8	420.0



44°	15.2	17.3	16.5	16.0	17.9	24.7
44.5°	13.0	14.9	14.3	14.1	15.7	21.1

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66.5°	0.6	0.7	0.7	0.7	0.7	0.7
67°	0.6	0.6	0.6	0.6	0.7	0.7

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89°	0.0	0.0	0.0	0.0	0.0	0.0
89.5°	0.0	0.0	0.0	0.0	0.0	0.0

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(END OF REPORT)