

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: P775808

Luminaire Tested: HCDJBL510CSD-HCD6TSQMB-1000lm-4000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P775808
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B015-HCD6TSQMB)
Test Lab:
Issue Date: 2/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL510CSD-HCD6TSQMB-1000lm-4000K
Description: 6 INCH SQUARE MEDIUM MATTE BLACK TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT
Ballast/Driver: -

Summary

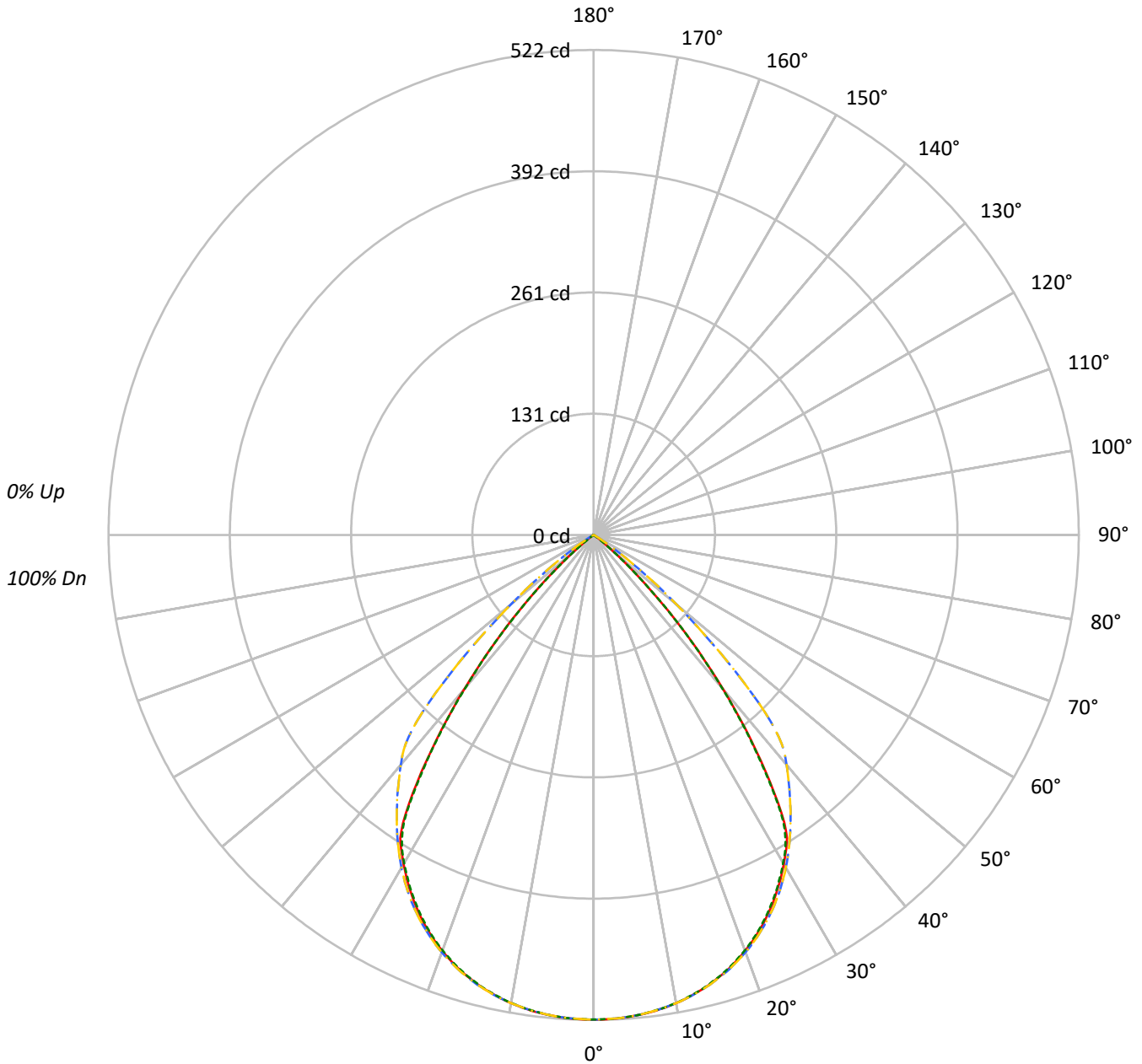
Lumens per Lamp: N/A
Luminaire Lumens: 752.7 lumens
Efficiency: N/A
Efficacy: 75.3 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.23
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 10
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: 24 FT



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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			
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92					92			
2	106	101	96	93	104	99	95	92	96	93	90	93	90	88	90	88	86	84					84			
3	100	93	87	83	98	91	86	82	89	84	81	86	83	80	84	81	78	77					77			
4	94	86	79	75	92	84	79	74	82	77	73	80	76	72	78	74	71	70					70			
5	88	79	72	67	87	78	72	67	76	71	66	74	70	66	73	69	65	64					64			
6	83	73	66	61	81	72	66	61	71	65	61	69	64	60	68	63	60	58					58			
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53					53			
8	74	63	56	51	72	62	56	51	61	55	51	60	55	51	59	54	51	49					49			
9	69	58	52	47	68	58	52	47	57	51	47	56	51	47	55	50	47	45					45			
10	65	55	48	44	64	54	48	44	53	47	43	52	47	43	52	47	43	42					42			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	22458	22458	22458	22458
5°	22449	22440	22449	22440
10°	22371	22358	22371	22358
15°	22185	22162	22185	22162
20°	21828	21801	21828	21801
25°	21231	21174	21231	21174
30°	20339	20274	20339	20274
35°	17802	17687	17802	17687
40°	12157	12078	12157	12078
45°	6326	6333	6326	6333
50°	1842	1822	1842	1822
55°	53	68	53	68
60°	17	17	17	17
65°	10	10	10	10
70°	13	13	13	13
75°	0	17	0	17
80°	0	0	0	0
85°	0	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 14632 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.3	6.6
10°-20°	140.3	18.6
20°-30°	205.9	27.4
30°-40°	218.5	29.0
40°-50°	122.0	16.2
50°-60°	16.5	2.2
60°-70°	0.2	0.0
70°-80°	0.1	0.0
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°	395.5	52.5
0°-40°	614.0	81.6
0°-60°	752.4	100.0
0°-90°	752.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	752.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	522	522	522	522	522	
5°	519	519	519	519	519	49
15°	498	497	498	497	498	140
25°	447	446	447	446	447	205
35°	339	336	339	336	339	205
45°	104	104	104	104	104	83
55°	1	1	1	1	1	5
65°	0	0	0	0	0	0
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°	521.6	521.6	521.6	521.6	521.6	521.6	521.6	521.6	521.6	521.6	521.6
0.5°	521.8	521.6	521.6	521.5	521.6	521.5	521.6	521.6	521.8	521.6	521.6
1°	521.7	521.6	521.5	521.5	521.6	521.5	521.5	521.6	521.7	521.6	521.5
1.5°	521.6	521.4	521.4	521.4	521.4	521.4	521.4	521.4	521.6	521.4	521.4
2°	521.4	521.3	521.2	521.2	521.3	521.2	521.2	521.3	521.4	521.3	521.2
2.5°	521.2	521.1	521.0	521.0	521.1	521.0	521.0	521.1	521.2	521.1	521.0
3°	521.0	520.8	520.8	520.8	520.8	520.8	520.8	520.8	521.0	520.8	520.8
3.5°	520.7	520.6	520.5	520.5	520.5	520.5	520.5	520.6	520.7	520.6	520.5
4°	520.4	520.1	520.0	520.0	520.1	520.0	520.0	520.1	520.4	520.1	520.0
4.5°	519.9	519.7	519.7	519.6	519.7	519.6	519.7	519.7	519.9	519.7	519.7
5°	519.4	519.3	519.2	519.2	519.2	519.2	519.2	519.3	519.4	519.3	519.2
5.5°	518.9	518.8	518.7	518.7	518.7	518.7	518.7	518.8	518.9	518.8	518.7
6°	518.4	518.3	518.1	518.0	518.1	518.0	518.1	518.3	518.4	518.3	518.1
6.5°	517.7	517.6	517.5	517.5	517.5	517.5	517.5	517.6	517.7	517.6	517.5
7°	517.1	517.0	516.9	516.8	516.8	516.8	516.9	517.0	517.1	517.0	516.9
7.5°	516.4	516.3	516.1	516.0	516.0	516.0	516.1	516.3	516.4	516.3	516.1
8°	515.5	515.4	515.4	515.3	515.3	515.3	515.4	515.4	515.5	515.4	515.4
8.5°	514.7	514.6	514.6	514.5	514.4	514.5	514.6	514.6	514.7	514.6	514.6
9°	513.7	513.7	513.6	513.5	513.4	513.5	513.6	513.7	513.7	513.7	513.6
9.5°	512.8	512.8	512.7	512.6	512.5	512.6	512.7	512.8	512.8	512.8	512.7
10°	511.7	511.7	511.7	511.5	511.4	511.5	511.7	511.7	511.7	511.7	511.7
10.5°	510.7	510.7	510.7	510.5	510.4	510.5	510.7	510.7	510.7	510.7	510.7
11°	509.4	509.5	509.5	509.3	509.1	509.3	509.5	509.5	509.4	509.5	509.5
11.5°	508.3	508.4	508.4	508.1	507.8	508.1	508.4	508.4	508.3	508.4	508.4
12°	507.0	507.1	507.1	506.8	506.6	506.8	507.1	507.1	507.0	507.1	507.1
12.5°	505.6	505.7	505.9	505.4	505.2	505.4	505.9	505.7	505.6	505.7	505.9
13°	504.2	504.4	504.5	504.1	503.7	504.1	504.5	504.4	504.2	504.4	504.5
13.5°	502.7	502.9	503.0	502.6	502.3	502.6	503.0	502.9	502.7	502.9	503.0
14°	501.0	501.3	501.5	501.0	500.7	501.0	501.5	501.3	501.0	501.3	501.5
14.5°	499.4	499.8	500.0	499.4	499.0	499.4	500.0	499.8	499.4	499.8	500.0
15°	497.7	498.1	498.3	497.8	497.2	497.8	498.3	498.1	497.7	498.1	498.3
15.5°	496.0	496.3	496.6	496.0	495.4	496.0	496.6	496.3	496.0	496.3	496.6
16°	494.1	494.5	494.8	494.2	493.6	494.2	494.8	494.5	494.1	494.5	494.8
16.5°	492.2	492.6	492.9	492.3	491.7	492.3	492.9	492.6	492.2	492.6	492.9
17°	490.1	490.7	491.0	490.3	489.6	490.3	491.0	490.7	490.1	490.7	491.0
17.5°	488.1	488.6	489.0	488.3	487.5	488.3	489.0	488.6	488.1	488.6	489.0
18°	485.9	486.5	486.9	486.1	485.3	486.1	486.9	486.5	485.9	486.5	486.9
18.5°	483.7	484.4	484.8	484.0	483.0	484.0	484.8	484.4	483.7	484.4	484.8
19°	481.4	482.1	482.6	481.6	480.6	481.6	482.6	482.1	481.4	482.1	482.6
19.5°	479.0	479.8	480.3	479.3	478.3	479.3	480.3	479.8	479.0	479.8	480.3
20°	476.4	477.4	478.0	476.8	475.8	476.8	478.0	477.4	476.4	477.4	478.0
20.5°	473.9	475.0	475.6	474.3	473.2	474.3	475.6	475.0	473.9	475.0	475.6
21°	471.3	472.3	473.1	471.8	470.4	471.8	473.1	472.3	471.3	472.3	473.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	462.8	464.1	465.0	463.5	461.8	463.5	465.0	464.1	462.8	464.1	465.0
23°	459.8	461.2	462.1	460.6	458.8	460.6	462.1	461.2	459.8	461.2	462.1
23.5°	456.8	458.3	459.3	457.5	455.6	457.5	459.3	458.3	456.8	458.3	459.3
24°	453.5	455.2	456.3	454.4	452.5	454.4	456.3	455.2	453.5	455.2	456.3
24.5°	450.3	451.9	453.2	451.2	449.2	451.2	453.2	451.9	450.3	451.9	453.2
25°	446.9	448.7	449.9	447.8	445.7	447.8	449.9	448.7	446.9	448.7	449.9
25.5°	443.5	445.3	446.8	444.5	442.3	444.5	446.8	445.3	443.5	445.3	446.8
26°	440.1	442.0	443.4	441.1	438.7	441.1	443.4	442.0	440.1	442.0	443.4
26.5°	436.5	438.4	440.0	437.5	435.1	437.5	440.0	438.4	436.5	438.4	440.0
27°	432.7	434.9	436.5	434.0	431.5	434.0	436.5	434.9	432.7	434.9	436.5
27.5°	428.9	431.2	432.9	430.2	427.8	430.2	432.9	431.2	428.9	431.2	432.9
28°	425.2	427.5	429.2	426.5	423.8	426.5	429.2	427.5	425.2	427.5	429.2
28.5°	421.3	423.7	425.5	422.7	419.9	422.7	425.5	423.7	421.3	423.7	425.5
29°	417.3	419.9	421.6	418.8	415.9	418.8	421.6	419.9	417.3	419.9	421.6
29.5°	413.3	415.9	417.7	415.0	411.9	415.0	417.7	415.9	413.3	415.9	417.7
30°	409.1	411.9	413.6	411.0	407.8	411.0	413.6	411.9	409.1	411.9	413.6
30.5°	405.0	407.9	409.5	407.0	403.6	407.0	409.5	407.9	405.0	407.9	409.5
31°	400.7	403.8	405.3	402.9	399.3	402.9	405.3	403.8	400.7	403.8	405.3
31.5°	396.4	399.7	401.0	398.7	394.9	398.7	401.0	399.7	396.4	399.7	401.0
32°	391.9	395.4	396.7	394.5	389.3	394.5	396.7	395.4	391.9	395.4	396.7
32.5°	387.3	391.1	392.3	390.2	383.6	390.2	392.3	391.1	387.3	391.1	392.3
33°	379.9	386.8	387.7	385.9	377.4	385.9	387.7	386.8	379.9	386.8	387.7
33.5°	371.8	382.5	383.2	381.4	369.0	381.4	383.2	382.5	371.8	382.5	383.2
34°	361.9	378.1	378.6	376.1	359.7	376.1	378.6	378.1	361.9	378.1	378.6
34.5°	350.4	373.3	374.0	370.2	348.5	370.2	374.0	373.3	350.4	373.3	374.0
35°	338.7	366.3	369.4	364.2	336.5	364.2	369.4	366.3	338.7	366.3	369.4
35.5°	326.9	359.4	364.7	356.6	324.3	356.6	364.7	359.4	326.9	359.4	364.7
36°	314.7	350.0	360.0	348.2	312.2	348.2	360.0	350.0	314.7	350.0	360.0
36.5°	302.4	340.1	355.4	338.0	300.3	338.0	355.4	340.1	302.4	340.1	355.4
37°	289.9	328.9	350.8	327.2	288.1	327.2	350.8	328.9	289.9	328.9	350.8
37.5°	277.8	317.7	346.0	315.8	276.1	315.8	346.0	317.7	277.8	317.7	346.0
38°	265.2	306.1	341.4	304.1	264.1	304.1	341.4	306.1	265.2	306.1	341.4
38.5°	253.0	294.5	336.7	292.6	251.9	292.6	336.7	294.5	253.0	294.5	336.7
39°	240.8	282.8	332.2	281.3	239.5	281.3	332.2	282.8	240.8	282.8	332.2
39.5°	228.7	271.2	327.5	269.9	227.2	269.9	327.5	271.2	228.7	271.2	327.5
40°	216.3	259.4	322.9	258.5	214.9	258.5	322.9	259.4	216.3	259.4	322.9
40.5°	204.2	247.9	318.3	246.9	202.9	246.9	318.3	247.9	204.2	247.9	318.3
41°	192.4	236.3	313.6	235.5	191.0	235.5	313.6	236.3	192.4	236.3	313.6
41.5°	180.6	224.8	308.3	223.8	179.7	223.8	308.3	224.8	180.6	224.8	308.3
42°	168.9	213.2	302.4	212.3	168.2	212.3	302.4	213.2	168.9	213.2	302.4
42.5°	157.6	201.9	294.7	200.8	156.9	200.8	294.7	201.9	157.6	201.9	294.7
43°	146.4	190.4	286.0	189.6	145.8	189.6	286.0	190.4	146.4	190.4	286.0
43.5°	135.4	179.3	276.7	178.5	134.8	178.5	276.7	179.3	135.4	179.3	276.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	103.9	146.8	240.3	146.4	104.0	146.4	240.3	146.8	103.9	146.8	240.3
45.5°	94.5	136.3	226.7	136.0	94.5	136.0	226.7	136.3	94.5	136.3	226.7
46°	85.2	126.0	213.1	125.7	85.2	125.7	213.1	126.0	85.2	126.0	213.1
46.5°	76.1	115.9	199.8	115.6	75.9	115.6	199.8	115.9	76.1	115.9	199.8
47°	67.1	106.0	186.4	106.0	66.8	106.0	186.4	106.0	67.1	106.0	186.4
47.5°	58.5	96.7	173.7	96.8	58.6	96.8	173.7	96.7	58.5	96.7	173.7
48°	51.0	87.6	161.4	87.6	51.0	87.6	161.4	87.6	51.0	87.6	161.4
48.5°	44.0	78.8	149.5	78.7	43.9	78.7	149.5	78.8	44.0	78.8	149.5
49°	38.2	70.1	138.0	70.0	37.3	70.0	138.0	70.1	38.2	70.1	138.0
49.5°	32.8	61.7	126.7	61.7	32.2	61.7	126.7	61.7	32.8	61.7	126.7
50°	27.5	54.0	115.8	54.0	27.2	54.0	115.8	54.0	27.5	54.0	115.8
50.5°	22.7	47.3	105.3	46.7	22.5	46.7	105.3	47.3	22.7	47.3	105.3
51°	18.6	40.9	95.8	39.9	18.6	39.9	95.8	40.9	18.6	40.9	95.8
51.5°	14.9	35.3	86.6	34.5	14.6	34.5	86.6	35.3	14.9	35.3	86.6
52°	11.9	29.8	77.5	29.2	11.2	29.2	77.5	29.8	11.9	29.8	77.5
52.5°	8.9	24.8	68.7	24.2	8.0	24.2	68.7	24.8	8.9	24.8	68.7
53°	6.0	20.3	60.5	19.9	4.9	19.9	60.5	20.3	6.0	20.3	60.5
53.5°	4.0	16.2	53.1	15.6	2.9	15.6	53.1	16.2	4.0	16.2	53.1
54°	1.9	13.0	46.1	12.1	1.7	12.1	46.1	13.0	1.9	13.0	46.1
54.5°	1.2	10.0	40.1	8.9	1.3	8.9	40.1	10.0	1.2	10.0	40.1
55°	0.7	6.9	34.5	5.9	0.9	5.9	34.5	6.9	0.7	6.9	34.5
55.5°	0.3	4.4	29.2	4.0	0.6	4.0	29.2	4.4	0.3	4.4	29.2
56°	0.2	1.9	24.4	2.9	0.3	2.9	24.4	1.9	0.2	1.9	24.4
56.5°	0.2	0.9	19.8	1.8	0.2	1.8	19.8	0.9	0.2	0.9	19.8
57°	0.2	0.5	16.1	0.9	0.2	0.9	16.1	0.5	0.2	0.5	16.1
57.5°	0.2	0.4	12.9	0.4	0.2	0.4	12.9	0.4	0.2	0.4	12.9
58°	0.2	0.2	10.4	0.2	0.2	0.2	10.4	0.2	0.2	0.2	10.4
58.5°	0.2	0.2	8.1	0.2	0.2	0.2	8.1	0.2	0.2	0.2	8.1
59°	0.2	0.2	6.0	0.2	0.2	0.2	6.0	0.2	0.2	0.2	6.0
59.5°	0.2	0.2	4.4	0.2	0.2	0.2	4.4	0.2	0.2	0.2	4.4
60°	0.2	0.2	3.0	0.2	0.2	0.2	3.0	0.2	0.2	0.2	3.0
60.5°	0.2	0.2	2.1	0.2	0.2	0.2	2.1	0.2	0.2	0.2	2.1
61°	0.2	0.2	1.4	0.2	0.2	0.2	1.4	0.2	0.2	0.2	1.4
61.5°	0.2	0.2	0.8	0.2	0.2	0.2	0.8	0.2	0.2	0.2	0.8
62°	0.1	0.1	0.4	0.2	0.2	0.2	0.4	0.1	0.1	0.1	0.4
62.5°	0.1	0.1	0.3	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.3
63°	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2
63.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
64°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
64.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
66°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1



TEST NUMBER: P775808

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMB-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
68°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
68.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
69°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
69.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
70°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
70.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
71°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
71.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
72°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
72.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
73°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
73.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
74°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
74.5°	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0
75°	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
75.5°	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
76°	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
76.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0
83.5°	0.0	0.0	0.0	0.0	0.0	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	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: P775808

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMB-1000lm-4000K

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: P775808

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMB-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	521.6	521.6	521.6	521.6	521.6	521.6
0.5°	521.5	521.6	521.5	521.6	521.6	521.8
1°	521.5	521.6	521.5	521.5	521.6	521.7
1.5°	521.4	521.4	521.4	521.4	521.4	521.6
2°	521.2	521.3	521.2	521.2	521.3	521.4
2.5°	521.0	521.1	521.0	521.0	521.1	521.2
3°	520.8	520.8	520.8	520.8	520.8	521.0
3.5°	520.5	520.5	520.5	520.5	520.6	520.7
4°	520.0	520.1	520.0	520.0	520.1	520.4
4.5°	519.6	519.7	519.6	519.7	519.7	519.9
5°	519.2	519.2	519.2	519.2	519.3	519.4
5.5°	518.7	518.7	518.7	518.7	518.8	518.9
6°	518.0	518.1	518.0	518.1	518.3	518.4
6.5°	517.5	517.5	517.5	517.5	517.6	517.7
7°	516.8	516.8	516.8	516.9	517.0	517.1
7.5°	516.0	516.0	516.0	516.1	516.3	516.4
8°	515.3	515.3	515.3	515.4	515.4	515.5
8.5°	514.5	514.4	514.5	514.6	514.6	514.7
9°	513.5	513.4	513.5	513.6	513.7	513.7
9.5°	512.6	512.5	512.6	512.7	512.8	512.8
10°	511.5	511.4	511.5	511.7	511.7	511.7
10.5°	510.5	510.4	510.5	510.7	510.7	510.7
11°	509.3	509.1	509.3	509.5	509.5	509.4
11.5°	508.1	507.8	508.1	508.4	508.4	508.3
12°	506.8	506.6	506.8	507.1	507.1	507.0
12.5°	505.4	505.2	505.4	505.9	505.7	505.6
13°	504.1	503.7	504.1	504.5	504.4	504.2
13.5°	502.6	502.3	502.6	503.0	502.9	502.7
14°	501.0	500.7	501.0	501.5	501.3	501.0
14.5°	499.4	499.0	499.4	500.0	499.8	499.4
15°	497.8	497.2	497.8	498.3	498.1	497.7
15.5°	496.0	495.4	496.0	496.6	496.3	496.0
16°	494.2	493.6	494.2	494.8	494.5	494.1
16.5°	492.3	491.7	492.3	492.9	492.6	492.2
17°	490.3	489.6	490.3	491.0	490.7	490.1
17.5°	488.3	487.5	488.3	489.0	488.6	488.1
18°	486.1	485.3	486.1	486.9	486.5	485.9
18.5°	484.0	483.0	484.0	484.8	484.4	483.7
19°	481.6	480.6	481.6	482.6	482.1	481.4
19.5°	479.3	478.3	479.3	480.3	479.8	479.0
20°	476.8	475.8	476.8	478.0	477.4	476.4
20.5°	474.3	473.2	474.3	475.6	475.0	473.9
21°	471.8	470.4	471.8	473.1	472.3	471.3

TEST NUMBER: P775808

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMB-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	463.5	461.8	463.5	465.0	464.1	462.8
23°	460.6	458.8	460.6	462.1	461.2	459.8
23.5°	457.5	455.6	457.5	459.3	458.3	456.8
24°	454.4	452.5	454.4	456.3	455.2	453.5
24.5°	451.2	449.2	451.2	453.2	451.9	450.3
25°	447.8	445.7	447.8	449.9	448.7	446.9
25.5°	444.5	442.3	444.5	446.8	445.3	443.5
26°	441.1	438.7	441.1	443.4	442.0	440.1
26.5°	437.5	435.1	437.5	440.0	438.4	436.5
27°	434.0	431.5	434.0	436.5	434.9	432.7
27.5°	430.2	427.8	430.2	432.9	431.2	428.9
28°	426.5	423.8	426.5	429.2	427.5	425.2
28.5°	422.7	419.9	422.7	425.5	423.7	421.3
29°	418.8	415.9	418.8	421.6	419.9	417.3
29.5°	415.0	411.9	415.0	417.7	415.9	413.3
30°	411.0	407.8	411.0	413.6	411.9	409.1
30.5°	407.0	403.6	407.0	409.5	407.9	405.0
31°	402.9	399.3	402.9	405.3	403.8	400.7
31.5°	398.7	394.9	398.7	401.0	399.7	396.4
32°	394.5	389.3	394.5	396.7	395.4	391.9
32.5°	390.2	383.6	390.2	392.3	391.1	387.3
33°	385.9	377.4	385.9	387.7	386.8	379.9
33.5°	381.4	369.0	381.4	383.2	382.5	371.8
34°	376.1	359.7	376.1	378.6	378.1	361.9
34.5°	370.2	348.5	370.2	374.0	373.3	350.4
35°	364.2	336.5	364.2	369.4	366.3	338.7
35.5°	356.6	324.3	356.6	364.7	359.4	326.9
36°	348.2	312.2	348.2	360.0	350.0	314.7
36.5°	338.0	300.3	338.0	355.4	340.1	302.4
37°	327.2	288.1	327.2	350.8	328.9	289.9
37.5°	315.8	276.1	315.8	346.0	317.7	277.8
38°	304.1	264.1	304.1	341.4	306.1	265.2
38.5°	292.6	251.9	292.6	336.7	294.5	253.0
39°	281.3	239.5	281.3	332.2	282.8	240.8
39.5°	269.9	227.2	269.9	327.5	271.2	228.7
40°	258.5	214.9	258.5	322.9	259.4	216.3
40.5°	246.9	202.9	246.9	318.3	247.9	204.2
41°	235.5	191.0	235.5	313.6	236.3	192.4
41.5°	223.8	179.7	223.8	308.3	224.8	180.6
42°	212.3	168.2	212.3	302.4	213.2	168.9
42.5°	200.8	156.9	200.8	294.7	201.9	157.6
43°	189.6	145.8	189.6	286.0	190.4	146.4
43.5°	178.5	134.8	178.5	276.7	179.3	135.4



TEST NUMBER: P775808

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMB-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	146.4	104.0	146.4	240.3	146.8	103.9
45.5°	136.0	94.5	136.0	226.7	136.3	94.5
46°	125.7	85.2	125.7	213.1	126.0	85.2
46.5°	115.6	75.9	115.6	199.8	115.9	76.1
47°	106.0	66.8	106.0	186.4	106.0	67.1
47.5°	96.8	58.6	96.8	173.7	96.7	58.5
48°	87.6	51.0	87.6	161.4	87.6	51.0
48.5°	78.7	43.9	78.7	149.5	78.8	44.0
49°	70.0	37.3	70.0	138.0	70.1	38.2
49.5°	61.7	32.2	61.7	126.7	61.7	32.8
50°	54.0	27.2	54.0	115.8	54.0	27.5
50.5°	46.7	22.5	46.7	105.3	47.3	22.7
51°	39.9	18.6	39.9	95.8	40.9	18.6
51.5°	34.5	14.6	34.5	86.6	35.3	14.9
52°	29.2	11.2	29.2	77.5	29.8	11.9
52.5°	24.2	8.0	24.2	68.7	24.8	8.9
53°	19.9	4.9	19.9	60.5	20.3	6.0
53.5°	15.6	2.9	15.6	53.1	16.2	4.0
54°	12.1	1.7	12.1	46.1	13.0	1.9
54.5°	8.9	1.3	8.9	40.1	10.0	1.2
55°	5.9	0.9	5.9	34.5	6.9	0.7
55.5°	4.0	0.6	4.0	29.2	4.4	0.3
56°	2.9	0.3	2.9	24.4	1.9	0.2
56.5°	1.8	0.2	1.8	19.8	0.9	0.2
57°	0.9	0.2	0.9	16.1	0.5	0.2
57.5°	0.4	0.2	0.4	12.9	0.4	0.2
58°	0.2	0.2	0.2	10.4	0.2	0.2
58.5°	0.2	0.2	0.2	8.1	0.2	0.2
59°	0.2	0.2	0.2	6.0	0.2	0.2
59.5°	0.2	0.2	0.2	4.4	0.2	0.2
60°	0.2	0.2	0.2	3.0	0.2	0.2
60.5°	0.2	0.2	0.2	2.1	0.2	0.2
61°	0.2	0.2	0.2	1.4	0.2	0.2
61.5°	0.2	0.2	0.2	0.8	0.2	0.2
62°	0.2	0.2	0.2	0.4	0.1	0.1
62.5°	0.1	0.1	0.1	0.3	0.1	0.1
63°	0.1	0.1	0.1	0.2	0.1	0.1
63.5°	0.1	0.1	0.1	0.1	0.1	0.1
64°	0.1	0.1	0.1	0.1	0.1	0.1
64.5°	0.1	0.1	0.1	0.1	0.1	0.1
65°	0.1	0.1	0.1	0.1	0.1	0.1
65.5°	0.1	0.1	0.1	0.1	0.1	0.1
66°	0.1	0.1	0.1	0.1	0.1	0.1



TEST NUMBER: P775808

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMB-1000lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	0.1	0.1	0.1	0.1	0.1	0.1
68°	0.1	0.1	0.1	0.1	0.1	0.1
68.5°	0.1	0.1	0.1	0.1	0.1	0.1
69°	0.1	0.1	0.1	0.1	0.1	0.1
69.5°	0.1	0.1	0.1	0.1	0.1	0.1
70°	0.1	0.1	0.1	0.1	0.1	0.1
70.5°	0.1	0.1	0.1	0.1	0.1	0.1
71°	0.1	0.1	0.1	0.1	0.1	0.1
71.5°	0.1	0.1	0.1	0.1	0.1	0.1
72°	0.1	0.1	0.1	0.1	0.1	0.1
72.5°	0.1	0.1	0.1	0.1	0.1	0.1
73°	0.1	0.1	0.1	0.1	0.1	0.1
73.5°	0.1	0.1	0.1	0.1	0.1	0.1
74°	0.1	0.1	0.1	0.1	0.1	0.1
74.5°	0.1	0.1	0.1	0.0	0.1	0.1
75°	0.1	0.1	0.1	0.0	0.0	0.0
75.5°	0.1	0.1	0.1	0.0	0.0	0.0
76°	0.0	0.1	0.0	0.0	0.0	0.0
76.5°	0.0	0.0	0.0	0.0	0.0	0.0
77°	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0
78°	0.0	0.0	0.0	0.0	0.0	0.0
78.5°	0.0	0.0	0.0	0.0	0.0	0.0
79°	0.0	0.0	0.0	0.0	0.0	0.0
79.5°	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0
80.5°	0.0	0.0	0.0	0.0	0.0	0.0
81°	0.0	0.0	0.0	0.0	0.0	0.0
81.5°	0.0	0.0	0.0	0.0	0.0	0.0
82°	0.0	0.0	0.0	0.0	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: P775808

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMB-1000lm-4000K

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°	468.5	469.7	470.4	469.1	467.6	469.1	470.4	469.7	468.5	469.7	470.4
22°	465.7	467.0	467.7	466.3	464.8	466.3	467.7	467.0	465.7	467.0	467.7



44°	124.6	168.1	265.3	167.6	124.1	167.6	265.3	168.1	124.6	168.1	265.3
44.5°	114.2	157.4	253.0	157.0	113.8	157.0	253.0	157.4	114.2	157.4	253.0



66.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
67°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1



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°	469.1	467.6	469.1	470.4	469.7	468.5
22°	466.3	464.8	466.3	467.7	467.0	465.7



44°	167.6	124.1	167.6	265.3	168.1	124.6
44.5°	157.0	113.8	157.0	253.0	157.4	114.2

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66.5°	0.1	0.1	0.1	0.1	0.1	0.1
67°	0.1	0.1	0.1	0.1	0.1	0.1

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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)