

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: P775807

Luminaire Tested: HCDJBL510CSD-HCD6TSQMB-1000lm-3500K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P775807
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-3500K
Description: 6 INCH SQUARE MEDIUM MATTE BLACK TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3500K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 742.2 lumens
Efficiency: N/A
Efficacy: 74.2 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

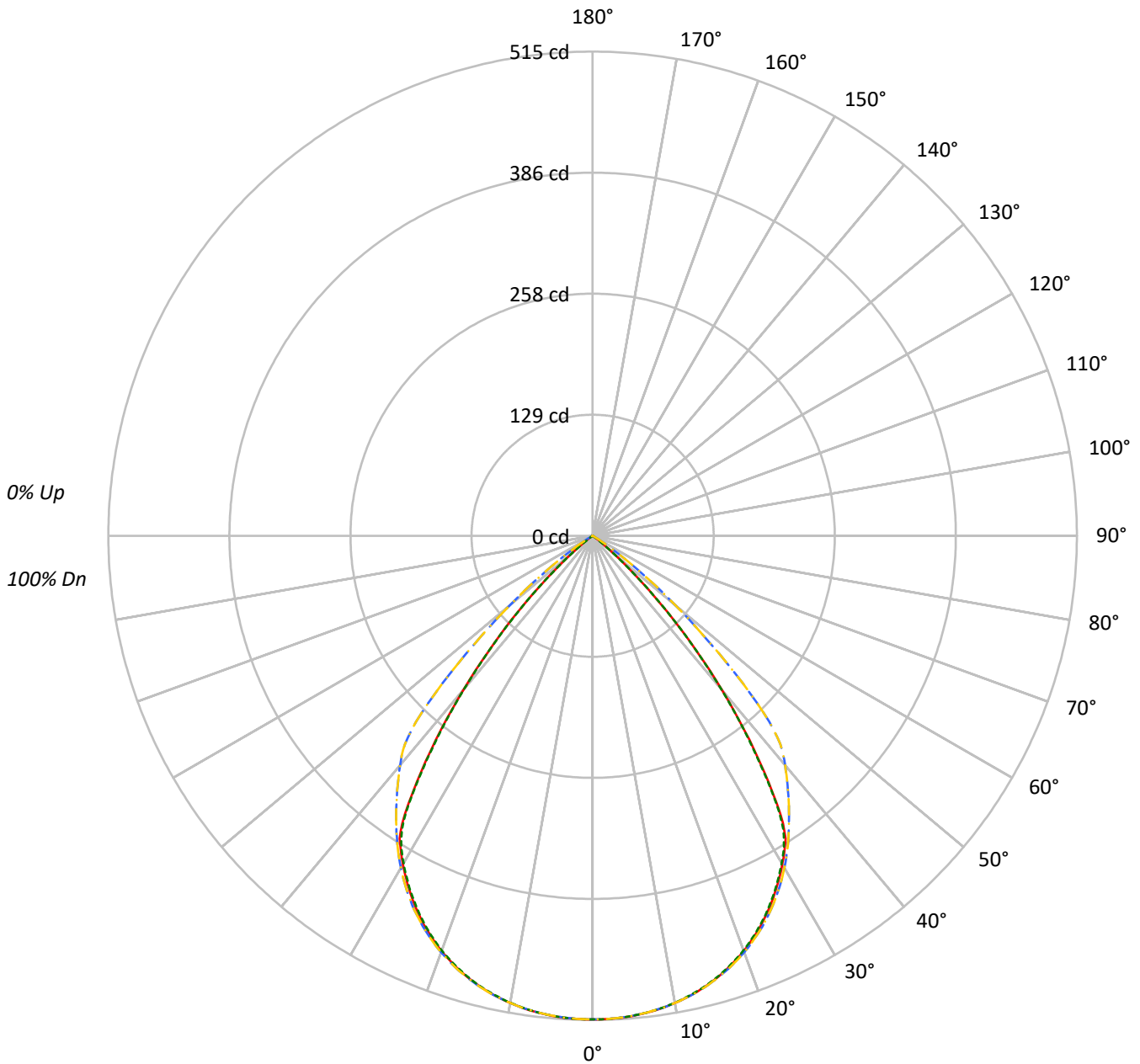
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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									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°	22148	22148	22148	22148
5°	22137	22129	22137	22129
10°	22065	22052	22065	22052
15°	21877	21859	21877	21859
20°	21526	21498	21526	21498
25°	20936	20884	20936	20884
30°	20056	19996	20056	19996
35°	17555	17440	17555	17440
40°	11989	11910	11989	11910
45°	6241	6247	6241	6247
50°	1822	1795	1822	1795
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: 14431 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.6	6.6
10°-20°	138.3	18.6
20°-30°	203.0	27.4
30°-40°	215.4	29.0
40°-50°	120.3	16.2
50°-60°	16.3	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°	390.0	52.5
0°-40°	605.5	81.6
0°-60°	742.0	100.0
0°-90°	742.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	742.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	514	514	514	514	514	
5°	512	512	512	512	512	49
15°	491	490	491	490	491	138
25°	441	440	441	440	441	202
35°	334	332	334	332	334	202
45°	102	103	102	103	102	82
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°	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4	514.4
0.5°	514.6	514.4	514.4	514.3	514.4	514.3	514.4	514.4	514.6	514.4	514.4
1°	514.5	514.4	514.3	514.3	514.4	514.3	514.3	514.4	514.5	514.4	514.3
1.5°	514.4	514.2	514.2	514.2	514.2	514.2	514.2	514.2	514.4	514.2	514.2
2°	514.2	514.1	514.0	514.0	514.1	514.0	514.0	514.1	514.2	514.1	514.0
2.5°	514.0	513.9	513.8	513.8	513.9	513.8	513.8	513.9	514.0	513.9	513.8
3°	513.8	513.6	513.6	513.6	513.6	513.6	513.6	513.6	513.8	513.6	513.6
3.5°	513.5	513.4	513.3	513.3	513.3	513.3	513.3	513.4	513.5	513.4	513.3
4°	513.2	513.0	512.8	512.8	513.0	512.8	512.8	513.0	513.2	513.0	512.8
4.5°	512.7	512.5	512.5	512.4	512.5	512.4	512.5	512.5	512.7	512.5	512.5
5°	512.2	512.1	512.0	512.0	512.0	512.0	512.0	512.1	512.2	512.1	512.0
5.5°	511.7	511.6	511.5	511.5	511.5	511.5	511.5	511.6	511.7	511.6	511.5
6°	511.2	511.1	511.0	510.9	511.0	510.9	511.0	511.1	511.2	511.1	511.0
6.5°	510.6	510.5	510.4	510.4	510.4	510.4	510.4	510.5	510.6	510.5	510.4
7°	509.9	509.8	509.7	509.6	509.6	509.6	509.7	509.8	509.9	509.8	509.7
7.5°	509.2	509.1	509.0	508.9	508.9	508.9	509.0	509.1	509.2	509.1	509.0
8°	508.4	508.3	508.3	508.2	508.2	508.2	508.3	508.3	508.4	508.3	508.3
8.5°	507.6	507.5	507.5	507.4	507.3	507.4	507.5	507.5	507.6	507.5	507.5
9°	506.6	506.6	506.5	506.4	506.3	506.4	506.5	506.6	506.6	506.6	506.5
9.5°	505.7	505.7	505.6	505.5	505.4	505.5	505.6	505.7	505.7	505.7	505.6
10°	504.7	504.7	504.7	504.5	504.4	504.5	504.7	504.7	504.7	504.7	504.7
10.5°	503.6	503.6	503.6	503.4	503.3	503.4	503.6	503.6	503.6	503.6	503.6
11°	502.4	502.5	502.5	502.3	502.1	502.3	502.5	502.5	502.4	502.5	502.5
11.5°	501.2	501.3	501.3	501.0	500.8	501.0	501.3	501.3	501.2	501.3	501.3
12°	500.0	500.1	500.1	499.8	499.6	499.8	500.1	500.1	500.0	500.1	500.1
12.5°	498.7	498.8	498.9	498.4	498.2	498.4	498.9	498.8	498.7	498.8	498.9
13°	497.2	497.4	497.5	497.1	496.8	497.1	497.5	497.4	497.2	497.4	497.5
13.5°	495.8	496.0	496.1	495.6	495.3	495.6	496.1	496.0	495.8	496.0	496.1
14°	494.1	494.4	494.6	494.1	493.8	494.1	494.6	494.4	494.1	494.4	494.6
14.5°	492.5	492.8	493.1	492.5	492.1	492.5	493.1	492.8	492.5	492.8	493.1
15°	490.8	491.2	491.4	490.9	490.4	490.9	491.4	491.2	490.8	491.2	491.4
15.5°	489.1	489.4	489.7	489.1	488.6	489.1	489.7	489.4	489.1	489.4	489.7
16°	487.3	487.7	488.0	487.4	486.7	487.4	488.0	487.7	487.3	487.7	488.0
16.5°	485.4	485.8	486.1	485.5	484.9	485.5	486.1	485.8	485.4	485.8	486.1
17°	483.3	483.9	484.2	483.5	482.8	483.5	484.2	483.9	483.3	483.9	484.2
17.5°	481.3	481.9	482.3	481.6	480.7	481.6	482.3	481.9	481.3	481.9	482.3
18°	479.2	479.8	480.2	479.4	478.5	479.4	480.2	479.8	479.2	479.8	480.2
18.5°	477.0	477.7	478.1	477.3	476.4	477.3	478.1	477.7	477.0	477.7	478.1
19°	474.7	475.4	476.0	474.9	474.0	474.9	476.0	475.4	474.7	475.4	476.0
19.5°	472.3	473.2	473.7	472.6	471.7	472.6	473.7	473.2	472.3	473.2	473.7
20°	469.8	470.8	471.4	470.3	469.2	470.3	471.4	470.8	469.8	470.8	471.4
20.5°	467.4	468.4	469.0	467.8	466.6	467.8	469.0	468.4	467.4	468.4	469.0
21°	464.8	465.8	466.5	465.3	463.9	465.3	466.5	465.8	464.8	465.8	466.5



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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°	456.4	457.7	458.5	457.1	455.4	457.1	458.5	457.7	456.4	457.7	458.5
23°	453.5	454.8	455.8	454.2	452.4	454.2	455.8	454.8	453.5	454.8	455.8
23.5°	450.5	451.9	453.0	451.2	449.3	451.2	453.0	451.9	450.5	451.9	453.0
24°	447.3	448.9	449.9	448.1	446.2	448.1	449.9	448.9	447.3	448.9	449.9
24.5°	444.0	445.7	446.9	445.0	443.0	445.0	446.9	445.7	444.0	445.7	446.9
25°	440.7	442.5	443.7	441.7	439.6	441.7	443.7	442.5	440.7	442.5	443.7
25.5°	437.4	439.2	440.6	438.3	436.2	438.3	440.6	439.2	437.4	439.2	440.6
26°	434.0	435.9	437.3	435.0	432.6	435.0	437.3	435.9	434.0	435.9	437.3
26.5°	430.5	432.3	433.9	431.5	429.1	431.5	433.9	432.3	430.5	432.3	433.9
27°	426.7	428.9	430.5	428.0	425.5	428.0	430.5	428.9	426.7	428.9	430.5
27.5°	423.0	425.3	426.9	424.2	421.9	424.2	426.9	425.3	423.0	425.3	426.9
28°	419.3	421.6	423.3	420.6	417.9	420.6	423.3	421.6	419.3	421.6	423.3
28.5°	415.4	417.8	419.6	416.9	414.1	416.9	419.6	417.8	415.4	417.8	419.6
29°	411.5	414.1	415.8	413.1	410.2	413.1	415.8	414.1	411.5	414.1	415.8
29.5°	407.6	410.2	411.9	409.2	406.2	409.2	411.9	410.2	407.6	410.2	411.9
30°	403.4	406.2	407.9	405.3	402.2	405.3	407.9	406.2	403.4	406.2	407.9
30.5°	399.4	402.3	403.8	401.3	398.0	401.3	403.8	402.3	399.4	402.3	403.8
31°	395.1	398.2	399.7	397.3	393.8	397.3	399.7	398.2	395.1	398.2	399.7
31.5°	390.9	394.2	395.4	393.2	389.4	393.2	395.4	394.2	390.9	394.2	395.4
32°	386.5	389.9	391.2	389.0	383.9	389.0	391.2	389.9	386.5	389.9	391.2
32.5°	382.0	385.7	386.8	384.8	378.3	384.8	386.8	385.7	382.0	385.7	386.8
33°	374.6	381.5	382.4	380.5	372.2	380.5	382.4	381.5	374.6	381.5	382.4
33.5°	366.6	377.2	377.9	376.2	363.9	376.2	377.9	377.2	366.6	377.2	377.9
34°	356.9	372.8	373.4	370.9	354.7	370.9	373.4	372.8	356.9	372.8	373.4
34.5°	345.6	368.2	368.8	365.1	343.7	365.1	368.8	368.2	345.6	368.2	368.8
35°	334.0	361.2	364.2	359.2	331.8	359.2	364.2	361.2	334.0	361.2	364.2
35.5°	322.4	354.4	359.7	351.7	319.8	351.7	359.7	354.4	322.4	354.4	359.7
36°	310.4	345.2	355.0	343.4	307.9	343.4	355.0	345.2	310.4	345.2	355.0
36.5°	298.2	335.4	350.5	333.4	296.2	333.4	350.5	335.4	298.2	335.4	350.5
37°	285.9	324.4	345.9	322.7	284.1	322.7	345.9	324.4	285.9	324.4	345.9
37.5°	274.0	313.3	341.2	311.4	272.3	311.4	341.2	313.3	274.0	313.3	341.2
38°	261.6	301.9	336.7	299.9	260.4	299.9	336.7	301.9	261.6	301.9	336.7
38.5°	249.5	290.5	332.0	288.6	248.4	288.6	332.0	290.5	249.5	290.5	332.0
39°	237.5	278.9	327.6	277.4	236.2	277.4	327.6	278.9	237.5	278.9	327.6
39.5°	225.5	267.5	323.0	266.2	224.0	266.2	323.0	267.5	225.5	267.5	323.0
40°	213.3	255.9	318.4	254.9	211.9	254.9	318.4	255.9	213.3	255.9	318.4
40.5°	201.3	244.5	313.9	243.5	200.1	243.5	313.9	244.5	201.3	244.5	313.9
41°	189.7	233.1	309.2	232.2	188.4	232.2	309.2	233.1	189.7	233.1	309.2
41.5°	178.1	221.7	304.0	220.7	177.2	220.7	304.0	221.7	178.1	221.7	304.0
42°	166.5	210.3	298.2	209.3	165.9	209.3	298.2	210.3	166.5	210.3	298.2
42.5°	155.4	199.1	290.7	198.0	154.7	198.0	290.7	199.1	155.4	199.1	290.7
43°	144.4	187.8	282.1	186.9	143.8	186.9	282.1	187.8	144.4	187.8	282.1
43.5°	133.6	176.8	272.8	176.1	133.0	176.1	272.8	176.8	133.6	176.8	272.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	102.5	144.8	237.0	144.4	102.6	144.4	237.0	144.8	102.5	144.8	237.0
45.5°	93.2	134.4	223.5	134.1	93.2	134.1	223.5	134.4	93.2	134.4	223.5
46°	84.0	124.2	210.2	123.9	84.0	123.9	210.2	124.2	84.0	124.2	210.2
46.5°	75.0	114.3	197.0	114.0	74.8	114.0	197.0	114.3	75.0	114.3	197.0
47°	66.2	104.6	183.8	104.6	65.9	104.6	183.8	104.6	66.2	104.6	183.8
47.5°	57.7	95.3	171.3	95.4	57.8	95.4	171.3	95.3	57.7	95.3	171.3
48°	50.3	86.4	159.2	86.4	50.3	86.4	159.2	86.4	50.3	86.4	159.2
48.5°	43.4	77.7	147.5	77.6	43.3	77.6	147.5	77.7	43.4	77.7	147.5
49°	37.7	69.1	136.1	69.0	36.8	69.0	136.1	69.1	37.7	69.1	136.1
49.5°	32.3	60.8	125.0	60.8	31.7	60.8	125.0	60.8	32.3	60.8	125.0
50°	27.2	53.3	114.2	53.3	26.8	53.3	114.2	53.3	27.2	53.3	114.2
50.5°	22.4	46.6	103.8	46.0	22.2	46.0	103.8	46.6	22.4	46.6	103.8
51°	18.3	40.3	94.5	39.4	18.3	39.4	94.5	40.3	18.3	40.3	94.5
51.5°	14.7	34.8	85.4	34.0	14.4	34.0	85.4	34.8	14.7	34.8	85.4
52°	11.7	29.4	76.5	28.8	11.1	28.8	76.5	29.4	11.7	29.4	76.5
52.5°	8.8	24.5	67.8	23.8	7.9	23.8	67.8	24.5	8.8	24.5	67.8
53°	5.9	20.0	59.7	19.6	4.9	19.6	59.7	20.0	5.9	20.0	59.7
53.5°	3.9	16.0	52.3	15.3	2.9	15.3	52.3	16.0	3.9	16.0	52.3
54°	1.9	12.8	45.5	11.9	1.7	11.9	45.5	12.8	1.9	12.8	45.5
54.5°	1.1	9.8	39.6	8.8	1.2	8.8	39.6	9.8	1.1	9.8	39.6
55°	0.7	6.8	34.0	5.8	0.9	5.8	34.0	6.8	0.7	6.8	34.0
55.5°	0.3	4.4	28.8	3.9	0.6	3.9	28.8	4.4	0.3	4.4	28.8
56°	0.2	1.9	24.0	2.9	0.3	2.9	24.0	1.9	0.2	1.9	24.0
56.5°	0.2	0.9	19.5	1.8	0.2	1.8	19.5	0.9	0.2	0.9	19.5
57°	0.2	0.5	15.9	0.9	0.2	0.9	15.9	0.5	0.2	0.5	15.9
57.5°	0.2	0.4	12.7	0.4	0.2	0.4	12.7	0.4	0.2	0.4	12.7
58°	0.2	0.2	10.3	0.2	0.2	0.2	10.3	0.2	0.2	0.2	10.3
58.5°	0.2	0.2	8.0	0.2	0.2	0.2	8.0	0.2	0.2	0.2	8.0
59°	0.2	0.2	5.9	0.2	0.2	0.2	5.9	0.2	0.2	0.2	5.9
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	1.3	0.2	0.2	0.2	1.3	0.2	0.2	0.2	1.3
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: P775807

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMB-1000lm-3500K

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: P775807

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMB-1000lm-3500K

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: P775807

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMB-1000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	514.4	514.4	514.4	514.4	514.4	514.4
0.5°	514.3	514.4	514.3	514.4	514.4	514.6
1°	514.3	514.4	514.3	514.3	514.4	514.5
1.5°	514.2	514.2	514.2	514.2	514.2	514.4
2°	514.0	514.1	514.0	514.0	514.1	514.2
2.5°	513.8	513.9	513.8	513.8	513.9	514.0
3°	513.6	513.6	513.6	513.6	513.6	513.8
3.5°	513.3	513.3	513.3	513.3	513.4	513.5
4°	512.8	513.0	512.8	512.8	513.0	513.2
4.5°	512.4	512.5	512.4	512.5	512.5	512.7
5°	512.0	512.0	512.0	512.0	512.1	512.2
5.5°	511.5	511.5	511.5	511.5	511.6	511.7
6°	510.9	511.0	510.9	511.0	511.1	511.2
6.5°	510.4	510.4	510.4	510.4	510.5	510.6
7°	509.6	509.6	509.6	509.7	509.8	509.9
7.5°	508.9	508.9	508.9	509.0	509.1	509.2
8°	508.2	508.2	508.2	508.3	508.3	508.4
8.5°	507.4	507.3	507.4	507.5	507.5	507.6
9°	506.4	506.3	506.4	506.5	506.6	506.6
9.5°	505.5	505.4	505.5	505.6	505.7	505.7
10°	504.5	504.4	504.5	504.7	504.7	504.7
10.5°	503.4	503.3	503.4	503.6	503.6	503.6
11°	502.3	502.1	502.3	502.5	502.5	502.4
11.5°	501.0	500.8	501.0	501.3	501.3	501.2
12°	499.8	499.6	499.8	500.1	500.1	500.0
12.5°	498.4	498.2	498.4	498.9	498.8	498.7
13°	497.1	496.8	497.1	497.5	497.4	497.2
13.5°	495.6	495.3	495.6	496.1	496.0	495.8
14°	494.1	493.8	494.1	494.6	494.4	494.1
14.5°	492.5	492.1	492.5	493.1	492.8	492.5
15°	490.9	490.4	490.9	491.4	491.2	490.8
15.5°	489.1	488.6	489.1	489.7	489.4	489.1
16°	487.4	486.7	487.4	488.0	487.7	487.3
16.5°	485.5	484.9	485.5	486.1	485.8	485.4
17°	483.5	482.8	483.5	484.2	483.9	483.3
17.5°	481.6	480.7	481.6	482.3	481.9	481.3
18°	479.4	478.5	479.4	480.2	479.8	479.2
18.5°	477.3	476.4	477.3	478.1	477.7	477.0
19°	474.9	474.0	474.9	476.0	475.4	474.7
19.5°	472.6	471.7	472.6	473.7	473.2	472.3
20°	470.3	469.2	470.3	471.4	470.8	469.8
20.5°	467.8	466.6	467.8	469.0	468.4	467.4
21°	465.3	463.9	465.3	466.5	465.8	464.8

TEST NUMBER: P775807

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMB-1000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	457.1	455.4	457.1	458.5	457.7	456.4
23°	454.2	452.4	454.2	455.8	454.8	453.5
23.5°	451.2	449.3	451.2	453.0	451.9	450.5
24°	448.1	446.2	448.1	449.9	448.9	447.3
24.5°	445.0	443.0	445.0	446.9	445.7	444.0
25°	441.7	439.6	441.7	443.7	442.5	440.7
25.5°	438.3	436.2	438.3	440.6	439.2	437.4
26°	435.0	432.6	435.0	437.3	435.9	434.0
26.5°	431.5	429.1	431.5	433.9	432.3	430.5
27°	428.0	425.5	428.0	430.5	428.9	426.7
27.5°	424.2	421.9	424.2	426.9	425.3	423.0
28°	420.6	417.9	420.6	423.3	421.6	419.3
28.5°	416.9	414.1	416.9	419.6	417.8	415.4
29°	413.1	410.2	413.1	415.8	414.1	411.5
29.5°	409.2	406.2	409.2	411.9	410.2	407.6
30°	405.3	402.2	405.3	407.9	406.2	403.4
30.5°	401.3	398.0	401.3	403.8	402.3	399.4
31°	397.3	393.8	397.3	399.7	398.2	395.1
31.5°	393.2	389.4	393.2	395.4	394.2	390.9
32°	389.0	383.9	389.0	391.2	389.9	386.5
32.5°	384.8	378.3	384.8	386.8	385.7	382.0
33°	380.5	372.2	380.5	382.4	381.5	374.6
33.5°	376.2	363.9	376.2	377.9	377.2	366.6
34°	370.9	354.7	370.9	373.4	372.8	356.9
34.5°	365.1	343.7	365.1	368.8	368.2	345.6
35°	359.2	331.8	359.2	364.2	361.2	334.0
35.5°	351.7	319.8	351.7	359.7	354.4	322.4
36°	343.4	307.9	343.4	355.0	345.2	310.4
36.5°	333.4	296.2	333.4	350.5	335.4	298.2
37°	322.7	284.1	322.7	345.9	324.4	285.9
37.5°	311.4	272.3	311.4	341.2	313.3	274.0
38°	299.9	260.4	299.9	336.7	301.9	261.6
38.5°	288.6	248.4	288.6	332.0	290.5	249.5
39°	277.4	236.2	277.4	327.6	278.9	237.5
39.5°	266.2	224.0	266.2	323.0	267.5	225.5
40°	254.9	211.9	254.9	318.4	255.9	213.3
40.5°	243.5	200.1	243.5	313.9	244.5	201.3
41°	232.2	188.4	232.2	309.2	233.1	189.7
41.5°	220.7	177.2	220.7	304.0	221.7	178.1
42°	209.3	165.9	209.3	298.2	210.3	166.5
42.5°	198.0	154.7	198.0	290.7	199.1	155.4
43°	186.9	143.8	186.9	282.1	187.8	144.4
43.5°	176.1	133.0	176.1	272.8	176.8	133.6



TEST NUMBER: P775807

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMB-1000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	144.4	102.6	144.4	237.0	144.8	102.5
45.5°	134.1	93.2	134.1	223.5	134.4	93.2
46°	123.9	84.0	123.9	210.2	124.2	84.0
46.5°	114.0	74.8	114.0	197.0	114.3	75.0
47°	104.6	65.9	104.6	183.8	104.6	66.2
47.5°	95.4	57.8	95.4	171.3	95.3	57.7
48°	86.4	50.3	86.4	159.2	86.4	50.3
48.5°	77.6	43.3	77.6	147.5	77.7	43.4
49°	69.0	36.8	69.0	136.1	69.1	37.7
49.5°	60.8	31.7	60.8	125.0	60.8	32.3
50°	53.3	26.8	53.3	114.2	53.3	27.2
50.5°	46.0	22.2	46.0	103.8	46.6	22.4
51°	39.4	18.3	39.4	94.5	40.3	18.3
51.5°	34.0	14.4	34.0	85.4	34.8	14.7
52°	28.8	11.1	28.8	76.5	29.4	11.7
52.5°	23.8	7.9	23.8	67.8	24.5	8.8
53°	19.6	4.9	19.6	59.7	20.0	5.9
53.5°	15.3	2.9	15.3	52.3	16.0	3.9
54°	11.9	1.7	11.9	45.5	12.8	1.9
54.5°	8.8	1.2	8.8	39.6	9.8	1.1
55°	5.8	0.9	5.8	34.0	6.8	0.7
55.5°	3.9	0.6	3.9	28.8	4.4	0.3
56°	2.9	0.3	2.9	24.0	1.9	0.2
56.5°	1.8	0.2	1.8	19.5	0.9	0.2
57°	0.9	0.2	0.9	15.9	0.5	0.2
57.5°	0.4	0.2	0.4	12.7	0.4	0.2
58°	0.2	0.2	0.2	10.3	0.2	0.2
58.5°	0.2	0.2	0.2	8.0	0.2	0.2
59°	0.2	0.2	0.2	5.9	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	1.3	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: P775807

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMB-1000lm-3500K

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: P775807

CATALOG NUMBER: HCDJBL510CSD-HCD6TSQMB-1000lm-3500K

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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1121 Highway 74 South
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°	462.1	463.2	463.9	462.6	461.1	462.6	463.9	463.2	462.1	463.2	463.9
22°	459.3	460.5	461.2	459.9	458.3	459.9	461.2	460.5	459.3	460.5	461.2



44°	122.9	165.8	261.7	165.3	122.4	165.3	261.7	165.8	122.9	165.8	261.7
44.5°	112.6	155.2	249.5	154.8	112.2	154.8	249.5	155.2	112.6	155.2	249.5



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°	462.6	461.1	462.6	463.9	463.2	462.1
22°	459.9	458.3	459.9	461.2	460.5	459.3



44°	165.3	122.4	165.3	261.7	165.8	122.9
44.5°	154.8	112.2	154.8	249.5	155.2	112.6

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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)