

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: P776852

Luminaire Tested: HCDJBL510CSD-HCD42TRMW-750lm-3500K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P776852
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156A001)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL510CSD-HCD42TRMW-750lm-3500K
Description: 4 INCH ROUND NARROW MATTE WHITE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3500K CCT
Ballast/Driver: -

Summary

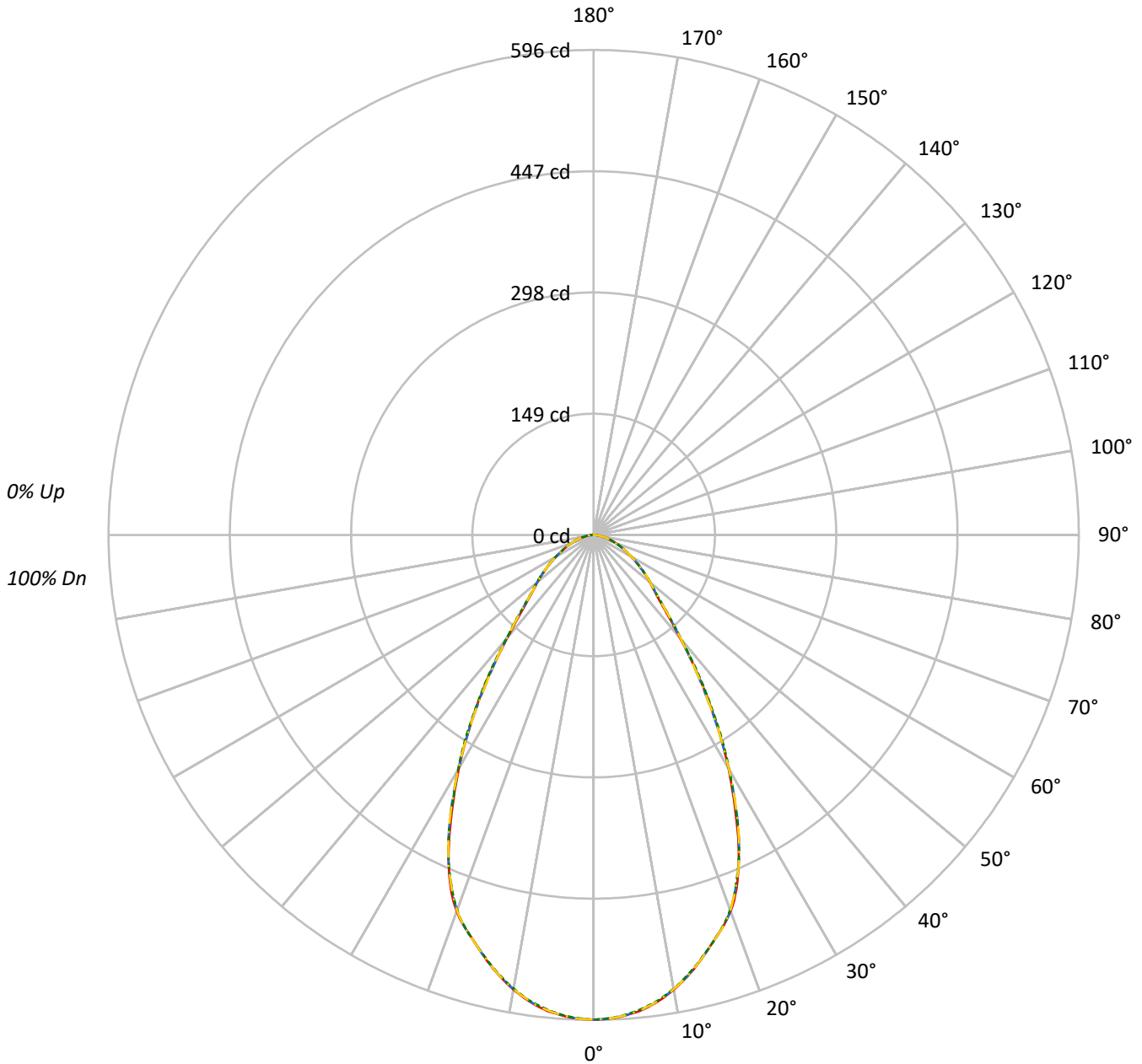
Lumens per Lamp: N/A
Luminaire Lumens: 769.2 lumens
Efficiency: N/A
Efficacy: 102.6 lumens/watt
Spacing Criteria (0/90/45): 0.96 / 0.97 / 0.95
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 7.5
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								
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89								
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80								
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71								
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64								
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58								
6	80	69	62	57	78	68	61	56	67	60	56	65	60	55	64	59	55	53								
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49								
8	71	60	52	48	70	59	52	47	58	52	47	57	51	47	56	51	47	45								
9	67	56	49	44	66	55	48	44	54	48	44	53	48	44	52	47	43	42								
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	74969	74969	74969	74969
5°	74434	74270	74434	74270
10°	72509	72355	72509	72355
15°	69301	69223	69301	69223
20°	65905	65664	65905	65664
25°	58488	58682	58488	58682
30°	48115	48377	48115	48377
35°	37333	37733	37333	37733
40°	27123	27583	27123	27583
45°	20539	21037	20539	21037
50°	17680	17817	17680	17817
55°	15359	15534	15359	15534
60°	13441	13541	13441	13541
65°	11792	11911	11792	11911
70°	10413	10487	10413	10487
75°	9141	9141	9141	9141
80°	7900	7827	7900	7827
85°	6353	6353	6353	6353

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 21037 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.5	7.2
10°-20°	149.4	19.4
20°-30°	191.4	24.9
30°-40°	151.6	19.7
40°-50°	92.8	12.1
50°-60°	63.5	8.3
60°-70°	39.7	5.2
70°-80°	20.1	2.6
80°-90°	5.1	0.7
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°	396.3	51.5
0°-40°	547.9	71.2
0°-60°	704.2	91.6
0°-90°	769.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	769.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	596	596	596	596	596	
5°	589	588	589	588	589	56
15°	532	531	532	531	532	149
25°	421	423	421	423	421	191
35°	243	246	243	246	243	151
45°	115	118	115	118	115	92
55°	70	71	70	71	70	63
65°	40	40	40	40	40	40
75°	19	19	19	19	19	20
85°	4	4	4	4	4	5
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°	595.7	595.7	595.7	595.7	595.7	595.7	595.7	595.7	595.7	595.7	595.7
0.5°	595.8	595.7	595.5	595.4	595.2	595.4	595.5	595.7	595.8	595.7	595.5
1°	595.5	595.4	595.4	595.3	595.0	595.3	595.4	595.4	595.5	595.4	595.4
1.5°	595.2	595.0	595.0	594.9	594.6	594.9	595.0	595.0	595.2	595.0	595.0
2°	594.7	594.6	594.5	594.4	594.1	594.4	594.5	594.6	594.7	594.6	594.5
2.5°	594.2	594.0	593.8	593.8	593.4	593.8	593.8	594.0	594.2	594.0	593.8
3°	593.4	593.2	593.0	592.9	592.5	592.9	593.0	593.2	593.4	593.2	593.0
3.5°	592.5	592.3	592.1	591.9	591.7	591.9	592.1	592.3	592.5	592.3	592.1
4°	591.5	591.4	591.1	590.9	590.5	590.9	591.1	591.4	591.5	591.4	591.1
4.5°	590.3	590.2	589.9	589.7	589.2	589.7	589.9	590.2	590.3	590.2	589.9
5°	589.2	589.0	588.7	588.5	587.9	588.5	588.7	589.0	589.2	589.0	588.7
5.5°	588.0	587.5	587.1	586.9	586.4	586.9	587.1	587.5	588.0	587.5	587.1
6°	586.2	585.9	585.5	585.2	584.6	585.2	585.5	585.9	586.2	585.9	585.5
6.5°	584.4	584.1	583.6	583.4	582.8	583.4	583.6	584.1	584.4	584.1	583.6
7°	582.4	582.1	581.9	581.5	580.9	581.5	581.9	582.1	582.4	582.1	581.9
7.5°	580.3	580.0	579.6	579.5	578.9	579.5	579.6	580.0	580.3	580.0	579.6
8°	578.0	577.7	577.4	577.2	576.9	577.2	577.4	577.7	578.0	577.7	577.4
8.5°	575.6	575.3	574.9	574.7	574.4	574.7	574.9	575.3	575.6	575.3	574.9
9°	573.0	572.8	572.4	572.1	571.8	572.1	572.4	572.8	573.0	572.8	572.4
9.5°	570.2	570.1	569.7	569.4	569.1	569.4	569.7	570.1	570.2	570.1	569.7
10°	567.4	567.2	566.9	566.6	566.2	566.6	566.9	567.2	567.4	567.2	566.9
10.5°	564.3	564.2	563.8	563.5	563.2	563.5	563.8	564.2	564.3	564.2	563.8
11°	561.2	561.1	560.7	560.4	560.0	560.4	560.7	561.1	561.2	561.1	560.7
11.5°	557.9	557.8	557.5	557.1	556.8	557.1	557.5	557.8	557.9	557.8	557.5
12°	554.6	554.4	554.2	553.8	553.5	553.8	554.2	554.4	554.6	554.4	554.2
12.5°	551.1	550.9	550.7	550.3	549.9	550.3	550.7	550.9	551.1	550.9	550.7
13°	547.5	547.3	547.1	546.8	546.4	546.8	547.1	547.3	547.5	547.3	547.1
13.5°	543.7	543.6	543.4	543.1	542.8	543.1	543.4	543.6	543.7	543.6	543.4
14°	539.9	539.8	539.7	539.4	539.0	539.4	539.7	539.8	539.9	539.8	539.7
14.5°	535.9	535.8	535.8	535.5	535.1	535.5	535.8	535.8	535.9	535.8	535.8
15°	531.9	531.9	531.8	531.6	531.3	531.6	531.8	531.9	531.9	531.9	531.8
15.5°	527.8	527.8	528.0	527.8	527.6	527.8	528.0	527.8	527.8	527.8	528.0
16°	523.8	523.9	524.1	524.0	523.9	524.0	524.1	523.9	523.8	523.9	524.1
16.5°	519.8	520.0	520.3	520.3	520.2	520.3	520.3	520.0	519.8	520.0	520.3
17°	516.1	516.2	516.5	516.5	516.5	516.5	516.5	516.2	516.1	516.2	516.5
17.5°	512.4	512.6	512.8	512.7	512.6	512.7	512.8	512.6	512.4	512.6	512.8
18°	508.8	508.9	509.0	508.9	508.7	508.9	509.0	508.9	508.8	508.9	509.0
18.5°	505.0	505.0	505.0	504.8	504.6	504.8	505.0	505.0	505.0	505.0	505.0
19°	501.1	500.8	500.7	500.4	500.2	500.4	500.7	500.8	501.1	500.8	500.7
19.5°	496.8	496.4	496.0	495.8	495.6	495.8	496.0	496.4	496.8	496.4	496.0
20°	492.1	491.7	490.8	490.9	490.3	490.9	490.8	491.7	492.1	491.7	490.8
20.5°	486.9	486.2	485.2	485.5	484.9	485.5	485.2	486.2	486.9	486.2	485.2
21°	481.4	480.5	479.3	479.7	478.9	479.7	479.3	480.5	481.4	480.5	479.3



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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°	461.6	460.6	459.8	459.7	459.3	459.7	459.8	460.6	461.6	460.6	459.8
23°	454.0	453.2	453.0	452.5	452.3	452.5	453.0	453.2	454.0	453.2	453.0
23.5°	446.3	445.5	445.9	445.0	445.4	445.0	445.9	445.5	446.3	445.5	445.9
24°	438.2	437.6	438.6	437.3	438.0	437.3	438.6	437.6	438.2	437.6	438.6
24.5°	429.9	429.7	430.9	429.6	430.5	429.6	430.9	429.7	429.9	429.7	430.9
25°	421.2	421.4	422.8	421.9	422.6	421.9	422.8	421.4	421.2	421.4	422.8
25.5°	412.2	413.2	414.5	414.1	414.3	414.1	414.5	413.2	412.2	413.2	414.5
26°	402.9	404.8	406.0	406.1	405.4	406.1	406.0	404.8	402.9	404.8	406.0
26.5°	393.5	396.2	397.1	397.7	396.2	397.7	397.1	396.2	393.5	396.2	397.1
27°	384.2	387.2	388.2	389.1	386.9	389.1	388.2	387.2	384.2	387.2	388.2
27.5°	375.1	378.0	379.1	380.2	377.4	380.2	379.1	378.0	375.1	378.0	379.1
28°	366.0	368.7	369.8	371.0	367.9	371.0	369.8	368.7	366.0	368.7	369.8
28.5°	357.2	359.3	360.6	361.5	358.7	361.5	360.6	359.3	357.2	359.3	360.6
29°	348.4	349.8	351.3	352.0	350.1	352.0	351.3	349.8	348.4	349.8	351.3
29.5°	339.8	340.5	342.2	342.4	341.5	342.4	342.2	340.5	339.8	340.5	342.2
30°	331.1	330.9	332.7	332.8	332.9	332.8	332.7	330.9	331.1	330.9	332.7
30.5°	322.2	321.7	323.4	323.6	324.8	323.6	323.4	321.7	322.2	321.7	323.4
31°	313.4	312.2	314.0	314.3	316.1	314.3	314.0	312.2	313.4	312.2	314.0
31.5°	304.3	303.1	304.6	305.1	307.5	305.1	304.6	303.1	304.3	303.1	304.6
32°	295.0	293.9	295.2	296.1	298.5	296.1	295.2	293.9	295.0	293.9	295.2
32.5°	286.1	285.1	286.1	287.2	289.6	287.2	286.1	285.1	286.1	285.1	286.1
33°	277.1	276.3	276.7	278.3	280.5	278.3	276.7	276.3	277.1	276.3	276.7
33.5°	269.0	267.6	267.3	269.3	271.3	269.3	267.3	267.6	269.0	267.6	267.3
34°	260.3	258.8	258.1	260.5	262.6	260.5	258.1	258.8	260.3	258.8	258.1
34.5°	251.7	250.1	249.1	251.7	254.0	251.7	249.1	250.1	251.7	250.1	249.1
35°	243.0	241.6	240.5	243.2	245.6	243.2	240.5	241.6	243.0	241.6	240.5
35.5°	234.5	233.3	232.1	234.7	237.4	234.7	232.1	233.3	234.5	233.3	232.1
36°	226.2	224.9	223.8	226.6	229.4	226.6	223.8	224.9	226.2	224.9	223.8
36.5°	218.0	216.8	215.9	218.5	221.1	218.5	215.9	216.8	218.0	216.8	215.9
37°	209.7	208.9	208.1	210.7	213.0	210.7	208.1	208.9	209.7	208.9	208.1
37.5°	201.7	201.1	200.6	203.2	204.9	203.2	200.6	201.1	201.7	201.1	200.6
38°	193.7	193.6	193.4	195.8	196.8	195.8	193.4	193.6	193.7	193.6	193.4
38.5°	186.2	186.4	186.5	188.7	189.1	188.7	186.5	186.4	186.2	186.4	186.5
39°	178.9	179.3	179.7	181.7	181.6	181.7	179.7	179.3	178.9	179.3	179.7
39.5°	171.8	172.6	173.1	174.9	174.6	174.9	173.1	172.6	171.8	172.6	173.1
40°	165.1	165.9	166.8	168.2	167.9	168.2	166.8	165.9	165.1	165.9	166.8
40.5°	158.7	159.5	160.7	161.8	161.7	161.8	160.7	159.5	158.7	159.5	160.7
41°	152.5	153.3	155.0	155.7	156.0	155.7	155.0	153.3	152.5	153.3	155.0
41.5°	146.7	147.6	149.5	149.9	150.6	149.9	149.5	147.6	146.7	147.6	149.5
42°	141.3	142.2	144.2	144.5	145.4	144.5	144.2	142.2	141.3	142.2	144.2
42.5°	136.2	137.1	139.3	139.4	140.4	139.4	139.3	137.1	136.2	137.1	139.3
43°	131.3	132.3	134.4	134.6	135.5	134.6	134.4	132.3	131.3	132.3	134.4
43.5°	126.8	127.8	129.9	130.0	130.8	130.0	129.9	127.8	126.8	127.8	129.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	115.4	116.2	117.4	117.8	118.2	117.8	117.4	116.2	115.4	116.2	117.4
45.5°	112.0	112.6	113.8	114.2	114.6	114.2	113.8	112.6	112.0	112.6	113.8
46°	108.8	109.4	110.4	111.0	111.1	111.0	110.4	109.4	108.8	109.4	110.4
46.5°	105.9	106.3	107.1	107.8	107.9	107.8	107.1	106.3	105.9	106.3	107.1
47°	103.1	103.4	104.2	104.8	105.1	104.8	104.2	103.4	103.1	103.4	104.2
47.5°	100.4	100.7	101.4	102.1	102.4	102.1	101.4	100.7	100.4	100.7	101.4
48°	98.0	98.3	99.0	99.6	100.0	99.6	99.0	98.3	98.0	98.3	99.0
48.5°	96.0	96.1	96.7	97.3	97.6	97.3	96.7	96.1	96.0	96.1	96.7
49°	94.1	94.1	94.6	95.1	95.3	95.1	94.6	94.1	94.1	94.1	94.6
49.5°	92.2	92.3	92.6	93.0	93.1	93.0	92.6	92.3	92.2	92.3	92.6
50°	90.3	90.4	90.6	90.9	91.0	90.9	90.6	90.4	90.3	90.4	90.6
50.5°	88.4	88.5	88.6	88.9	88.9	88.9	88.6	88.5	88.4	88.5	88.6
51°	86.2	86.4	86.6	87.0	87.0	87.0	86.6	86.4	86.2	86.4	86.6
51.5°	84.2	84.2	84.6	85.0	85.0	85.0	84.6	84.2	84.2	84.2	84.6
52°	82.0	82.2	82.5	82.9	83.0	82.9	82.5	82.2	82.0	82.2	82.5
52.5°	79.9	80.0	80.4	80.7	80.9	80.7	80.4	80.0	79.9	80.0	80.4
53°	77.9	78.0	78.3	78.7	78.8	78.7	78.3	78.0	77.9	78.0	78.3
53.5°	75.8	75.9	76.3	76.7	76.8	76.7	76.3	75.9	75.8	75.9	76.3
54°	73.9	74.0	74.3	74.6	74.7	74.6	74.3	74.0	73.9	74.0	74.3
54.5°	72.0	72.0	72.4	72.7	72.8	72.7	72.4	72.0	72.0	72.0	72.4
55°	70.0	70.2	70.5	70.8	70.8	70.8	70.5	70.2	70.0	70.2	70.5
55.5°	68.2	68.4	68.7	68.9	69.0	68.9	68.7	68.4	68.2	68.4	68.7
56°	66.5	66.6	66.9	67.1	67.2	67.1	66.9	66.6	66.5	66.6	66.9
56.5°	64.7	64.9	65.1	65.3	65.4	65.3	65.1	64.9	64.7	64.9	65.1
57°	62.9	63.1	63.3	63.6	63.7	63.6	63.3	63.1	62.9	63.1	63.3
57.5°	61.2	61.4	61.7	61.8	62.0	61.8	61.7	61.4	61.2	61.4	61.7
58°	59.7	59.8	60.0	60.2	60.3	60.2	60.0	59.8	59.7	59.8	60.0
58.5°	58.1	58.2	58.4	58.6	58.6	58.6	58.4	58.2	58.1	58.2	58.4
59°	56.5	56.6	56.7	56.9	57.0	56.9	56.7	56.6	56.5	56.6	56.7
59.5°	54.9	55.0	55.1	55.4	55.4	55.4	55.1	55.0	54.9	55.0	55.1
60°	53.4	53.4	53.6	53.8	53.8	53.8	53.6	53.4	53.4	53.4	53.6
60.5°	51.9	51.9	52.1	52.3	52.3	52.3	52.1	51.9	51.9	51.9	52.1
61°	50.4	50.5	50.7	50.8	50.9	50.8	50.7	50.5	50.4	50.5	50.7
61.5°	49.0	49.1	49.2	49.4	49.5	49.4	49.2	49.1	49.0	49.1	49.2
62°	47.6	47.6	47.8	47.9	47.9	47.9	47.8	47.6	47.6	47.6	47.8
62.5°	46.2	46.3	46.3	46.5	46.6	46.5	46.3	46.3	46.2	46.3	46.3
63°	44.8	44.9	45.0	45.2	45.2	45.2	45.0	44.9	44.8	44.9	45.0
63.5°	43.5	43.6	43.6	43.8	43.9	43.8	43.6	43.6	43.5	43.6	43.6
64°	42.2	42.3	42.4	42.4	42.5	42.4	42.4	42.3	42.2	42.3	42.4
64.5°	40.9	41.0	41.1	41.2	41.2	41.2	41.1	41.0	40.9	41.0	41.1
65°	39.6	39.7	39.8	39.9	40.0	39.9	39.8	39.7	39.6	39.7	39.8
65.5°	38.5	38.5	38.5	38.7	38.7	38.7	38.5	38.5	38.5	38.5	38.5
66°	37.2	37.3	37.3	37.4	37.5	37.4	37.3	37.3	37.2	37.3	37.3



TEST NUMBER: P776852

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-750lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	33.7	33.7	33.8	33.9	33.9	33.9	33.8	33.7	33.7	33.7	33.8
68°	32.5	32.6	32.7	32.8	32.8	32.8	32.7	32.6	32.5	32.6	32.7
68.5°	31.4	31.5	31.6	31.6	31.7	31.6	31.6	31.5	31.4	31.5	31.6
69°	30.4	30.4	30.4	30.6	30.6	30.6	30.4	30.4	30.4	30.4	30.4
69.5°	29.3	29.4	29.4	29.4	29.5	29.4	29.4	29.4	29.3	29.4	29.4
70°	28.3	28.4	28.3	28.4	28.5	28.4	28.3	28.4	28.3	28.4	28.3
70.5°	27.3	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.3	27.4	27.4
71°	26.3	26.3	26.3	26.3	26.4	26.3	26.3	26.3	26.3	26.3	26.3
71.5°	25.3	25.3	25.4	25.4	25.4	25.4	25.4	25.3	25.3	25.3	25.4
72°	24.3	24.3	24.3	24.4	24.4	24.4	24.3	24.3	24.3	24.3	24.3
72.5°	23.4	23.4	23.4	23.5	23.5	23.5	23.4	23.4	23.4	23.4	23.4
73°	22.4	22.4	22.4	22.5	22.5	22.5	22.4	22.4	22.4	22.4	22.4
73.5°	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
74°	20.6	20.6	20.6	20.7	20.7	20.7	20.6	20.6	20.6	20.6	20.6
74.5°	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7
75°	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8
75.5°	17.9	17.9	17.9	17.9	18.0	17.9	17.9	17.9	17.9	17.9	17.9
76°	17.2	17.1	17.1	17.2	17.2	17.2	17.1	17.1	17.2	17.1	17.1
76.5°	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3
77°	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
77.5°	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7
78°	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9
78.5°	13.2	13.2	13.1	13.1	13.2	13.1	13.1	13.2	13.2	13.2	13.1
79°	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4
79.5°	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6
80°	10.9	10.9	10.8	10.8	10.8	10.8	10.8	10.9	10.9	10.9	10.8
80.5°	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
81°	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
81.5°	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
82°	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
82.5°	7.5	7.5	7.5	7.5	7.4	7.5	7.5	7.5	7.5	7.5	7.5
83°	6.9	6.9	6.9	6.8	6.8	6.8	6.9	6.9	6.9	6.9	6.9
83.5°	6.2	6.2	6.2	6.1	6.1	6.1	6.2	6.2	6.2	6.2	6.2
84°	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
84.5°	5.0	4.9	4.9	4.9	4.9	4.9	4.9	4.9	5.0	4.9	4.9
85°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
85.5°	3.8	3.7	3.8	3.7	3.8	3.7	3.8	3.7	3.8	3.7	3.8
86°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
86.5°	2.7	2.6	2.6	2.6	2.7	2.6	2.6	2.6	2.7	2.6	2.6
87°	2.2	2.2	2.2	2.1	2.2	2.1	2.2	2.2	2.2	2.2	2.2
87.5°	1.6	1.6	1.6	1.6	1.7	1.6	1.6	1.6	1.6	1.6	1.6
88°	1.0	1.1	1.1	1.2	1.2	1.2	1.1	1.1	1.0	1.1	1.1
88.5°	0.6	0.6	0.7	0.8	1.0	0.8	0.7	0.6	0.6	0.6	0.7



TEST NUMBER: P776852

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-750lm-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	0.1	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.1



TEST NUMBER: P776852

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-750lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	595.7	595.7	595.7	595.7	595.7	595.7
0.5°	595.4	595.2	595.4	595.5	595.7	595.8
1°	595.3	595.0	595.3	595.4	595.4	595.5
1.5°	594.9	594.6	594.9	595.0	595.0	595.2
2°	594.4	594.1	594.4	594.5	594.6	594.7
2.5°	593.8	593.4	593.8	593.8	594.0	594.2
3°	592.9	592.5	592.9	593.0	593.2	593.4
3.5°	591.9	591.7	591.9	592.1	592.3	592.5
4°	590.9	590.5	590.9	591.1	591.4	591.5
4.5°	589.7	589.2	589.7	589.9	590.2	590.3
5°	588.5	587.9	588.5	588.7	589.0	589.2
5.5°	586.9	586.4	586.9	587.1	587.5	588.0
6°	585.2	584.6	585.2	585.5	585.9	586.2
6.5°	583.4	582.8	583.4	583.6	584.1	584.4
7°	581.5	580.9	581.5	581.9	582.1	582.4
7.5°	579.5	578.9	579.5	579.6	580.0	580.3
8°	577.2	576.9	577.2	577.4	577.7	578.0
8.5°	574.7	574.4	574.7	574.9	575.3	575.6
9°	572.1	571.8	572.1	572.4	572.8	573.0
9.5°	569.4	569.1	569.4	569.7	570.1	570.2
10°	566.6	566.2	566.6	566.9	567.2	567.4
10.5°	563.5	563.2	563.5	563.8	564.2	564.3
11°	560.4	560.0	560.4	560.7	561.1	561.2
11.5°	557.1	556.8	557.1	557.5	557.8	557.9
12°	553.8	553.5	553.8	554.2	554.4	554.6
12.5°	550.3	549.9	550.3	550.7	550.9	551.1
13°	546.8	546.4	546.8	547.1	547.3	547.5
13.5°	543.1	542.8	543.1	543.4	543.6	543.7
14°	539.4	539.0	539.4	539.7	539.8	539.9
14.5°	535.5	535.1	535.5	535.8	535.8	535.9
15°	531.6	531.3	531.6	531.8	531.9	531.9
15.5°	527.8	527.6	527.8	528.0	527.8	527.8
16°	524.0	523.9	524.0	524.1	523.9	523.8
16.5°	520.3	520.2	520.3	520.3	520.0	519.8
17°	516.5	516.5	516.5	516.5	516.2	516.1
17.5°	512.7	512.6	512.7	512.8	512.6	512.4
18°	508.9	508.7	508.9	509.0	508.9	508.8
18.5°	504.8	504.6	504.8	505.0	505.0	505.0
19°	500.4	500.2	500.4	500.7	500.8	501.1
19.5°	495.8	495.6	495.8	496.0	496.4	496.8
20°	490.9	490.3	490.9	490.8	491.7	492.1
20.5°	485.5	484.9	485.5	485.2	486.2	486.9
21°	479.7	478.9	479.7	479.3	480.5	481.4

TEST NUMBER: P776852

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-750lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	459.7	459.3	459.7	459.8	460.6	461.6
23°	452.5	452.3	452.5	453.0	453.2	454.0
23.5°	445.0	445.4	445.0	445.9	445.5	446.3
24°	437.3	438.0	437.3	438.6	437.6	438.2
24.5°	429.6	430.5	429.6	430.9	429.7	429.9
25°	421.9	422.6	421.9	422.8	421.4	421.2
25.5°	414.1	414.3	414.1	414.5	413.2	412.2
26°	406.1	405.4	406.1	406.0	404.8	402.9
26.5°	397.7	396.2	397.7	397.1	396.2	393.5
27°	389.1	386.9	389.1	388.2	387.2	384.2
27.5°	380.2	377.4	380.2	379.1	378.0	375.1
28°	371.0	367.9	371.0	369.8	368.7	366.0
28.5°	361.5	358.7	361.5	360.6	359.3	357.2
29°	352.0	350.1	352.0	351.3	349.8	348.4
29.5°	342.4	341.5	342.4	342.2	340.5	339.8
30°	332.8	332.9	332.8	332.7	330.9	331.1
30.5°	323.6	324.8	323.6	323.4	321.7	322.2
31°	314.3	316.1	314.3	314.0	312.2	313.4
31.5°	305.1	307.5	305.1	304.6	303.1	304.3
32°	296.1	298.5	296.1	295.2	293.9	295.0
32.5°	287.2	289.6	287.2	286.1	285.1	286.1
33°	278.3	280.5	278.3	276.7	276.3	277.1
33.5°	269.3	271.3	269.3	267.3	267.6	269.0
34°	260.5	262.6	260.5	258.1	258.8	260.3
34.5°	251.7	254.0	251.7	249.1	250.1	251.7
35°	243.2	245.6	243.2	240.5	241.6	243.0
35.5°	234.7	237.4	234.7	232.1	233.3	234.5
36°	226.6	229.4	226.6	223.8	224.9	226.2
36.5°	218.5	221.1	218.5	215.9	216.8	218.0
37°	210.7	213.0	210.7	208.1	208.9	209.7
37.5°	203.2	204.9	203.2	200.6	201.1	201.7
38°	195.8	196.8	195.8	193.4	193.6	193.7
38.5°	188.7	189.1	188.7	186.5	186.4	186.2
39°	181.7	181.6	181.7	179.7	179.3	178.9
39.5°	174.9	174.6	174.9	173.1	172.6	171.8
40°	168.2	167.9	168.2	166.8	165.9	165.1
40.5°	161.8	161.7	161.8	160.7	159.5	158.7
41°	155.7	156.0	155.7	155.0	153.3	152.5
41.5°	149.9	150.6	149.9	149.5	147.6	146.7
42°	144.5	145.4	144.5	144.2	142.2	141.3
42.5°	139.4	140.4	139.4	139.3	137.1	136.2
43°	134.6	135.5	134.6	134.4	132.3	131.3
43.5°	130.0	130.8	130.0	129.9	127.8	126.8



TEST NUMBER: P776852

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-750lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	117.8	118.2	117.8	117.4	116.2	115.4
45.5°	114.2	114.6	114.2	113.8	112.6	112.0
46°	111.0	111.1	111.0	110.4	109.4	108.8
46.5°	107.8	107.9	107.8	107.1	106.3	105.9
47°	104.8	105.1	104.8	104.2	103.4	103.1
47.5°	102.1	102.4	102.1	101.4	100.7	100.4
48°	99.6	100.0	99.6	99.0	98.3	98.0
48.5°	97.3	97.6	97.3	96.7	96.1	96.0
49°	95.1	95.3	95.1	94.6	94.1	94.1
49.5°	93.0	93.1	93.0	92.6	92.3	92.2
50°	90.9	91.0	90.9	90.6	90.4	90.3
50.5°	88.9	88.9	88.9	88.6	88.5	88.4
51°	87.0	87.0	87.0	86.6	86.4	86.2
51.5°	85.0	85.0	85.0	84.6	84.2	84.2
52°	82.9	83.0	82.9	82.5	82.2	82.0
52.5°	80.7	80.9	80.7	80.4	80.0	79.9
53°	78.7	78.8	78.7	78.3	78.0	77.9
53.5°	76.7	76.8	76.7	76.3	75.9	75.8
54°	74.6	74.7	74.6	74.3	74.0	73.9
54.5°	72.7	72.8	72.7	72.4	72.0	72.0
55°	70.8	70.8	70.8	70.5	70.2	70.0
55.5°	68.9	69.0	68.9	68.7	68.4	68.2
56°	67.1	67.2	67.1	66.9	66.6	66.5
56.5°	65.3	65.4	65.3	65.1	64.9	64.7
57°	63.6	63.7	63.6	63.3	63.1	62.9
57.5°	61.8	62.0	61.8	61.7	61.4	61.2
58°	60.2	60.3	60.2	60.0	59.8	59.7
58.5°	58.6	58.6	58.6	58.4	58.2	58.1
59°	56.9	57.0	56.9	56.7	56.6	56.5
59.5°	55.4	55.4	55.4	55.1	55.0	54.9
60°	53.8	53.8	53.8	53.6	53.4	53.4
60.5°	52.3	52.3	52.3	52.1	51.9	51.9
61°	50.8	50.9	50.8	50.7	50.5	50.4
61.5°	49.4	49.5	49.4	49.2	49.1	49.0
62°	47.9	47.9	47.9	47.8	47.6	47.6
62.5°	46.5	46.6	46.5	46.3	46.3	46.2
63°	45.2	45.2	45.2	45.0	44.9	44.8
63.5°	43.8	43.9	43.8	43.6	43.6	43.5
64°	42.4	42.5	42.4	42.4	42.3	42.2
64.5°	41.2	41.2	41.2	41.1	41.0	40.9
65°	39.9	40.0	39.9	39.8	39.7	39.6
65.5°	38.7	38.7	38.7	38.5	38.5	38.5
66°	37.4	37.5	37.4	37.3	37.3	37.2



TEST NUMBER: P776852

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-750lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	33.9	33.9	33.9	33.8	33.7	33.7
68°	32.8	32.8	32.8	32.7	32.6	32.5
68.5°	31.6	31.7	31.6	31.6	31.5	31.4
69°	30.6	30.6	30.6	30.4	30.4	30.4
69.5°	29.4	29.5	29.4	29.4	29.4	29.3
70°	28.4	28.5	28.4	28.3	28.4	28.3
70.5°	27.4	27.4	27.4	27.4	27.4	27.3
71°	26.3	26.4	26.3	26.3	26.3	26.3
71.5°	25.4	25.4	25.4	25.4	25.3	25.3
72°	24.4	24.4	24.4	24.3	24.3	24.3
72.5°	23.5	23.5	23.5	23.4	23.4	23.4
73°	22.5	22.5	22.5	22.4	22.4	22.4
73.5°	21.5	21.5	21.5	21.5	21.5	21.5
74°	20.7	20.7	20.7	20.6	20.6	20.6
74.5°	19.7	19.7	19.7	19.7	19.7	19.7
75°	18.8	18.8	18.8	18.8	18.8	18.8
75.5°	17.9	18.0	17.9	17.9	17.9	17.9
76°	17.2	17.2	17.2	17.1	17.1	17.2
76.5°	16.3	16.3	16.3	16.3	16.3	16.3
77°	15.5	15.5	15.5	15.5	15.5	15.5
77.5°	14.7	14.7	14.7	14.7	14.7	14.7
78°	13.9	13.9	13.9	13.9	13.9	13.9
78.5°	13.1	13.2	13.1	13.1	13.2	13.2
79°	12.4	12.4	12.4	12.4	12.4	12.4
79.5°	11.6	11.6	11.6	11.6	11.6	11.6
80°	10.8	10.8	10.8	10.8	10.9	10.9
80.5°	10.2	10.2	10.2	10.2	10.2	10.2
81°	9.5	9.5	9.5	9.5	9.5	9.5
81.5°	8.8	8.8	8.8	8.8	8.8	8.8
82°	8.1	8.1	8.1	8.1	8.1	8.1
82.5°	7.5	7.4	7.5	7.5	7.5	7.5
83°	6.8	6.8	6.8	6.9	6.9	6.9
83.5°	6.1	6.1	6.1	6.2	6.2	6.2
84°	5.6	5.6	5.6	5.6	5.6	5.6
84.5°	4.9	4.9	4.9	4.9	4.9	5.0
85°	4.4	4.4	4.4	4.4	4.4	4.4
85.5°	3.7	3.8	3.7	3.8	3.7	3.8
86°	3.2	3.2	3.2	3.2	3.2	3.2
86.5°	2.6	2.7	2.6	2.6	2.6	2.7
87°	2.1	2.2	2.1	2.2	2.2	2.2
87.5°	1.6	1.7	1.6	1.6	1.6	1.6
88°	1.2	1.2	1.2	1.1	1.1	1.0
88.5°	0.8	1.0	0.8	0.7	0.6	0.6



TEST NUMBER: P776852

CATALOG NUMBER: HCDJBL510CSD-HCD42TRMW-750lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.2	0.2	0.2	0.1	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°	475.1	474.3	473.0	473.4	472.6	473.4	473.0	474.3	475.1	474.3	473.0
22°	468.5	467.7	466.5	466.7	465.9	466.7	466.5	467.7	468.5	467.7	466.5



44°	122.7	123.7	125.5	125.6	126.4	125.6	125.5	123.7	122.7	123.7	125.5
44.5°	118.9	119.8	121.4	121.7	122.2	121.7	121.4	119.8	118.9	119.8	121.4



66.5°	36.0	36.1	36.1	36.2	36.3	36.2	36.1	36.1	36.0	36.1	36.1
67°	34.9	34.9	34.9	35.0	35.1	35.0	34.9	34.9	34.9	34.9	34.9



89°	0.2	0.3	0.5	0.6	0.6	0.6	0.5	0.3	0.2	0.3	0.5
89.5°	0.0	0.1	0.2	0.3	0.4	0.3	0.2	0.1	0.0	0.1	0.2

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21.5°	473.4	472.6	473.4	473.0	474.3	475.1
22°	466.7	465.9	466.7	466.5	467.7	468.5



44°	125.6	126.4	125.6	125.5	123.7	122.7
44.5°	121.7	122.2	121.7	121.4	119.8	118.9

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66.5°	36.2	36.3	36.2	36.1	36.1	36.0
67°	35.0	35.1	35.0	34.9	34.9	34.9

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89°	0.6	0.6	0.6	0.5	0.3	0.2
89.5°	0.3	0.4	0.3	0.2	0.1	0.0

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(END OF REPORT)