

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: P776575

Luminaire Tested: HCDJBS4050CSD-HCD42TRH-5000lm-2700K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P776575
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B050)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL54050CSD-HCD42TRH-5000lm-2700K
Description: 4 INCH ROUND NARROW HAZE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4576.1 lumens
Efficiency: N/A
Efficacy: 95.3 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.93 / 0.92
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

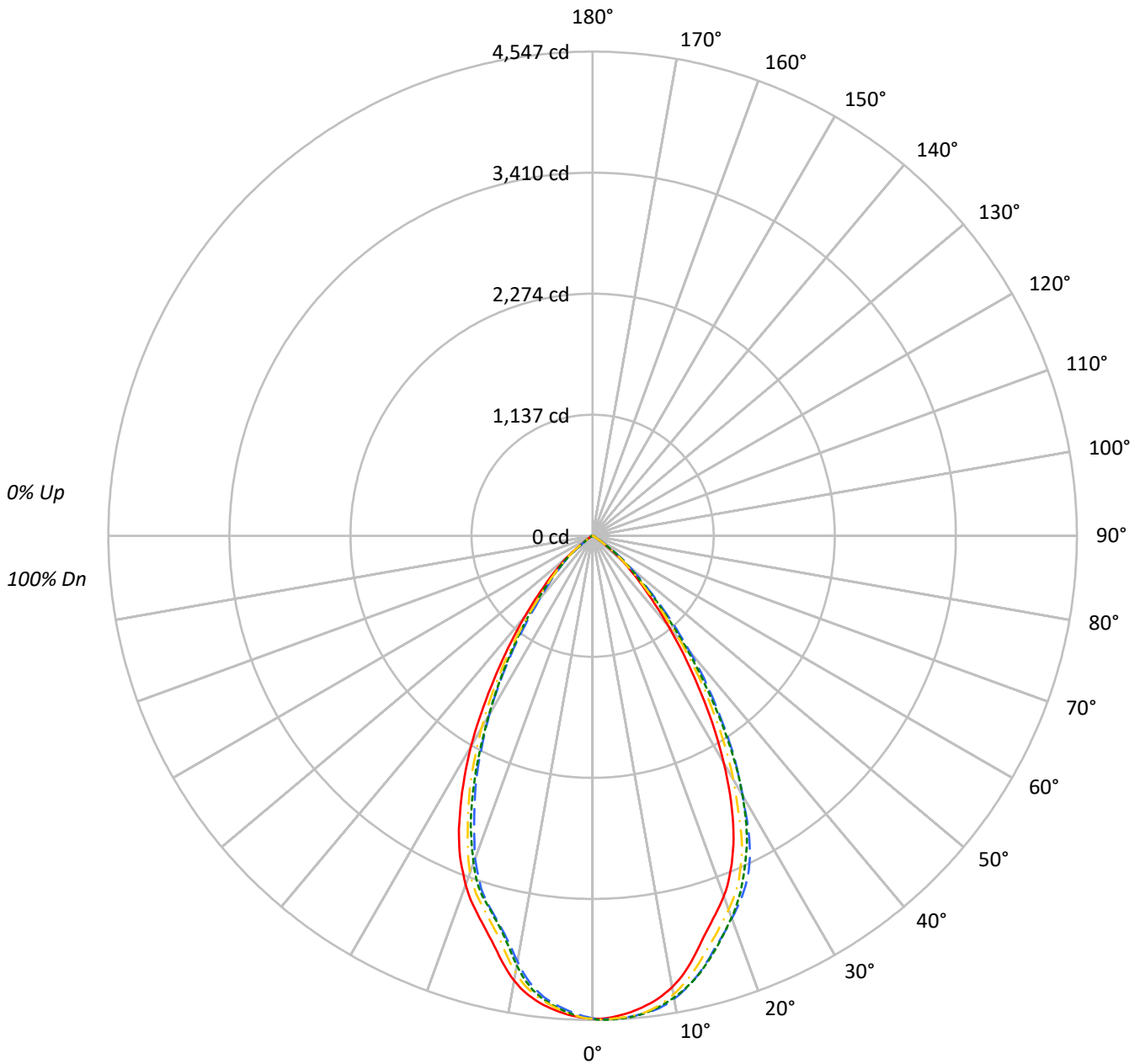
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93					93			
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	86					86			
3	101	95	89	85	99	93	88	84	90	86	83	88	85	82	86	83	80	79					79			
4	96	88	82	77	94	87	81	77	84	80	76	82	78	75	80	77	74	73					73			
5	90	82	75	71	89	81	75	70	79	74	70	77	73	69	76	72	69	67					67			
6	86	76	70	65	84	75	69	65	74	68	64	72	68	64	71	67	64	62					62			
7	81	71	65	60	80	70	64	60	69	64	60	68	63	59	67	62	59	58					58			
8	77	67	60	56	75	66	60	56	65	59	56	64	59	55	63	58	55	54					54			
9	73	63	56	52	72	62	56	52	61	56	52	60	55	52	59	55	51	50					50			
10	69	59	53	49	68	58	53	49	58	52	48	57	52	48	56	51	48	47					47			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	570741	570741	570741	570741
5°	565784	572062	563080	558242
10°	549975	562665	542180	523727
15°	514200	540779	501080	477106
20°	482430	511171	467055	437900
25°	434867	470916	411275	369076
30°	357848	408956	331705	283982
35°	266079	317439	240883	204764
40°	181765	221358	162396	139265
45°	116736	138307	103530	88615
50°	70268	80097	60283	48790
55°	26790	31683	18979	14788
60°	9061	10672	7576	6066
65°	4348	4616	3514	2859
70°	2024	2355	1693	1509
75°	1118	1313	875	875
80°	652	652	362	362
85°	0	722	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°

Vertical Angle: 45°

Luminance: 153880 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	420.1	9.2
10°-20°	1095.2	23.9
20°-30°	1374.1	30.0
30°-40°	1049.3	22.9
40°-50°	500.0	10.9
50°-60°	119.7	2.6
60°-70°	14.9	0.3
70°-80°	2.6	0.1
80°-90°	0.3	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°	2889.4	63.1
0°-40°	3938.7	86.1
0°-60°	4558.4	99.6
0°-90°	4576.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4576.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4535	4535	4535	4535	4535	
5°	4479	4528	4457	4419	4479	422
15°	3947	4151	3846	3662	3947	1110
25°	3132	3391	2962	2658	3132	1416
35°	1732	2066	1568	1333	1732	1082
45°	656	777	582	498	656	519
55°	122	144	86	67	122	131
65°	15	16	12	10	15	16
75°	2	3	2	2	2	3
85°	0	0	0	0	0	0
90°	0	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°	4535.1	4535.1	4535.1	4535.1	4535.1	4535.1	4535.1	4535.1	4535.1	4535.1	4535.1
0.5°	4536.5	4535.6	4535.1	4534.2	4543.8	4542.8	4541.0	4537.8	4532.8	4525.1	4521.4
1°	4536.0	4538.3	4539.7	4538.7	4546.0	4545.6	4541.9	4536.9	4528.7	4517.8	4513.2
1.5°	4533.3	4538.3	4541.0	4541.9	4546.9	4546.0	4541.5	4535.1	4524.6	4508.2	4501.4
2°	4528.7	4537.8	4541.9	4543.8	4546.5	4546.0	4540.6	4532.4	4517.3	4498.2	4489.1
2.5°	4523.3	4535.1	4541.0	4543.8	4545.1	4544.7	4538.7	4528.7	4510.0	4486.8	4476.8
3°	4516.0	4531.0	4538.7	4543.3	4543.8	4543.3	4536.0	4524.2	4501.4	4475.0	4463.1
3.5°	4507.8	4527.8	4536.0	4541.5	4541.0	4541.0	4533.3	4519.2	4492.3	4461.8	4448.5
4°	4498.7	4522.3	4532.4	4539.7	4537.8	4538.7	4530.5	4513.2	4481.3	4448.5	4433.1
4.5°	4488.6	4516.0	4529.2	4536.0	4534.2	4535.1	4526.4	4506.4	4470.4	4433.5	4417.1
5°	4478.6	4509.1	4525.5	4532.8	4528.3	4530.5	4521.4	4497.7	4457.2	4417.6	4398.4
5.5°	4466.8	4502.3	4520.5	4529.2	4522.8	4525.1	4515.1	4487.7	4444.0	4400.7	4378.4
6°	4453.6	4494.1	4515.5	4524.6	4514.1	4517.8	4506.9	4477.2	4429.0	4382.0	4357.0
6.5°	4439.4	4485.0	4509.1	4517.8	4505.5	4508.2	4496.8	4464.5	4412.6	4361.1	4331.5
7°	4424.9	4475.0	4501.4	4510.5	4495.0	4497.7	4485.4	4450.4	4394.3	4337.9	4303.7
7.5°	4409.4	4462.7	4492.3	4501.8	4482.3	4484.5	4470.4	4433.5	4374.8	4311.0	4272.7
8°	4391.2	4448.5	4480.9	4491.4	4468.6	4470.0	4454.9	4415.8	4353.3	4282.3	4236.7
8.5°	4372.0	4432.6	4466.8	4478.6	4453.1	4454.0	4436.7	4396.6	4328.7	4249.9	4198.9
9°	4350.6	4415.3	4451.3	4464.0	4438.1	4435.3	4417.6	4375.7	4302.8	4214.4	4155.7
9.5°	4328.3	4396.6	4434.0	4448.5	4420.3	4417.6	4396.2	4353.3	4273.6	4174.8	4110.6
10°	4303.7	4375.7	4414.8	4431.2	4403.0	4396.6	4373.8	4327.8	4242.7	4132.0	4060.0
10.5°	4276.4	4352.9	4394.3	4413.5	4383.9	4375.7	4349.7	4301.0	4208.5	4086.0	4012.2
11°	4247.7	4329.7	4371.6	4393.9	4363.8	4352.9	4323.7	4270.9	4169.8	4040.0	3962.5
11.5°	4216.2	4304.2	4349.2	4373.4	4343.3	4328.7	4295.0	4239.9	4129.7	3993.0	3913.3
12°	4182.5	4276.8	4324.2	4352.9	4320.1	4303.7	4265.9	4207.1	4087.8	3946.1	3869.1
12.5°	4146.5	4246.8	4297.3	4329.2	4296.0	4275.5	4235.4	4171.6	4045.4	3903.8	3828.1
13°	4107.4	4215.3	4269.1	4305.5	4271.4	4247.7	4202.1	4134.2	4002.1	3863.2	3789.9
13.5°	4066.8	4182.1	4239.0	4279.6	4244.5	4216.7	4168.4	4096.4	3960.7	3823.6	3754.8
14°	4027.2	4148.4	4208.5	4253.1	4215.8	4185.3	4133.8	4057.3	3919.7	3786.2	3719.7
14.5°	3987.6	4112.8	4177.1	4225.3	4183.4	4152.0	4098.3	4017.6	3882.3	3751.6	3685.1
15°	3946.6	4075.0	4144.7	4194.4	4150.6	4118.8	4062.3	3980.3	3845.9	3716.1	3650.9
15.5°	3908.3	4039.0	4111.5	4164.8	4119.2	4085.0	4026.7	3943.8	3810.8	3682.8	3619.1
16°	3871.0	4002.6	4075.0	4131.5	4086.0	4052.3	3994.4	3908.3	3775.3	3649.1	3586.3
16.5°	3837.2	3967.1	4041.3	4099.6	4054.5	4018.5	3962.1	3873.7	3741.6	3616.3	3552.6
17°	3802.2	3931.5	4009.9	4066.8	4020.8	3986.7	3930.2	3838.6	3707.9	3583.1	3517.0
17.5°	3768.0	3898.7	3978.5	4034.9	3987.1	3953.9	3896.9	3804.9	3674.6	3547.1	3479.2
18°	3734.3	3866.4	3947.0	4003.1	3953.4	3920.2	3863.7	3772.1	3641.8	3508.8	3429.1
18.5°	3702.0	3833.6	3917.0	3970.7	3917.9	3887.8	3831.3	3739.3	3606.3	3460.5	3379.0
19°	3670.1	3802.6	3886.9	3938.8	3884.2	3854.6	3799.4	3707.4	3568.5	3412.7	3328.9
19.5°	3636.8	3770.3	3855.0	3905.1	3849.5	3823.1	3767.6	3674.6	3528.4	3364.4	3278.8
20°	3602.2	3739.3	3824.0	3872.8	3816.8	3789.9	3735.2	3640.5	3487.4	3316.1	3225.0
20.5°	3565.3	3708.3	3793.5	3840.9	3782.1	3755.7	3701.5	3604.5	3441.0	3267.9	3163.5
21°	3524.8	3676.9	3762.5	3807.6	3743.9	3721.5	3667.8	3565.8	3394.5	3207.7	3095.7



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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°	3390.8	3570.3	3663.7	3704.2	3624.5	3603.6	3554.8	3435.5	3255.1	3019.1	2907.5
23°	3342.6	3531.6	3627.7	3664.6	3580.3	3563.5	3515.2	3387.2	3201.8	2960.8	2843.8
23.5°	3291.5	3490.6	3591.7	3625.4	3533.9	3517.0	3464.6	3338.9	3144.9	2903.4	2783.6
24°	3239.6	3445.5	3552.6	3584.0	3487.9	3467.8	3413.6	3290.6	3086.1	2844.7	2723.5
24.5°	3187.2	3398.1	3511.1	3538.0	3439.6	3418.2	3363.1	3245.1	3026.0	2788.7	2662.9
25°	3131.7	3348.0	3466.9	3492.9	3391.3	3369.0	3312.5	3189.1	2961.8	2730.4	2600.5
25.5°	3072.9	3295.6	3417.3	3442.8	3342.6	3319.3	3261.5	3131.7	2895.7	2668.4	2536.3
26°	3010.9	3240.5	3366.2	3391.8	3294.3	3270.1	3194.5	3071.1	2828.3	2604.6	2470.7
26.5°	2946.3	3182.2	3307.5	3340.3	3245.5	3211.8	3125.7	3005.9	2761.8	2537.7	2404.2
27°	2880.7	3122.1	3246.4	3287.9	3191.3	3151.7	3051.9	2936.2	2696.6	2466.6	2335.0
27.5°	2813.7	3058.3	3178.6	3235.5	3133.9	3090.2	2980.4	2867.5	2627.9	2396.0	2267.5
28°	2744.0	2991.4	3105.7	3176.3	3074.3	3026.4	2909.4	2794.6	2561.4	2324.9	2200.1
28.5°	2674.3	2918.9	3033.3	3117.1	3009.1	2959.5	2841.0	2718.1	2493.5	2254.8	2134.5
29°	2602.4	2844.2	2958.1	3055.6	2948.1	2888.0	2774.1	2642.9	2425.6	2184.2	2067.1
29.5°	2534.0	2768.2	2885.2	2991.4	2879.8	2817.8	2707.6	2570.0	2355.0	2117.2	2001.5
30°	2462.5	2692.5	2814.6	2923.0	2814.2	2743.6	2640.6	2494.4	2282.6	2051.6	1937.8
30.5°	2389.2	2616.9	2747.2	2852.0	2745.8	2668.4	2573.7	2421.1	2211.1	1985.1	1873.5
31°	2316.7	2544.0	2681.2	2780.9	2679.3	2597.3	2505.3	2346.4	2138.6	1920.4	1807.5
31.5°	2243.0	2470.7	2614.6	2703.9	2606.5	2524.9	2433.8	2274.4	2064.8	1853.9	1741.4
32°	2169.2	2399.2	2547.2	2631.0	2535.4	2456.1	2361.8	2201.5	1989.7	1785.6	1674.9
32.5°	2095.8	2326.8	2477.5	2555.9	2457.5	2385.1	2288.5	2129.5	1914.1	1716.8	1609.3
33°	2022.0	2255.2	2407.4	2482.6	2381.0	2314.0	2213.8	2058.5	1842.6	1648.0	1543.7
33.5°	1950.5	2182.4	2332.2	2410.1	2301.3	2244.3	2140.0	1987.9	1769.7	1578.8	1477.7
34°	1875.8	2109.0	2258.4	2338.2	2223.8	2173.3	2067.6	1917.3	1700.0	1508.7	1414.4
34.5°	1803.8	2034.8	2183.7	2265.7	2145.0	2100.4	1996.1	1847.6	1632.6	1443.1	1352.4
35°	1731.9	1962.4	2108.1	2193.8	2066.2	2027.0	1926.8	1781.1	1567.9	1377.5	1292.7
35.5°	1660.8	1890.8	2035.7	2121.3	1989.7	1953.2	1859.0	1714.6	1501.4	1315.1	1232.2
36°	1596.1	1821.1	1966.5	2048.4	1914.1	1880.8	1791.1	1648.5	1438.5	1252.7	1172.9
36.5°	1531.0	1753.7	1898.6	1973.3	1835.7	1807.9	1721.8	1584.7	1375.7	1193.9	1116.0
37°	1465.8	1686.8	1828.9	1903.6	1761.5	1735.1	1653.5	1521.0	1315.5	1137.4	1058.6
37.5°	1401.2	1613.4	1761.9	1828.9	1688.6	1664.9	1582.5	1459.5	1255.9	1081.8	1005.3
38°	1336.0	1553.3	1693.6	1757.4	1619.8	1596.6	1513.7	1395.7	1200.7	1027.6	952.0
38.5°	1274.5	1492.7	1622.5	1683.1	1546.0	1527.3	1446.7	1333.3	1142.4	974.3	901.9
39°	1216.7	1432.6	1555.6	1616.6	1480.0	1459.5	1381.1	1271.8	1089.6	924.2	855.5
39.5°	1160.6	1372.5	1488.6	1547.4	1413.9	1390.2	1317.3	1213.0	1037.7	876.9	813.5
40°	1106.4	1310.5	1421.2	1478.6	1347.4	1322.4	1254.0	1152.9	988.5	832.7	773.0
40.5°	1051.8	1250.8	1354.2	1409.8	1280.9	1256.3	1194.4	1095.1	938.4	790.8	734.3
41°	1000.3	1189.3	1289.1	1341.0	1219.4	1192.1	1137.4	1040.4	891.9	752.5	699.7
41.5°	951.1	1131.5	1229.0	1276.4	1156.5	1127.9	1080.5	988.5	847.7	715.2	668.2
42°	903.3	1073.2	1169.3	1212.6	1099.2	1065.4	1023.1	936.5	805.3	682.4	636.4
42.5°	857.7	1018.1	1111.0	1150.6	1040.4	1006.7	968.0	888.3	763.4	648.7	605.8
43°	814.9	965.7	1055.0	1088.7	984.4	949.7	913.8	840.9	723.8	617.2	576.7
43.5°	771.6	914.7	998.5	1029.5	929.7	896.5	860.9	795.8	686.5	586.7	547.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	655.9	773.0	836.3	864.6	777.1	748.9	714.7	671.0	581.7	501.1	466.9
45.5°	620.4	729.7	785.8	815.4	730.6	705.1	672.8	632.7	549.8	474.2	441.4
46°	585.3	687.8	737.5	767.1	684.6	663.7	632.3	596.7	518.8	447.8	418.6
46.5°	552.5	650.0	695.6	722.9	642.7	624.1	594.9	562.1	489.2	422.7	395.8
47°	521.1	612.7	655.0	679.6	601.7	585.8	559.4	528.4	459.6	399.0	372.6
47.5°	491.0	577.1	615.9	639.1	564.8	550.3	526.6	496.5	433.2	375.8	349.8
48°	461.9	543.0	579.4	600.8	529.3	516.6	494.7	466.4	408.1	352.1	327.1
48.5°	433.2	510.6	545.7	563.5	495.1	484.2	464.6	437.7	383.5	328.9	301.6
49°	406.8	479.2	512.9	530.2	464.2	453.7	435.9	412.2	358.5	302.0	273.3
49.5°	383.5	449.6	481.9	496.1	434.1	428.2	410.9	386.7	333.4	272.9	244.6
50°	358.9	421.8	451.9	466.0	409.1	402.7	385.8	361.7	307.9	244.2	215.9
50.5°	335.7	395.8	423.6	434.6	384.0	376.7	360.3	336.2	277.9	215.5	190.4
51°	311.1	370.3	397.2	407.7	358.5	351.2	335.3	310.7	247.8	188.6	165.8
51.5°	283.8	346.2	372.2	381.7	333.4	325.7	309.7	281.5	218.6	164.4	143.9
52°	254.6	321.1	346.6	356.7	307.9	299.7	280.1	251.4	191.3	143.9	126.2
52.5°	226.4	293.8	321.1	333.0	280.1	271.0	249.6	221.4	166.7	125.7	110.7
53°	198.1	263.7	293.4	306.6	250.1	240.5	219.6	193.6	145.3	110.7	97.5
53.5°	172.6	234.1	262.8	278.8	221.4	210.9	192.2	168.1	127.1	97.5	86.1
54°	155.8	205.0	231.4	247.8	192.7	184.0	166.3	146.7	111.6	86.5	76.5
54.5°	138.9	179.0	202.2	218.6	166.7	159.4	143.9	128.0	98.4	76.5	68.3
55°	122.1	154.9	176.3	189.0	144.4	138.0	125.3	112.1	86.5	68.3	61.0
55.5°	105.2	139.4	154.4	164.9	124.8	119.8	109.8	97.9	77.0	61.0	54.7
56°	88.8	123.4	138.0	148.5	108.4	103.9	96.1	86.5	68.3	54.7	49.2
56.5°	78.3	107.5	122.1	132.1	94.7	91.6	84.7	76.5	61.0	49.2	44.2
57°	69.2	92.0	106.1	115.7	83.4	80.6	74.7	67.9	54.7	44.6	40.5
57.5°	61.9	81.5	90.2	99.8	73.3	71.1	66.5	60.6	49.2	41.0	37.4
58°	55.1	72.4	79.7	83.4	65.1	63.3	59.2	54.2	44.2	37.4	33.7
58.5°	49.7	64.2	70.6	73.3	57.9	56.5	52.8	48.3	40.5	33.7	30.5
59°	44.6	57.4	62.9	65.1	51.5	50.1	47.4	43.7	37.4	30.5	26.9
59.5°	40.1	51.5	56.0	57.9	46.0	45.1	43.7	40.1	33.7	26.9	24.6
60°	36.0	46.0	50.1	51.5	42.4	41.5	40.1	36.9	30.1	24.6	22.3
60.5°	32.8	41.5	45.1	46.0	38.7	37.8	36.4	33.3	26.9	22.3	20.0
61°	29.6	37.4	40.5	41.5	35.1	34.2	32.8	29.6	24.1	20.0	18.7
61.5°	26.9	33.7	36.4	37.4	31.4	30.5	29.2	26.4	21.9	18.7	16.9
62°	24.1	30.5	32.8	33.7	27.3	26.9	25.5	23.7	20.0	16.9	15.5
62.5°	22.3	27.8	30.1	30.5	25.1	24.6	23.2	21.9	18.2	15.5	14.1
63°	20.0	25.1	27.3	27.8	22.8	22.3	21.0	19.6	16.9	14.1	12.8
63.5°	18.2	22.8	24.6	25.1	20.5	20.0	19.1	17.8	15.0	12.8	11.8
64°	16.9	21.0	22.3	22.8	18.7	18.2	17.3	16.4	14.1	11.8	10.9
64.5°	15.5	19.1	20.5	20.5	16.9	16.9	15.9	15.0	12.8	10.9	10.0
65°	14.6	17.3	18.7	18.7	15.5	15.5	14.6	13.7	11.8	10.0	9.1
65.5°	13.2	15.9	16.9	17.3	14.1	14.1	13.2	12.3	10.9	9.1	8.2
66°	11.8	14.6	15.5	15.9	13.2	12.8	12.3	11.4	9.6	8.2	7.7



TEST NUMBER: P776575

CATALOG NUMBER: HCDJBL54050CSD-HCD42TRH-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	9.1	10.9	11.8	11.8	10.0	10.0	9.1	8.7	7.3	6.4	5.9
68°	8.2	10.0	10.9	10.9	9.1	9.1	8.7	8.2	6.8	5.9	5.5
68.5°	7.3	9.1	10.0	10.0	8.2	8.2	7.7	7.3	6.4	5.5	5.0
69°	6.8	8.7	9.1	9.1	7.7	7.7	7.3	6.8	5.9	5.0	4.6
69.5°	6.4	7.7	8.2	8.7	7.3	6.8	6.4	6.4	5.0	4.6	4.1
70°	5.5	7.3	7.7	7.7	6.4	6.4	5.9	5.5	4.6	4.1	3.6
70.5°	5.0	6.4	6.8	7.3	5.9	5.9	5.5	5.0	4.6	3.6	3.6
71°	4.6	5.9	6.4	6.4	5.5	5.5	5.0	4.6	4.1	3.6	3.2
71.5°	4.1	5.5	5.9	5.9	5.0	5.0	4.6	4.6	3.6	3.2	3.2
72°	4.1	5.0	5.5	5.5	4.6	4.6	4.1	4.1	3.2	2.7	2.7
72.5°	3.6	4.6	5.0	5.0	4.1	4.1	4.1	3.6	3.2	2.7	2.3
73°	3.2	4.1	4.6	4.6	4.1	3.6	3.6	3.2	2.7	2.3	2.3
73.5°	3.2	3.6	4.1	4.1	3.6	3.6	3.2	3.2	2.3	2.3	2.3
74°	2.7	3.6	3.6	4.1	3.2	3.2	3.2	2.7	2.3	1.8	1.8
74.5°	2.3	3.2	3.6	3.6	3.2	2.7	2.7	2.7	2.3	1.8	1.8
75°	2.3	2.7	3.2	3.2	2.7	2.7	2.7	2.3	1.8	1.4	1.4
75.5°	1.8	2.7	2.7	3.2	2.7	2.3	2.3	2.3	1.8	1.4	1.4
76°	1.8	2.3	2.7	2.7	2.3	2.3	2.3	1.8	1.4	1.4	1.4
76.5°	1.8	2.3	2.3	2.7	2.3	2.3	1.8	1.8	1.4	0.9	0.9
77°	1.4	1.8	2.3	2.3	1.8	1.8	1.8	1.4	1.4	0.9	0.9
77.5°	1.4	1.8	1.8	2.3	1.8	1.8	1.4	1.4	0.9	0.9	0.9
78°	1.4	1.4	1.8	1.8	1.4	1.4	1.4	1.4	0.9	0.9	0.9
78.5°	0.9	1.4	1.8	1.8	1.4	1.4	1.4	0.9	0.9	0.9	0.9
79°	0.9	1.4	1.4	1.4	1.4	1.4	1.4	0.9	0.9	0.5	0.5
79.5°	0.9	1.4	1.4	1.4	1.4	1.4	0.9	0.9	0.9	0.5	0.5
80°	0.9	0.9	1.4	1.4	0.9	0.9	0.9	0.9	0.5	0.5	0.5
80.5°	0.5	0.9	0.9	1.4	0.9	0.9	0.9	0.9	0.5	0.5	0.5
81°	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.5	0.5	0.5	0.5
81.5°	0.5	0.9	0.9	0.9	0.9	0.9	0.5	0.5	0.5	0.5	0.5
82°	0.5	0.5	0.9	0.9	0.9	0.9	0.5	0.5	0.5	0.0	0.5
82.5°	0.5	0.5	0.9	0.9	0.5	0.5	0.5	0.5	0.5	0.0	0.0
83°	0.5	0.5	0.5	0.9	0.5	0.5	0.5	0.5	0.0	0.0	0.0
83.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0
84°	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
84.5°	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
85.5°	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
86.5°	0.0	0.0	0.0	0.5	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: P776575
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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: P776575

CATALOG NUMBER: HCDJBL54050CSD-HCD42TRH-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	4535.1	4535.1	4535.1	4535.1	4535.1	4535.1
0.5°	4518.7	4534.6	4535.1	4534.6	4534.2	4536.5
1°	4508.2	4527.8	4528.7	4529.2	4529.6	4536.0
1.5°	4496.4	4519.2	4519.6	4521.4	4524.2	4533.3
2°	4483.6	4508.2	4510.0	4511.9	4516.0	4528.7
2.5°	4469.5	4496.4	4497.7	4500.9	4505.9	4523.3
3°	4454.0	4482.7	4485.0	4488.6	4495.5	4516.0
3.5°	4438.5	4468.6	4470.9	4475.4	4484.1	4507.8
4°	4421.2	4453.1	4455.4	4461.3	4471.3	4498.7
4.5°	4403.9	4436.7	4438.5	4445.8	4457.7	4488.6
5°	4383.0	4418.9	4422.1	4429.9	4444.0	4478.6
5.5°	4360.6	4399.8	4403.5	4413.0	4429.0	4466.8
6°	4336.5	4379.3	4383.9	4394.8	4412.6	4453.6
6.5°	4306.4	4356.1	4360.6	4374.8	4394.8	4439.4
7°	4275.9	4329.7	4336.5	4353.3	4376.1	4424.9
7.5°	4238.1	4301.4	4308.7	4330.1	4356.5	4409.4
8°	4200.7	4267.3	4279.1	4303.7	4333.8	4391.2
8.5°	4156.1	4230.8	4244.9	4274.1	4308.7	4372.0
9°	4110.1	4190.3	4207.1	4241.7	4282.3	4350.6
9.5°	4059.5	4146.1	4164.8	4205.8	4253.1	4328.3
10°	4009.0	4098.3	4120.1	4165.7	4221.2	4303.7
10.5°	3958.4	4047.2	4072.3	4122.4	4184.4	4276.4
11°	3909.2	3995.8	4023.1	4076.8	4145.6	4247.7
11.5°	3860.0	3943.8	3970.3	4028.6	4104.6	4216.2
12°	3820.9	3894.6	3922.4	3979.8	4060.0	4182.5
12.5°	3782.1	3849.1	3874.1	3931.1	4013.5	4146.5
13°	3745.7	3806.7	3832.7	3887.8	3969.3	4107.4
13.5°	3711.1	3767.6	3794.0	3845.0	3926.1	4066.8
14°	3675.5	3730.7	3757.1	3807.2	3884.2	4027.2
14.5°	3645.5	3697.0	3723.4	3771.7	3845.0	3987.6
15°	3611.3	3661.9	3689.2	3736.1	3807.6	3946.6
15.5°	3581.3	3629.5	3656.4	3701.5	3772.1	3908.3
16°	3550.7	3599.0	3623.2	3667.3	3736.1	3871.0
16.5°	3516.1	3567.6	3592.2	3635.0	3701.1	3837.2
17°	3479.2	3538.0	3560.3	3601.7	3669.6	3802.2
17.5°	3430.9	3504.7	3528.4	3569.0	3635.9	3768.0
18°	3383.1	3466.0	3491.1	3536.2	3603.1	3734.3
18.5°	3335.3	3422.7	3450.5	3498.3	3568.5	3702.0
19°	3287.4	3375.8	3408.2	3459.2	3532.5	3670.1
19.5°	3239.2	3324.3	3360.3	3413.2	3492.9	3636.8
20°	3180.9	3269.7	3308.4	3365.3	3451.0	3602.2
20.5°	3118.0	3213.2	3255.1	3313.0	3405.0	3565.3
21°	3056.0	3157.2	3196.8	3256.0	3355.3	3524.8

TEST NUMBER: P776575

CATALOG NUMBER: HCDJBL54050CSD-HCD42TRH-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2865.2	2987.7	3010.9	3067.9	3186.3	3390.8
23°	2798.2	2927.6	2944.9	3002.7	3126.6	3342.6
23.5°	2736.3	2865.2	2879.3	2940.3	3064.7	3291.5
24°	2666.1	2797.8	2815.1	2877.0	3004.1	3239.6
24.5°	2602.4	2731.3	2747.2	2813.3	2941.7	3187.2
25°	2534.9	2657.9	2681.6	2752.2	2882.9	3131.7
25.5°	2468.9	2589.1	2616.0	2688.4	2822.4	3072.9
26°	2401.9	2519.4	2548.6	2625.6	2762.7	3010.9
26.5°	2336.8	2449.8	2483.9	2559.5	2701.2	2946.3
27°	2268.9	2376.0	2414.7	2493.0	2636.5	2880.7
27.5°	2203.3	2305.4	2346.8	2425.6	2571.4	2813.7
28°	2135.4	2233.8	2278.5	2352.3	2504.0	2744.0
28.5°	2068.0	2161.4	2211.5	2286.7	2434.7	2674.3
29°	1997.0	2091.7	2142.3	2217.0	2365.0	2602.4
29.5°	1926.4	2021.6	2075.3	2149.6	2291.2	2534.0
30°	1859.0	1954.2	2007.4	2084.0	2221.1	2462.5
30.5°	1788.8	1887.6	1937.3	2016.6	2148.2	2389.2
31°	1723.7	1823.4	1868.5	1950.5	2076.2	2316.7
31.5°	1658.5	1759.2	1799.3	1884.5	2004.7	2243.0
32°	1595.7	1696.8	1732.8	1818.4	1935.9	2169.2
32.5°	1534.6	1631.7	1666.7	1752.4	1868.1	2095.8
33°	1472.2	1571.5	1605.2	1684.5	1799.3	2022.0
33.5°	1413.5	1511.4	1543.3	1612.1	1731.0	1950.5
34°	1353.3	1451.3	1481.3	1549.7	1662.6	1875.8
34.5°	1296.4	1391.1	1419.4	1487.3	1595.2	1803.8
35°	1240.4	1332.8	1357.9	1424.8	1527.8	1731.9
35.5°	1184.8	1279.1	1299.1	1362.4	1460.4	1660.8
36°	1131.5	1225.3	1242.6	1300.9	1393.0	1596.1
36.5°	1080.9	1175.7	1186.6	1240.4	1326.0	1531.0
37°	1031.3	1123.3	1133.3	1179.8	1262.2	1465.8
37.5°	984.4	1073.6	1080.5	1120.1	1201.6	1401.2
38°	937.9	1024.9	1030.4	1062.3	1142.4	1336.0
38.5°	892.8	977.5	981.6	1005.8	1087.8	1274.5
39°	850.9	934.3	934.3	950.2	1034.5	1216.7
39.5°	807.6	888.7	890.1	899.2	982.1	1160.6
40°	768.5	847.7	845.4	850.0	931.1	1106.4
40.5°	729.3	805.8	803.5	805.3	881.9	1051.8
41°	692.4	767.1	762.5	763.0	836.3	1000.3
41.5°	658.2	727.9	723.4	725.2	792.6	951.1
42°	624.5	691.9	686.9	689.2	752.5	903.3
42.5°	593.1	656.4	651.8	655.9	712.9	857.7
43°	560.7	622.2	618.1	624.1	676.4	814.9
43.5°	531.6	589.4	586.2	594.4	641.8	771.6



TEST NUMBER: P776575

CATALOG NUMBER: HCDJBL54050CSD-HCD42TRH-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	448.2	497.9	497.4	509.3	548.9	655.9
45.5°	423.6	469.2	469.6	483.3	520.2	620.4
46°	400.9	441.8	443.2	456.9	492.4	585.3
46.5°	378.1	416.3	418.2	431.8	465.5	552.5
47°	355.3	392.7	394.9	408.1	439.6	521.1
47.5°	332.1	370.3	372.2	385.4	414.1	491.0
48°	310.2	347.6	350.3	363.5	390.4	461.9
48.5°	283.3	326.1	329.3	342.1	368.1	433.2
49°	255.1	302.5	306.6	320.7	345.7	406.8
49.5°	226.4	277.0	282.0	297.9	323.4	383.5
50°	199.1	249.2	255.1	272.4	300.2	358.9
50.5°	174.0	220.5	227.8	245.1	273.3	335.7
51°	150.3	192.7	200.0	218.2	245.5	311.1
51.5°	131.2	168.1	174.5	191.3	218.2	283.8
52°	114.3	151.2	157.6	166.7	190.9	254.6
52.5°	100.7	134.8	140.3	150.3	166.3	226.4
53°	88.4	118.9	123.0	133.9	150.3	198.1
53.5°	78.3	102.5	106.1	118.0	133.9	172.6
54°	69.7	86.1	88.8	101.6	117.5	155.8
54.5°	62.4	75.6	78.3	85.2	101.1	138.9
55°	55.6	67.4	69.7	75.6	85.2	122.1
55.5°	50.1	60.1	61.9	67.0	75.2	105.2
56°	45.1	53.8	55.6	59.7	67.0	88.8
56.5°	41.5	48.3	49.7	53.3	59.7	78.3
57°	37.8	43.7	44.6	47.8	53.3	69.2
57.5°	34.2	39.2	40.1	42.8	47.8	61.9
58°	30.5	35.5	36.4	38.7	42.8	55.1
58.5°	27.3	31.9	32.8	35.1	38.7	49.7
59°	24.6	29.2	29.6	31.9	35.1	44.6
59.5°	22.3	26.4	26.9	28.7	31.4	40.1
60°	20.5	24.1	24.6	26.0	28.7	36.0
60.5°	18.7	21.9	22.3	23.7	26.0	32.8
61°	16.9	19.6	20.0	21.4	23.7	29.6
61.5°	15.5	18.2	18.7	19.6	21.4	26.9
62°	14.1	16.9	17.3	17.8	19.6	24.1
62.5°	12.8	15.5	15.9	16.4	17.8	22.3
63°	11.8	14.1	14.6	15.0	16.4	20.0
63.5°	10.9	12.8	13.2	13.7	15.0	18.2
64°	10.0	11.4	11.8	12.3	13.7	16.9
64.5°	9.1	10.5	10.9	11.4	12.3	15.5
65°	8.2	9.6	10.0	10.5	11.4	14.6
65.5°	7.7	9.1	9.1	9.6	10.5	13.2
66°	6.8	8.2	8.2	8.7	9.6	11.8



TEST NUMBER: P776575

CATALOG NUMBER: HCDJBL54050CSD-HCD42TRH-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	5.5	6.4	6.4	6.8	7.3	9.1
68°	5.0	5.9	5.9	6.4	6.8	8.2
68.5°	4.6	5.5	5.5	5.9	6.4	7.3
69°	4.1	5.0	5.0	5.0	5.5	6.8
69.5°	3.6	4.6	4.6	5.0	5.0	6.4
70°	3.6	4.1	4.1	4.6	4.6	5.5
70.5°	3.2	3.6	3.6	4.1	4.1	5.0
71°	3.2	3.6	3.6	3.6	4.1	4.6
71.5°	2.7	3.2	3.2	3.2	3.6	4.1
72°	2.3	2.7	2.7	3.2	3.2	4.1
72.5°	2.3	2.7	2.7	2.7	3.2	3.6
73°	2.3	2.3	2.3	2.7	2.7	3.2
73.5°	1.8	2.3	2.3	2.3	2.3	3.2
74°	1.8	1.8	1.8	2.3	2.3	2.7
74.5°	1.4	1.8	1.8	1.8	1.8	2.3
75°	1.4	1.8	1.8	1.8	1.8	2.3
75.5°	1.4	1.4	1.4	1.8	1.8	1.8
76°	1.4	1.4	1.4	1.4	1.4	1.8
76.5°	0.9	1.4	1.4	1.4	1.4	1.8
77°	0.9	0.9	1.4	1.4	1.4	1.4
77.5°	0.9	0.9	0.9	0.9	0.9	1.4
78°	0.9	0.9	0.9	0.9	0.9	1.4
78.5°	0.9	0.9	0.9	0.9	0.9	0.9
79°	0.5	0.9	0.9	0.9	0.9	0.9
79.5°	0.5	0.5	0.5	0.5	0.5	0.9
80°	0.5	0.5	0.5	0.5	0.5	0.9
80.5°	0.5	0.5	0.5	0.5	0.5	0.5
81°	0.5	0.5	0.5	0.5	0.5	0.5
81.5°	0.5	0.5	0.5	0.5	0.5	0.5
82°	0.5	0.5	0.5	0.5	0.5	0.5
82.5°	0.0	0.5	0.5	0.5	0.5	0.5
83°	0.0	0.5	0.5	0.5	0.0	0.5
83.5°	0.0	0.0	0.0	0.0	0.0	0.5
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: P776575
CATALOG NUMBER: HCDJBS4050CSD-HCD42TRH-5000lm-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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Cooper Lighting Solutions Photometric Lab
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Peachtree City, GA 30269

Scaled Data Report





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

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Scaled Data Report



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Scaled Data Report





21.5°	3481.9	3643.2	3731.1	3774.4	3706.5	3683.3	3631.8	3524.3	3348.0	3144.4	3031.4
22°	3437.8	3607.7	3697.4	3740.2	3665.5	3645.5	3594.5	3483.8	3301.6	3080.2	2969.5



44°	731.1	864.6	942.0	973.0	878.2	845.0	809.0	751.6	650.5	558.0	520.2
44.5°	692.8	817.6	888.7	917.9	827.2	795.3	761.2	711.1	615.4	528.9	493.3



66.5°	10.5	13.2	14.6	14.6	11.8	11.8	10.9	10.5	9.1	7.7	6.8
67°	9.6	11.8	13.2	13.2	10.9	10.5	10.0	9.6	8.2	6.8	6.4



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°	2993.2	3101.1	3136.7	3194.5	3302.0	3481.9
22°	2931.2	3044.2	3074.3	3130.3	3245.1	3437.8



44°	503.3	557.5	555.3	564.4	609.0	731.1
44.5°	475.6	527.0	525.7	537.1	579.0	692.8

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66.5°	6.4	7.3	7.7	8.2	8.7	10.5
67°	5.9	6.8	6.8	7.3	8.2	9.6

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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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Scaled Data Report



(END OF REPORT)