

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: P776720

Luminaire Tested: HCDJBS4050CSD-HCD6TSQC-5000lm-2700K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776720
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2310613A001)
Test Lab:
Issue Date: 2/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL54050CSD-HCD6TSQC-5000lm-2700K
Description: 6 INCH SQUARE MEDIUM SPECULAR CLEAR TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 2700K CCT
Ballast/Driver: -

Summary

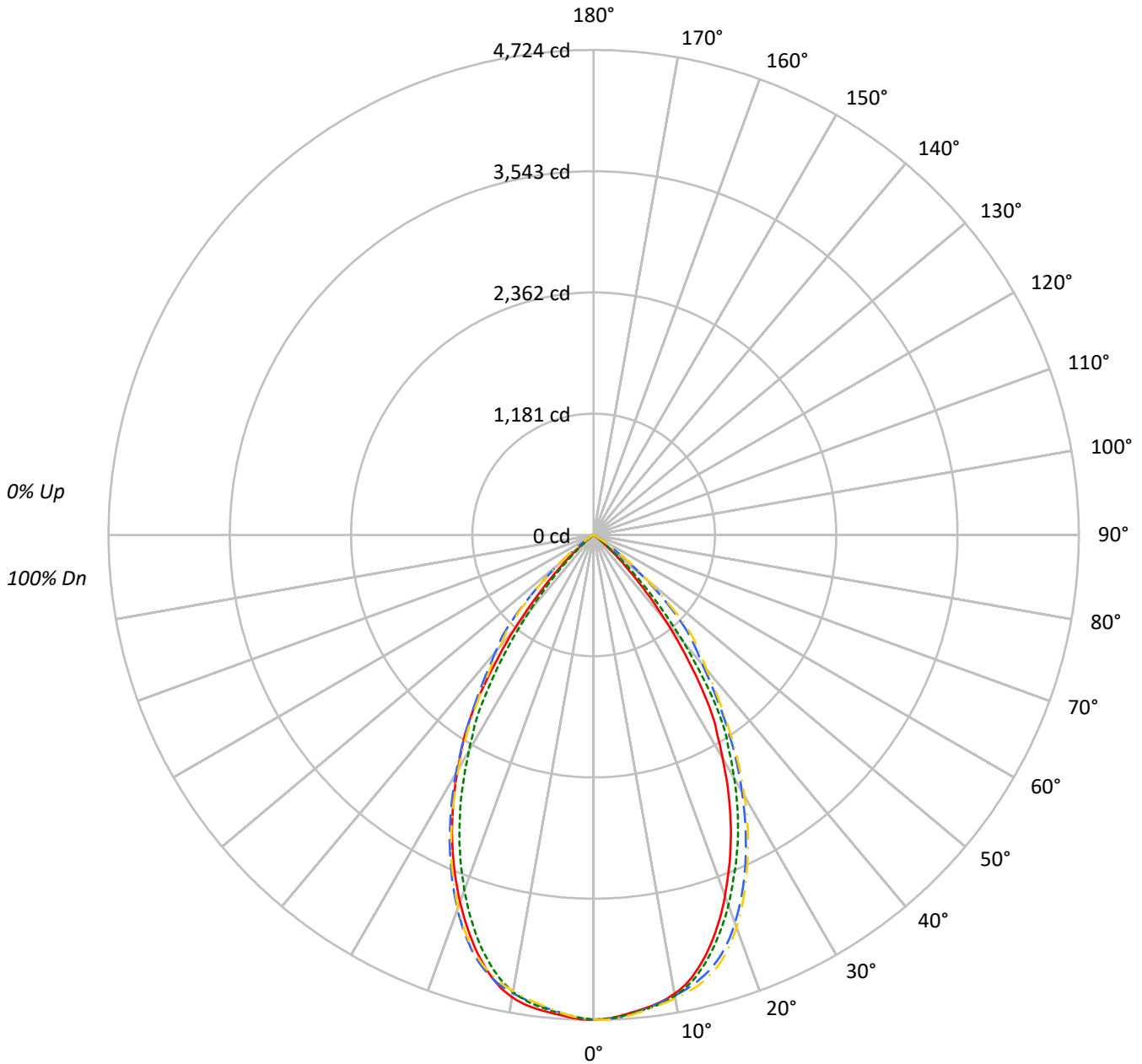
Lumens per Lamp: N/A
Luminaire Lumens: 5149.9 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 0.99
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P776720
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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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93	93	93	93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85	85	85	85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	86	83	80	79	79	79	79
4	96	87	82	77	94	86	81	77	84	79	76	82	78	75	80	77	74	72	72	72	72
5	90	81	75	70	89	80	74	70	78	73	69	77	72	69	75	71	68	67	67	67	67
6	85	76	69	65	84	75	69	64	73	68	64	72	67	64	71	66	63	62	62	62	62
7	81	71	64	60	79	70	64	60	69	63	59	67	63	59	66	62	59	57	57	57	57
8	76	66	60	55	75	65	59	55	64	59	55	63	58	55	62	58	54	53	53	53	53
9	72	62	56	51	71	61	55	51	60	55	51	60	55	51	59	54	51	49	49	49	49
10	69	58	52	48	68	58	52	48	57	51	48	56	51	48	55	51	47	46	46	46	46

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	203296	203296	203296	203296
5°	201393	201829	202123	201121
10°	198405	199284	199878	197671
15°	188599	190708	190346	186509
20°	171340	175766	174304	168627
25°	150254	157546	155062	146772
30°	124724	136044	131699	120711
35°	97238	112176	104565	91178
40°	61297	75888	67441	55328
45°	29653	40522	33812	25355
50°	9002	14187	10650	7234
55°	1194	1096	1058	923
60°	827	861	861	706
65°	693	693	744	601
70°	579	629	629	453
75°	532	532	532	449
80°	446	446	446	347
85°	247	445	247	247

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 135°
 Vertical Angle: 45°
 Luminance: 78585 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	441.5	8.6
10°-20°	1196.5	23.2
20°-30°	1512.5	29.4
30°-40°	1278.0	24.8
40°-50°	616.9	12.0
50°-60°	92.5	1.8
60°-70°	7.8	0.2
70°-80°	3.5	0.1
80°-90°	0.8	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°	3150.5	61.2
0°-40°	4428.5	86.0
0°-60°	5137.9	99.8
0°-90°	5149.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5149.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4722	4722	4722	4722	4722	
5°	4660	4670	4677	4653	4660	441
15°	4231	4278	4270	4184	4231	1178
25°	3163	3316	3264	3090	3163	1440
35°	1850	2134	1989	1735	1850	1131
45°	487	666	555	416	487	397
55°	16	15	14	12	16	31
65°	7	7	7	6	7	7
75°	3	3	3	3	3	3
85°	0	1	0	0	0	1
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°	4721.7	4721.7	4721.7	4721.7	4721.7	4721.7	4721.7	4721.7	4721.7	4721.7	4721.7
0.5°	4722.1	4722.6	4722.1	4722.6	4717.6	4720.8	4724.0	4726.7	4723.5	4720.3	4719.0
1°	4719.4	4721.7	4721.7	4722.6	4717.1	4721.7	4724.4	4725.8	4722.6	4716.2	4714.4
1.5°	4714.9	4719.0	4719.9	4721.7	4715.3	4719.9	4724.0	4723.5	4719.4	4711.7	4708.9
2°	4709.8	4715.3	4717.1	4719.9	4711.2	4717.6	4721.7	4719.0	4713.9	4705.3	4702.1
2.5°	4702.6	4711.2	4713.0	4716.2	4706.7	4713.5	4717.6	4713.9	4708.9	4698.0	4694.4
3°	4695.7	4704.4	4707.1	4711.7	4701.2	4708.5	4712.1	4707.1	4702.6	4689.8	4684.8
3.5°	4686.2	4697.1	4699.8	4705.3	4694.4	4701.6	4705.3	4701.2	4695.7	4681.6	4675.7
4°	4676.6	4688.4	4691.6	4697.5	4686.2	4695.3	4697.5	4693.4	4688.4	4672.9	4664.7
4.5°	4667.5	4678.4	4682.1	4689.3	4678.4	4686.6	4689.8	4686.6	4683.4	4664.3	4654.3
5°	4659.7	4668.8	4671.1	4680.2	4669.8	4678.0	4680.7	4680.2	4676.6	4656.1	4643.8
5.5°	4651.1	4659.7	4660.6	4670.2	4662.0	4669.3	4671.6	4672.9	4669.8	4647.4	4634.2
6°	4642.0	4651.1	4648.3	4659.3	4653.8	4660.6	4662.5	4665.2	4662.5	4638.3	4625.6
6.5°	4632.4	4642.4	4637.4	4648.8	4645.2	4652.0	4652.4	4657.0	4656.5	4629.2	4615.1
7°	4623.8	4632.4	4626.5	4638.8	4636.1	4642.4	4643.3	4649.3	4648.3	4618.7	4604.6
7.5°	4611.9	4621.9	4615.1	4627.9	4626.5	4632.4	4633.8	4640.2	4639.2	4607.4	4593.7
8°	4601.4	4611.5	4604.6	4616.5	4615.6	4622.4	4624.7	4631.0	4629.2	4595.5	4582.8
8.5°	4587.8	4599.6	4592.8	4604.6	4604.2	4610.5	4615.1	4620.6	4618.3	4582.8	4571.8
9°	4572.3	4587.3	4580.9	4592.3	4590.5	4598.2	4605.5	4608.7	4605.1	4568.6	4560.0
9.5°	4555.4	4572.7	4569.5	4578.7	4575.5	4585.9	4595.5	4596.9	4589.1	4552.7	4546.8
10°	4538.1	4556.8	4556.8	4565.0	4558.2	4571.4	4585.5	4580.9	4571.8	4534.5	4532.6
10.5°	4519.4	4540.4	4544.0	4550.0	4540.8	4555.0	4574.6	4564.5	4553.6	4516.2	4519.9
11°	4497.1	4523.1	4530.8	4533.1	4521.3	4537.2	4562.7	4545.4	4531.7	4496.7	4504.4
11.5°	4471.6	4503.9	4517.2	4516.2	4499.8	4519.4	4550.0	4527.2	4508.0	4473.4	4487.1
12°	4444.7	4483.0	4501.2	4497.1	4475.2	4500.3	4536.3	4505.3	4480.3	4448.4	4468.0
12.5°	4415.1	4458.8	4484.8	4477.5	4447.5	4477.5	4523.1	4481.6	4450.2	4420.6	4447.9
13°	4382.3	4432.4	4467.0	4455.7	4417.8	4454.3	4506.7	4455.2	4418.3	4389.6	4424.2
13.5°	4346.8	4404.2	4447.9	4433.3	4385.5	4427.0	4488.9	4427.0	4384.1	4357.7	4400.1
14°	4310.3	4374.1	4427.9	4407.8	4351.3	4398.7	4468.9	4396.0	4347.2	4324.0	4372.7
14.5°	4272.1	4341.8	4405.5	4379.1	4315.8	4367.3	4447.9	4362.7	4309.4	4288.5	4344.5
15°	4231.1	4306.7	4381.4	4348.1	4278.4	4334.9	4426.0	4329.0	4270.3	4251.1	4312.2
15.5°	4187.8	4271.2	4355.9	4316.7	4240.2	4301.2	4401.4	4293.9	4229.3	4214.7	4278.4
16°	4143.6	4232.9	4328.6	4283.9	4199.6	4267.1	4374.1	4258.0	4186.9	4174.1	4241.6
16.5°	4097.6	4193.7	4297.6	4248.4	4158.6	4231.1	4344.0	4219.2	4143.6	4133.1	4201.9
17°	4051.6	4152.7	4265.7	4211.5	4116.3	4192.8	4311.2	4178.2	4098.1	4090.3	4160.0
17.5°	4001.9	4109.9	4231.1	4173.7	4072.5	4154.1	4275.7	4137.7	4049.8	4047.9	4119.0
18°	3953.6	4067.5	4193.7	4135.4	4026.1	4114.5	4237.5	4095.8	4002.8	4001.9	4072.5
18.5°	3903.5	4022.9	4154.5	4094.9	3980.1	4073.5	4197.8	4052.0	3954.6	3955.5	4025.2
19°	3851.2	3976.9	4112.2	4053.4	3933.6	4031.1	4155.0	4006.9	3905.4	3908.5	3977.3
19.5°	3796.0	3930.0	4069.4	4009.7	3886.2	3987.8	4111.3	3961.8	3854.8	3862.5	3930.4
20°	3739.5	3880.8	4023.8	3967.3	3836.1	3943.2	4066.2	3914.9	3804.2	3812.0	3876.7
20.5°	3683.1	3832.9	3976.9	3923.1	3784.6	3898.1	4018.8	3867.1	3752.3	3761.9	3824.7
21°	3624.3	3781.9	3928.6	3878.0	3732.7	3850.2	3969.6	3818.8	3699.0	3712.7	3771.0



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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°	3459.4	3618.8	3776.4	3735.4	3576.9	3703.6	3818.4	3670.8	3539.6	3555.0	3606.5
23°	3401.5	3563.7	3723.1	3685.3	3527.7	3651.2	3763.7	3619.7	3484.4	3503.1	3548.7
23.5°	3341.4	3509.5	3668.5	3635.2	3474.9	3599.2	3710.8	3568.7	3429.3	3447.1	3490.8
24°	3283.1	3457.1	3612.9	3583.3	3422.0	3548.2	3655.7	3516.3	3374.2	3391.1	3433.0
24.5°	3223.4	3403.4	3557.3	3531.4	3369.2	3499.5	3599.7	3460.8	3319.1	3334.6	3375.1
25°	3162.8	3347.3	3500.4	3480.3	3316.3	3445.3	3540.9	3405.6	3264.0	3278.5	3317.3
25.5°	3100.9	3289.0	3443.0	3429.8	3263.5	3391.5	3483.5	3350.1	3205.2	3225.2	3259.4
26°	3038.0	3230.7	3382.9	3376.5	3208.4	3337.3	3426.6	3294.5	3146.9	3166.5	3193.8
26.5°	2974.7	3170.6	3322.7	3320.9	3151.0	3283.1	3369.2	3239.4	3085.8	3107.3	3132.3
27°	2910.9	3111.8	3262.6	3266.2	3093.6	3233.4	3311.8	3180.6	3025.7	3047.6	3068.1
27.5°	2844.9	3050.3	3200.2	3211.6	3035.7	3177.4	3254.4	3121.4	2964.7	2987.9	3004.8
28°	2778.4	2990.6	3139.1	3155.1	2977.4	3119.1	3191.1	3062.6	2902.7	2929.1	2938.7
28.5°	2710.9	2927.3	3074.5	3099.1	2919.1	3061.7	3130.0	3002.9	2839.4	2869.0	2876.3
29°	2644.0	2867.2	3011.1	3039.8	2859.0	3003.8	3065.8	2941.4	2777.4	2807.0	2812.5
29.5°	2576.5	2803.4	2948.3	2980.6	2798.8	2948.3	3000.7	2880.4	2712.3	2747.4	2749.2
30°	2508.7	2742.8	2887.7	2924.6	2736.4	2887.7	2935.5	2819.3	2649.0	2685.9	2682.2
30.5°	2445.8	2677.2	2824.8	2864.9	2674.5	2829.4	2874.5	2758.3	2587.0	2624.4	2618.0
31°	2383.9	2613.9	2761.0	2808.9	2614.4	2769.7	2811.6	2696.8	2529.2	2561.5	2550.6
31.5°	2316.9	2548.8	2697.7	2749.2	2557.4	2714.1	2746.9	2633.9	2464.5	2500.9	2484.1
32°	2258.1	2485.0	2635.8	2690.0	2495.0	2652.2	2681.8	2573.4	2409.4	2442.2	2416.2
32.5°	2208.5	2419.8	2571.5	2628.5	2434.4	2593.9	2616.6	2511.4	2347.9	2386.1	2349.2
33°	2151.1	2360.6	2505.5	2571.5	2386.6	2533.3	2549.2	2454.9	2287.3	2325.5	2282.3
33.5°	2080.0	2300.9	2440.3	2512.8	2329.6	2480.4	2484.5	2394.3	2218.5	2271.3	2215.8
34°	2009.9	2238.5	2376.1	2454.9	2267.7	2418.9	2418.0	2335.6	2146.1	2213.9	2151.1
34.5°	1929.7	2183.0	2311.0	2397.1	2203.9	2357.9	2352.4	2284.1	2070.4	2156.1	2086.4
35°	1850.0	2135.1	2247.2	2339.2	2134.2	2308.7	2287.3	2221.7	1989.4	2093.2	2022.2
35.5°	1771.6	2080.9	2180.7	2280.0	2062.7	2260.9	2224.0	2163.8	1906.4	2026.3	1960.2
36°	1695.5	2013.5	2116.0	2234.0	1983.4	2197.5	2161.1	2098.7	1823.1	1953.4	1898.7
36.5°	1611.7	1948.8	2053.6	2176.1	1903.3	2142.0	2100.0	2028.5	1738.3	1880.5	1839.9
37°	1536.5	1872.3	1991.2	2118.7	1819.0	2075.9	2038.1	1956.1	1657.7	1804.4	1782.5
37.5°	1461.8	1798.5	1930.6	2060.0	1739.3	2008.9	1979.3	1880.5	1579.4	1727.4	1727.4
38°	1386.7	1725.6	1869.5	1994.4	1657.3	1936.1	1922.4	1803.0	1501.5	1650.4	1672.7
38.5°	1312.0	1655.4	1812.1	1926.0	1579.4	1864.1	1867.3	1722.9	1427.2	1573.4	1621.7
39°	1235.4	1583.9	1754.7	1852.7	1502.4	1787.1	1814.4	1646.3	1352.5	1500.1	1573.4
39.5°	1161.6	1512.4	1700.1	1777.5	1426.8	1710.6	1761.6	1570.3	1276.4	1429.0	1531.1
40°	1090.6	1440.9	1650.4	1702.4	1350.2	1634.0	1711.9	1497.4	1199.9	1360.2	1487.8
40.5°	1020.0	1369.4	1608.5	1624.0	1275.5	1560.2	1665.0	1426.8	1125.2	1292.8	1443.2
41°	953.9	1298.3	1566.6	1552.5	1200.8	1486.0	1624.5	1356.6	1051.8	1223.1	1414.5
41.5°	889.7	1227.2	1524.7	1480.5	1126.6	1415.8	1583.5	1287.4	980.8	1155.3	1375.3
42°	825.9	1157.1	1482.8	1409.0	1053.2	1345.7	1537.9	1218.6	912.9	1086.9	1328.8
42.5°	762.6	1086.9	1440.9	1337.5	981.2	1278.3	1503.7	1149.3	848.7	1020.0	1283.3
43°	702.4	1021.3	1399.4	1269.6	913.8	1207.6	1475.0	1079.6	785.4	954.4	1223.6
43.5°	644.6	958.5	1355.7	1201.7	848.2	1137.5	1430.4	1010.4	724.8	890.6	1163.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	487.0	774.4	1209.5	999.5	665.5	937.5	1290.6	822.3	555.3	713.8	978.5
45.5°	438.2	716.1	1156.2	935.2	609.1	873.7	1234.5	764.4	502.9	657.3	916.6
46°	392.2	659.2	1099.2	872.4	554.9	812.7	1175.3	706.1	459.2	602.7	856.4
46.5°	348.5	604.0	1042.3	812.7	501.6	754.8	1113.3	650.5	415.5	550.3	797.7
47°	306.6	550.8	984.0	754.4	457.4	696.1	1047.3	596.8	371.7	502.0	741.2
47.5°	266.9	500.2	925.2	698.8	412.7	640.5	982.6	544.8	328.0	458.7	684.7
48°	231.0	451.0	864.2	644.6	368.5	586.3	920.7	494.7	284.7	415.5	631.8
48.5°	199.1	406.3	803.6	591.3	324.3	534.8	860.5	452.4	249.2	372.2	580.4
49°	170.8	361.7	743.4	539.4	280.2	482.9	802.2	410.0	216.8	329.4	530.7
49.5°	152.2	319.8	688.3	490.2	244.6	438.7	745.3	367.6	186.8	286.1	482.9
50°	134.4	280.2	633.2	443.7	211.8	394.0	691.5	325.3	159.0	251.0	441.0
50.5°	116.2	244.6	582.6	399.5	181.3	349.9	639.6	282.9	134.8	217.3	399.1
51°	97.9	210.9	531.6	355.8	153.5	305.7	589.9	246.0	111.6	187.2	357.1
51.5°	80.2	180.9	485.2	315.2	128.9	267.9	539.4	214.1	91.6	158.1	314.8
52°	66.5	154.0	439.1	277.9	106.1	232.3	490.2	182.7	76.5	132.6	279.7
52.5°	53.8	135.8	397.2	242.8	85.2	199.1	447.8	155.3	61.5	108.9	246.0
53°	41.0	117.5	356.2	209.5	71.1	169.0	405.4	128.5	46.5	88.8	215.0
53.5°	28.7	99.3	316.6	179.5	56.9	141.2	362.6	106.1	31.0	73.8	186.3
54°	19.6	81.1	279.2	151.2	42.4	117.1	320.2	85.2	16.4	58.8	160.8
54.5°	17.3	67.9	246.4	128.9	28.2	94.8	277.9	71.1	15.0	43.7	137.1
55°	15.9	54.7	214.6	106.6	14.6	78.8	244.6	56.5	14.1	29.2	115.7
55.5°	14.1	42.4	186.3	84.3	13.7	62.9	211.4	42.4	13.7	15.0	97.0
56°	12.8	30.1	160.4	62.4	13.2	47.4	181.3	27.8	13.2	13.7	80.6
56.5°	12.3	20.0	141.2	45.1	12.8	31.9	153.5	13.7	12.8	13.2	66.5
57°	11.8	18.2	122.1	30.1	12.3	15.9	128.9	12.8	12.3	12.8	57.9
57.5°	11.4	16.4	103.4	17.8	11.8	13.2	106.1	12.8	11.8	12.3	49.2
58°	10.9	14.6	84.3	15.9	11.4	12.8	86.6	12.3	11.8	11.8	40.5
58.5°	10.5	13.2	65.1	14.1	10.9	12.3	69.7	11.8	11.4	11.4	32.3
59°	10.5	11.4	52.8	12.8	10.5	11.8	60.1	11.4	10.9	10.9	23.7
59.5°	10.0	10.9	42.8	10.9	10.5	11.4	50.6	10.9	10.5	10.9	19.1
60°	9.6	10.5	34.6	10.5	10.0	10.9	41.0	10.5	10.0	10.5	15.9
60.5°	9.1	10.5	28.2	10.5	9.6	10.5	31.9	10.5	10.0	10.0	13.2
61°	9.1	10.0	22.8	10.0	9.1	10.5	22.3	10.0	9.6	9.6	11.4
61.5°	8.7	9.6	18.7	9.6	9.1	10.0	18.2	9.6	9.1	9.6	10.0
62°	8.7	9.6	16.9	9.6	8.7	9.6	15.0	9.6	8.7	9.1	9.6
62.5°	8.2	9.1	15.0	9.1	8.2	9.6	12.8	9.1	8.7	8.7	9.1
63°	7.7	8.7	12.8	8.7	8.2	9.1	10.9	8.7	8.2	8.7	8.7
63.5°	7.7	8.7	10.9	8.7	7.7	8.7	10.0	8.7	8.2	8.2	8.2
64°	7.3	8.2	9.1	8.2	7.7	8.7	9.1	8.2	7.7	7.7	8.2
64.5°	7.3	7.7	8.7	8.2	7.3	8.2	9.1	8.2	7.3	7.7	7.7
65°	6.8	7.7	8.7	7.7	6.8	7.7	8.7	7.7	7.3	7.3	7.7
65.5°	6.8	7.3	8.2	7.3	6.8	7.7	8.2	7.3	6.8	7.3	7.3
66°	6.4	7.3	7.7	7.3	6.4	7.3	8.2	7.3	6.8	6.8	7.3



TEST NUMBER: P776720

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQC-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	5.9	6.4	7.3	6.4	5.9	6.8	7.3	6.4	5.9	6.4	6.4
68°	5.5	6.4	6.8	6.4	5.5	6.4	6.8	6.4	5.9	5.9	5.9
68.5°	5.5	5.9	6.8	5.9	5.5	5.9	6.8	5.9	5.5	5.5	5.9
69°	5.0	5.9	6.4	5.9	5.0	5.9	6.4	5.9	5.5	5.5	5.5
69.5°	5.0	5.5	6.4	5.9	5.0	5.5	6.4	5.5	5.0	5.0	5.5
70°	4.6	5.5	5.9	5.5	5.0	5.5	5.9	5.5	5.0	5.0	5.0
70.5°	4.6	5.0	5.9	5.5	4.6	5.5	5.9	5.0	4.6	5.0	5.0
71°	4.6	5.0	5.5	5.0	4.6	5.0	5.5	5.0	4.6	4.6	4.6
71.5°	4.1	4.6	5.5	5.0	4.1	5.0	5.5	4.6	4.1	4.6	4.6
72°	4.1	4.6	5.0	4.6	4.1	4.6	5.0	4.6	4.1	4.1	4.1
72.5°	3.6	4.1	5.0	4.6	4.1	4.6	5.0	4.6	4.1	4.1	4.1
73°	3.6	4.1	4.6	4.6	3.6	4.1	4.6	4.1	3.6	3.6	4.1
73.5°	3.6	4.1	4.6	4.1	3.6	4.1	4.6	4.1	3.6	3.6	3.6
74°	3.2	3.6	4.1	4.1	3.6	4.1	4.1	3.6	3.6	3.6	3.6
74.5°	3.2	3.6	4.1	3.6	3.2	3.6	4.1	3.6	3.2	3.2	3.2
75°	3.2	3.2	3.6	3.6	3.2	3.6	4.1	3.6	3.2	3.2	3.2
75.5°	2.7	3.2	3.6	3.6	3.2	3.6	3.6	3.2	3.2	3.2	2.7
76°	2.7	3.2	3.6	3.2	3.2	3.2	3.6	3.2	2.7	2.7	2.7
76.5°	2.7	2.7	3.2	3.2	2.7	3.2	3.2	3.2	2.7	2.7	2.7
77°	2.7	2.7	3.2	3.2	2.7	3.2	3.2	2.7	2.7	2.7	2.3
77.5°	2.3	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.3	2.3	2.3
78°	2.3	2.3	2.7	2.7	2.3	2.7	2.7	2.3	2.3	2.3	1.8
78.5°	2.3	2.3	2.3	2.7	2.3	2.7	2.7	2.3	2.3	2.3	1.8
79°	1.8	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	1.8	1.8
79.5°	1.8	2.3	2.3	2.3	2.3	2.3	2.3	1.8	1.8	1.8	1.4
80°	1.8	1.8	1.8	2.3	1.8	2.3	2.3	1.8	1.8	1.8	1.4
80.5°	1.8	1.8	1.8	1.8	1.8	2.3	1.8	1.8	1.8	1.4	1.4
81°	1.4	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.4	1.4	1.4
81.5°	1.4	1.4	1.4	1.8	1.8	1.8	1.8	1.4	1.4	1.4	0.9
82°	1.4	1.4	1.4	1.8	1.4	1.8	1.4	1.4	1.4	0.9	0.9
82.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.9	0.9
83°	0.9	1.4	1.4	1.4	1.4	1.4	1.4	0.9	0.9	0.9	0.9
83.5°	0.9	0.9	0.9	1.4	1.4	1.4	0.9	0.9	0.9	0.5	0.9
84°	0.9	0.9	0.9	1.4	0.9	1.4	0.9	0.9	0.9	0.5	0.5
84.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.5	0.9	0.5	0.5
85°	0.5	0.5	0.9	0.9	0.9	0.9	0.9	0.5	0.5	0.5	0.5
85.5°	0.5	0.5	0.5	0.9	0.9	0.9	0.9	0.5	0.5	0.5	0.5
86°	0.5	0.5	0.5	0.9	0.9	0.9	0.5	0.5	0.5	0.0	0.5
86.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0
87°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
88.5°	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P776720

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQC-5000lm-2700K

CANDELA DISTRIBUTION (continued):

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



TEST NUMBER: P776720

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQC-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	4721.7	4721.7	4721.7	4721.7	4721.7	4721.7
0.5°	4717.1	4714.9	4717.1	4719.4	4724.0	4722.1
1°	4711.7	4711.7	4713.0	4714.4	4720.3	4719.4
1.5°	4706.2	4706.7	4707.6	4708.9	4716.7	4714.9
2°	4699.4	4700.7	4700.3	4702.1	4711.7	4709.8
2.5°	4691.6	4693.4	4693.0	4693.4	4703.5	4702.6
3°	4683.0	4685.7	4684.3	4684.3	4696.2	4695.7
3.5°	4674.8	4676.6	4674.3	4674.3	4686.2	4686.2
4°	4666.1	4669.3	4664.7	4663.4	4675.7	4676.6
4.5°	4657.9	4661.6	4655.2	4650.6	4665.2	4667.5
5°	4648.8	4653.4	4646.1	4637.9	4654.7	4659.7
5.5°	4638.8	4645.6	4636.1	4626.0	4644.7	4651.1
6°	4627.9	4637.0	4625.6	4614.6	4634.7	4642.0
6.5°	4617.4	4627.4	4614.6	4603.7	4623.8	4632.4
7°	4605.1	4616.9	4603.3	4592.8	4612.4	4623.8
7.5°	4592.3	4605.5	4590.0	4580.9	4600.1	4611.9
8°	4578.2	4592.8	4575.9	4568.2	4587.8	4601.4
8.5°	4562.3	4577.7	4560.9	4555.4	4574.1	4587.8
9°	4544.0	4559.5	4544.5	4541.8	4559.5	4572.3
9.5°	4525.4	4540.8	4526.7	4528.5	4543.1	4555.4
10°	4504.4	4521.3	4507.1	4513.5	4526.7	4538.1
10.5°	4481.2	4497.1	4485.3	4498.0	4509.0	4519.4
11°	4456.6	4472.1	4462.5	4481.6	4489.8	4497.1
11.5°	4430.1	4443.4	4437.9	4463.4	4469.3	4471.6
12°	4401.4	4412.4	4410.1	4443.8	4446.5	4444.7
12.5°	4370.5	4379.1	4380.5	4421.9	4420.6	4415.1
13°	4337.7	4345.0	4348.1	4399.6	4393.2	4382.3
13.5°	4303.0	4307.6	4314.9	4375.5	4364.1	4346.8
14°	4267.1	4268.0	4279.8	4349.5	4332.2	4310.3
14.5°	4230.2	4227.0	4242.9	4321.3	4299.4	4272.1
15°	4191.0	4184.2	4203.7	4289.8	4263.0	4231.1
15.5°	4150.9	4140.0	4162.7	4256.6	4225.6	4187.8
16°	4108.5	4094.4	4120.8	4220.6	4186.4	4143.6
16.5°	4065.3	4046.1	4077.6	4182.8	4145.9	4097.6
17°	4021.1	3997.8	4034.3	4143.2	4104.4	4051.6
17.5°	3976.0	3948.2	3988.3	4099.9	4059.8	4001.9
18°	3928.6	3898.5	3940.4	4056.1	4015.1	3953.6
18.5°	3883.5	3845.7	3892.2	4010.1	3969.1	3903.5
19°	3833.8	3791.5	3843.9	3962.3	3922.2	3851.2
19.5°	3784.6	3736.4	3793.8	3912.6	3873.9	3796.0
20°	3731.8	3680.3	3743.2	3861.6	3824.3	3739.5
20.5°	3680.8	3622.0	3688.1	3805.6	3774.2	3683.1
21°	3627.0	3565.5	3635.2	3753.7	3720.9	3624.3

TEST NUMBER: P776720

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQC-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	3464.9	3393.8	3467.6	3582.4	3553.7	3459.4
23°	3410.6	3335.0	3412.9	3527.3	3496.3	3401.5
23.5°	3356.0	3275.8	3358.3	3466.7	3441.2	3341.4
24°	3301.3	3214.3	3298.6	3406.1	3387.9	3283.1
24.5°	3246.6	3152.4	3238.9	3342.3	3332.7	3223.4
25°	3186.1	3089.5	3179.2	3283.1	3272.2	3162.8
25.5°	3124.1	3026.6	3117.7	3219.3	3212.9	3100.9
26°	3062.6	2961.5	3056.2	3154.2	3151.9	3038.0
26.5°	3001.1	2897.7	2994.7	3084.9	3092.7	2974.7
27°	2937.8	2830.7	2933.2	3022.5	3028.9	2910.9
27.5°	2873.6	2763.3	2868.1	2956.0	2966.9	2844.9
28°	2809.8	2695.4	2803.9	2888.1	2902.7	2778.4
28.5°	2744.6	2627.1	2740.1	2822.5	2839.4	2710.9
29°	2678.6	2558.3	2674.5	2757.9	2774.7	2644.0
29.5°	2612.1	2491.8	2608.9	2695.0	2712.3	2576.5
30°	2546.0	2428.0	2542.4	2630.8	2646.2	2508.7
30.5°	2480.9	2366.1	2476.8	2565.6	2581.1	2445.8
31°	2415.3	2299.1	2411.6	2498.6	2515.0	2383.9
31.5°	2354.2	2241.3	2347.0	2430.8	2450.8	2316.9
32°	2293.2	2188.9	2286.8	2362.9	2385.2	2258.1
32.5°	2229.4	2120.1	2226.7	2295.5	2320.5	2208.5
33°	2173.8	2054.5	2161.5	2229.0	2261.8	2151.1
33.5°	2122.4	1974.3	2109.6	2160.6	2200.3	2080.0
34°	2056.3	1892.3	2056.8	2093.2	2137.9	2009.9
34.5°	1995.3	1813.1	1988.9	2026.3	2087.3	1929.7
35°	1920.1	1734.7	1924.7	1960.7	2036.7	1850.0
35.5°	1844.5	1660.5	1848.1	1896.4	1973.4	1771.6
36°	1769.8	1583.0	1773.0	1834.9	1911.9	1695.5
36.5°	1696.9	1505.1	1700.5	1773.0	1840.4	1611.7
37°	1624.5	1427.2	1626.3	1714.7	1766.1	1536.5
37.5°	1553.4	1349.8	1556.1	1658.2	1691.0	1461.8
38°	1482.3	1271.9	1485.5	1609.4	1611.3	1386.7
38.5°	1409.4	1195.8	1415.4	1560.7	1545.2	1312.0
39°	1335.6	1121.5	1345.2	1511.9	1478.7	1235.4
39.5°	1262.3	1051.8	1274.2	1463.2	1412.6	1161.6
40°	1189.9	984.4	1201.3	1414.5	1346.1	1090.6
40.5°	1121.1	919.7	1132.0	1373.9	1275.1	1020.0
41°	1054.1	854.1	1063.2	1338.8	1204.9	953.9
41.5°	989.4	791.3	999.9	1300.1	1134.8	889.7
42°	926.1	728.0	937.0	1264.6	1067.8	825.9
42.5°	864.2	671.9	877.8	1227.2	1004.0	762.6
43°	803.6	615.9	818.2	1170.3	942.5	702.4
43.5°	745.3	562.6	759.4	1116.5	881.9	644.6



TEST NUMBER: P776720

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQC-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	579.0	416.4	594.0	936.6	709.7	487.0
45.5°	527.1	371.7	542.6	881.9	654.2	438.2
46°	477.9	329.4	494.3	827.3	601.3	392.2
46.5°	434.1	288.4	448.3	773.1	549.8	348.5
47°	390.4	251.0	404.1	718.8	501.1	306.6
47.5°	347.1	216.4	360.3	669.2	454.6	266.9
48°	303.4	186.3	320.2	618.2	409.5	231.0
48.5°	265.6	159.9	282.9	569.4	365.8	199.1
49°	230.0	142.6	247.4	523.0	326.2	170.8
49.5°	197.7	125.3	215.0	478.3	287.4	152.2
50°	169.9	108.0	185.0	435.5	251.0	134.4
50.5°	145.3	90.7	158.1	395.4	216.8	116.2
51°	123.9	73.8	140.3	358.1	187.7	97.9
51.5°	105.2	60.6	122.5	322.5	161.3	80.2
52°	89.3	47.8	104.8	288.8	143.0	66.5
52.5°	75.2	35.5	86.6	257.8	124.8	53.8
53°	63.3	23.7	69.2	227.8	107.1	41.0
53.5°	51.5	15.5	56.0	200.0	88.8	28.7
54°	39.6	14.1	43.3	174.5	71.1	19.6
54.5°	27.8	13.2	31.4	151.2	57.9	17.3
55°	16.4	12.3	20.5	129.8	45.1	15.9
55.5°	12.3	11.4	18.2	114.3	32.8	14.1
56°	11.8	10.9	16.4	98.9	21.9	12.8
56.5°	11.4	10.5	14.1	83.8	14.1	12.3
57°	10.9	10.0	11.8	68.3	13.2	11.8
57.5°	10.5	9.6	9.6	52.8	12.8	11.4
58°	10.0	9.6	9.6	42.4	11.8	10.9
58.5°	10.0	9.1	9.1	33.7	10.9	10.5
59°	9.6	8.7	9.1	26.9	10.5	10.5
59.5°	9.1	8.7	8.7	21.9	10.5	10.0
60°	9.1	8.2	8.2	17.3	10.0	9.6
60.5°	8.7	7.7	8.2	15.5	9.6	9.1
61°	8.2	7.7	7.7	13.2	9.6	9.1
61.5°	8.2	7.3	7.7	10.9	9.1	8.7
62°	7.7	7.3	7.3	8.7	8.7	8.7
62.5°	7.7	6.8	7.3	8.2	8.7	8.2
63°	7.3	6.8	6.8	8.2	8.2	7.7
63.5°	6.8	6.4	6.8	7.7	8.2	7.7
64°	6.8	6.4	6.4	7.7	7.7	7.3
64.5°	6.4	5.9	6.4	7.3	7.3	7.3
65°	6.4	5.9	5.9	7.3	7.3	6.8
65.5°	5.9	5.5	5.9	6.8	6.8	6.8
66°	5.9	5.5	5.5	6.8	6.8	6.4



TEST NUMBER: P776720

CATALOG NUMBER: HCDJBL54050CSD-HCD6TSQC-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	5.5	4.6	5.0	5.9	5.9	5.9
68°	5.0	4.6	5.0	5.9	5.9	5.5
68.5°	5.0	4.6	4.6	5.5	5.5	5.5
69°	4.6	4.1	4.6	5.5	5.5	5.0
69.5°	4.6	4.1	4.6	5.0	5.5	5.0
70°	4.1	3.6	4.1	5.0	5.0	4.6
70.5°	4.1	3.6	4.1	5.0	5.0	4.6
71°	4.1	3.6	3.6	4.6	4.6	4.6
71.5°	3.6	3.2	3.6	4.6	4.6	4.1
72°	3.6	3.2	3.6	4.1	4.1	4.1
72.5°	3.2	3.2	3.2	4.1	4.1	3.6
73°	3.2	3.2	3.2	3.6	4.1	3.6
73.5°	3.2	2.7	3.2	3.6	3.6	3.6
74°	2.7	2.7	3.2	3.6	3.6	3.2
74.5°	2.7	2.7	2.7	3.2	3.6	3.2
75°	2.7	2.7	2.7	3.2	3.2	3.2
75.5°	2.7	2.3	2.7	2.7	3.2	2.7
76°	2.3	2.3	2.3	2.7	2.7	2.7
76.5°	2.3	2.3	2.3	2.7	2.7	2.7
77°	2.3	2.3	2.3	2.3	2.7	2.7
77.5°	1.8	1.8	2.3	2.3	2.3	2.3
78°	1.8	1.8	1.8	2.3	2.3	2.3
78.5°	1.8	1.8	1.8	1.8	2.3	2.3
79°	1.8	1.8	1.8	1.8	2.3	1.8
79.5°	1.4	1.4	1.8	1.8	1.8	1.8
80°	1.4	1.4	1.4	1.4	1.8	1.8
80.5°	1.4	1.4	1.4	1.4	1.8	1.8
81°	1.4	1.4	1.4	1.4	1.4	1.4
81.5°	0.9	1.4	1.4	1.4	1.4	1.4
82°	0.9	0.9	0.9	0.9	1.4	1.4
82.5°	0.9	0.9	0.9	0.9	0.9	1.4
83°	0.9	0.9	0.9	0.9	0.9	0.9
83.5°	0.9	0.9	0.9	0.9	0.9	0.9
84°	0.5	0.9	0.9	0.5	0.9	0.9
84.5°	0.5	0.5	0.5	0.5	0.5	0.9
85°	0.5	0.5	0.5	0.5	0.5	0.5
85.5°	0.5	0.5	0.5	0.5	0.5	0.5
86°	0.5	0.5	0.5	0.5	0.5	0.5
86.5°	0.0	0.5	0.5	0.5	0.5	0.5
87°	0.0	0.0	0.0	0.0	0.0	0.5
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: P776720
CATALOG NUMBER: HCDJBL4050CSD-HCD6TSQC-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

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

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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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°	3568.7	3728.6	3878.5	3832.0	3680.3	3801.5	3920.8	3770.5	3647.1	3662.6	3719.0
22°	3514.1	3674.4	3827.5	3784.2	3627.9	3752.8	3870.3	3721.8	3596.0	3607.4	3662.6



44°	589.0	897.0	1319.2	1134.3	784.0	1069.2	1390.3	945.2	666.5	829.5	1102.4
44.5°	536.6	834.6	1264.6	1066.0	724.8	1004.0	1343.4	883.3	609.5	770.8	1040.5



66.5°	6.4	6.8	7.7	6.8	6.4	7.3	7.7	6.8	6.4	6.8	6.8
67°	5.9	6.8	7.3	6.8	5.9	6.8	7.7	6.8	6.4	6.4	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	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	0.0

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21.5°	3572.8	3510.4	3579.2	3698.5	3666.2	3568.7
22°	3519.5	3453.9	3524.5	3642.5	3608.8	3514.1



44°	687.9	510.2	701.1	1057.3	824.5	589.0
44.5°	630.9	462.8	646.9	997.2	766.2	536.6

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66.5°	5.9	5.0	5.5	6.4	6.4	6.4
67°	5.5	5.0	5.5	6.4	6.4	5.9

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Scaled Data Report



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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Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)