

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: P776620

Luminaire Tested: HCDJBS4050CSD-HCD4TSQC-5000lm-2700K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776620
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: HCDJBS4050CSD-HCD4TSQC-5000lm-2700K
Description: 4 INCH SQUARE MEDIUM SPECULAR CLEAR TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 2700K CCT
Ballast/Driver: -

Summary

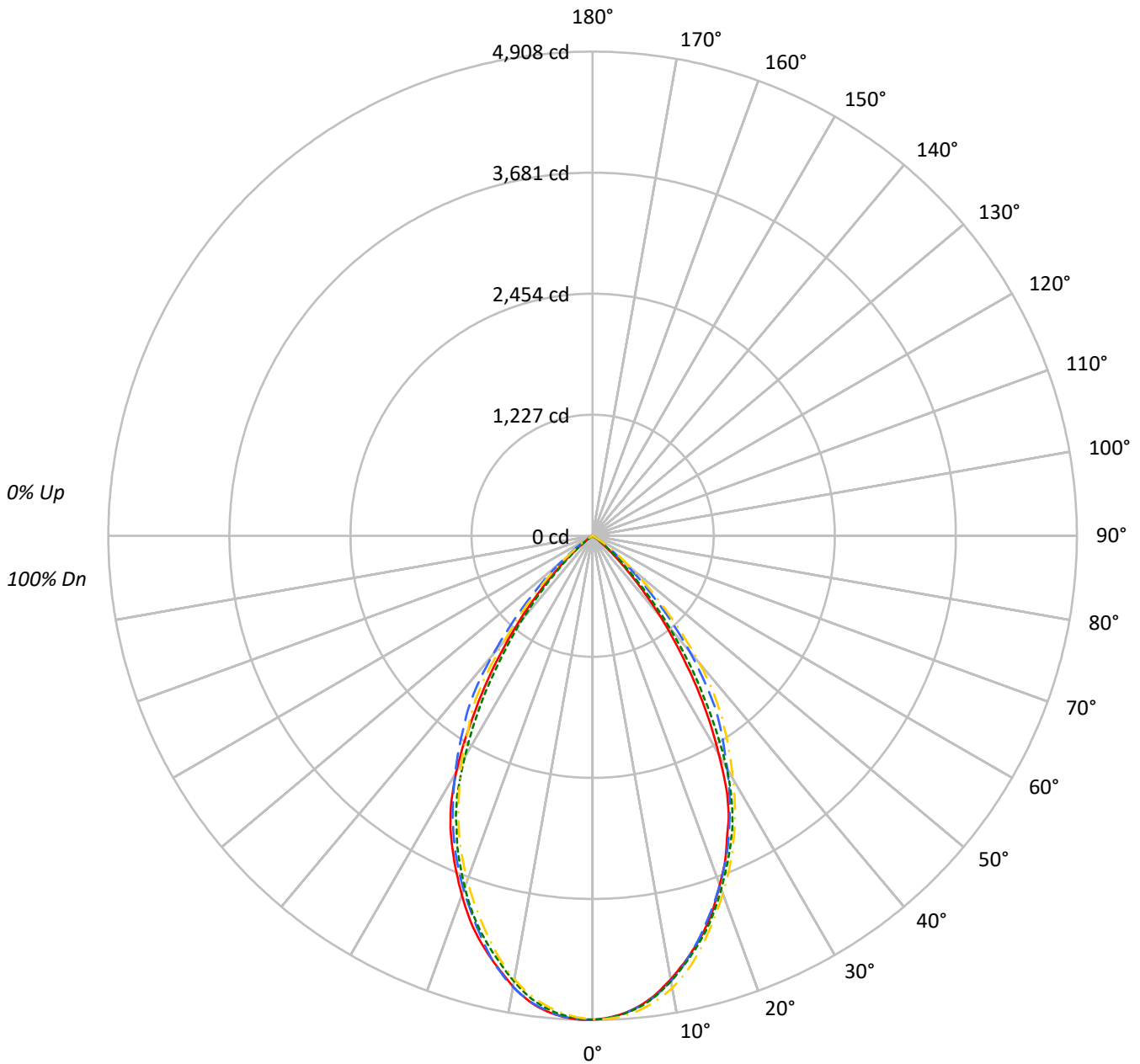
Lumens per Lamp: N/A
Luminaire Lumens: 5072.5 lumens
Efficiency: N/A
Efficacy: 105.7 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.93 / 0.98
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20										
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	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	75	72	69	67					67			
6	85	76	70	65	84	75	69	65	74	68	64	72	68	64	71	67	64	62					62			
7	81	71	65	60	79	70	64	60	69	64	60	68	63	59	67	62	59	57					57			
8	77	66	60	56	75	66	60	56	65	59	55	64	59	55	63	58	55	53					53			
9	73	62	56	52	71	62	56	52	61	55	52	60	55	51	59	55	51	50					50			
10	69	59	53	48	68	58	52	48	57	52	48	57	52	48	56	51	48	47					47			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	484702	484702	484702	484702
5°	477694	478507	481712	479321
10°	458065	459982	465703	460484
15°	431624	433906	440107	432790
20°	396361	400915	407668	398570
25°	354250	363749	369464	355646
30°	292352	309723	315544	295685
35°	215108	232652	237105	220164
40°	137648	155700	158758	143119
45°	69626	85170	87784	74784
50°	24450	32584	34691	27756
55°	4549	5894	6669	6600
60°	1720	1621	1443	1977
65°	1380	1286	1169	1497
70°	1040	1040	925	1185
75°	878	878	687	1031
80°	512	512	512	797
85°	567	567	0	567

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 135°
 Vertical Angle: 45°
 Luminance: 141475 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	453.9	8.9
10°-20°	1187.4	23.4
20°-30°	1507.9	29.7
30°-40°	1246.9	24.6
40°-50°	570.6	11.2
50°-60°	95.9	1.9
60°-70°	6.7	0.1
70°-80°	2.6	0.1
80°-90°	0.5	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°	3149.2	62.1
0°-40°	4396.2	86.7
0°-60°	5062.7	99.8
0°-90°	5072.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5072.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4904	4904	4904	4904	4904	
5°	4814	4823	4855	4831	4814	452
15°	4218	4240	4301	4229	4218	1179
25°	3248	3335	3388	3261	3248	1475
35°	1783	1928	1965	1825	1783	1107
45°	498	609	628	535	498	404
55°	26	34	39	38	26	43
65°	6	6	5	6	6	6
75°	2	2	2	3	2	2
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°	4903.8	4903.8	4903.8	4903.8	4903.8	4903.8	4903.8	4903.8	4903.8	4903.8	4903.8
0.5°	4902.9	4903.4	4903.4	4901.1	4902.9	4902.9	4902.9	4904.7	4907.5	4907.9	4907.0
1°	4897.9	4899.3	4899.7	4898.3	4900.6	4901.5	4902.9	4904.7	4907.5	4907.5	4906.1
1.5°	4892.9	4893.8	4894.7	4894.2	4896.1	4897.9	4901.1	4902.9	4906.1	4907.0	4903.8
2°	4885.1	4886.5	4887.9	4887.4	4890.1	4894.2	4897.9	4899.7	4903.4	4904.7	4901.1
2.5°	4876.5	4877.8	4879.7	4879.7	4882.4	4887.9	4894.2	4894.7	4898.3	4899.7	4897.4
3°	4867.8	4868.7	4869.6	4870.5	4873.7	4880.1	4887.9	4888.8	4892.9	4893.3	4890.1
3.5°	4856.9	4857.3	4858.7	4860.1	4863.3	4871.9	4881.0	4879.7	4885.6	4886.0	4881.9
4°	4845.0	4845.0	4845.9	4848.2	4851.4	4861.4	4871.5	4871.0	4876.9	4876.9	4872.4
4.5°	4830.4	4831.4	4833.2	4835.5	4838.6	4850.5	4861.0	4860.1	4867.4	4866.9	4861.4
5°	4814.5	4814.9	4818.1	4820.9	4822.7	4837.3	4849.6	4848.2	4855.0	4856.0	4848.7
5.5°	4796.7	4797.6	4801.7	4804.9	4807.2	4822.2	4836.8	4835.0	4841.8	4842.7	4835.5
6°	4777.1	4778.0	4784.0	4786.7	4789.0	4806.7	4821.3	4819.5	4827.3	4827.7	4820.0
6.5°	4756.6	4757.1	4763.9	4768.0	4769.4	4788.5	4805.8	4803.1	4811.8	4811.8	4804.9
7°	4733.4	4734.3	4742.5	4747.5	4748.4	4768.5	4789.0	4784.9	4793.5	4794.0	4786.7
7.5°	4709.7	4709.7	4720.2	4725.2	4724.3	4747.0	4769.8	4765.7	4772.6	4774.8	4767.6
8°	4683.7	4684.2	4694.2	4701.5	4699.2	4723.4	4749.3	4743.4	4749.8	4752.1	4746.1
8.5°	4655.9	4657.7	4669.1	4675.5	4671.4	4698.3	4727.5	4720.2	4725.2	4729.7	4722.9
9°	4624.5	4628.1	4640.9	4647.2	4643.1	4671.9	4703.8	4694.2	4697.8	4703.8	4699.7
9.5°	4593.5	4597.6	4612.2	4618.5	4613.5	4643.6	4679.1	4666.4	4670.0	4676.4	4673.7
10°	4563.9	4565.7	4581.2	4588.5	4583.0	4615.3	4652.7	4637.7	4640.0	4647.2	4644.5
10.5°	4531.0	4533.3	4549.7	4556.1	4551.1	4586.2	4624.0	4606.2	4608.5	4616.7	4614.9
11°	4498.7	4501.0	4516.5	4523.8	4519.2	4553.4	4592.6	4574.3	4574.8	4585.7	4584.4
11.5°	4465.0	4467.7	4480.5	4489.1	4485.0	4521.5	4562.5	4539.7	4539.7	4552.0	4551.6
12°	4432.6	4433.5	4444.0	4453.1	4451.3	4488.7	4529.2	4505.1	4506.0	4516.0	4515.1
12.5°	4398.9	4398.9	4403.9	4418.0	4418.0	4454.9	4493.2	4468.6	4474.1	4481.4	4480.9
13°	4363.3	4364.3	4366.1	4381.1	4384.8	4421.2	4456.8	4431.7	4441.3	4446.7	4441.3
13.5°	4327.8	4327.8	4326.9	4343.3	4349.2	4387.0	4421.2	4395.7	4406.6	4409.4	4400.7
14°	4291.8	4290.9	4285.9	4306.4	4313.2	4352.0	4379.3	4359.2	4371.5	4372.9	4358.3
14.5°	4254.9	4253.5	4244.9	4268.1	4277.2	4316.4	4339.2	4322.3	4336.5	4336.9	4316.4
15°	4218.0	4216.2	4204.8	4230.7	4240.3	4280.0	4298.6	4285.4	4300.9	4300.0	4270.4
15.5°	4180.6	4177.4	4161.0	4191.5	4202.9	4242.6	4255.8	4246.2	4263.1	4261.7	4225.3
16°	4140.1	4136.0	4119.1	4150.5	4164.2	4204.3	4211.1	4208.0	4226.6	4224.4	4179.2
16.5°	4100.0	4098.1	4075.8	4109.5	4124.6	4167.4	4167.9	4168.3	4187.4	4184.7	4135.5
17°	4058.0	4057.6	4033.0	4068.5	4083.5	4125.9	4123.2	4128.2	4146.9	4144.6	4089.0
17.5°	4013.8	4015.2	3989.2	4026.6	4040.3	4085.8	4079.0	4086.3	4104.1	4104.5	4044.4
18°	3966.0	3968.3	3945.5	3984.2	3995.6	4043.9	4035.7	4043.4	4059.8	4063.0	3998.3
18.5°	3916.3	3925.0	3901.7	3939.1	3950.9	4001.5	3992.4	3998.8	4014.7	4018.4	3954.1
19°	3865.7	3875.7	3857.1	3893.1	3905.4	3955.0	3948.2	3953.7	3970.1	3973.3	3909.9
19.5°	3817.9	3825.2	3811.5	3845.2	3858.9	3911.3	3904.5	3908.6	3923.6	3926.3	3865.3
20°	3768.2	3775.0	3767.3	3798.7	3811.5	3863.4	3859.8	3859.8	3875.7	3879.4	3819.7
20.5°	3719.9	3725.4	3722.6	3750.0	3763.6	3816.0	3814.7	3811.5	3827.4	3831.1	3773.7
21°	3672.5	3675.2	3676.6	3701.2	3714.9	3767.3	3769.1	3762.7	3779.1	3782.3	3726.3



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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°	3524.4	3526.7	3534.9	3551.3	3576.8	3618.3	3631.0	3611.4	3634.7	3631.9	3586.4
23°	3467.0	3477.5	3485.2	3500.7	3529.9	3568.1	3584.1	3559.9	3587.7	3581.4	3537.6
23.5°	3406.4	3425.1	3433.7	3446.5	3481.1	3520.8	3536.7	3508.4	3539.0	3530.3	3491.1
24°	3348.5	3368.5	3382.2	3398.2	3432.3	3467.9	3487.9	3457.0	3487.9	3478.8	3439.6
24.5°	3298.4	3309.3	3328.9	3349.9	3384.0	3415.5	3436.9	3405.9	3437.8	3427.3	3387.7
25°	3248.2	3247.3	3275.1	3300.6	3335.3	3363.1	3385.9	3354.4	3387.7	3375.4	3336.2
25.5°	3198.6	3190.8	3220.9	3244.6	3286.5	3310.2	3334.8	3302.9	3338.0	3323.9	3284.7
26°	3146.2	3139.3	3167.1	3188.5	3231.4	3257.8	3283.8	3251.9	3287.9	3272.4	3235.5
26.5°	3081.0	3089.7	3113.4	3131.6	3173.5	3210.0	3234.1	3192.6	3229.1	3213.2	3180.3
27°	3018.1	3038.6	3060.5	3081.5	3117.5	3161.2	3179.0	3139.8	3172.6	3163.0	3124.3
27.5°	2953.4	2985.8	3006.7	3033.6	3055.0	3108.8	3124.3	3090.6	3111.5	3108.8	3068.2
28°	2875.5	2918.8	2954.3	2985.3	2992.6	3047.7	3066.9	3037.3	3048.2	3048.2	3009.9
28.5°	2795.3	2855.0	2899.2	2927.0	2925.6	2989.4	3011.7	2978.9	2979.8	2991.7	2953.4
29°	2716.9	2791.2	2844.5	2870.0	2858.2	2928.8	2956.1	2923.8	2911.0	2929.7	2896.4
29.5°	2639.4	2717.4	2786.6	2813.5	2787.5	2865.0	2901.0	2863.2	2837.7	2865.0	2839.9
30°	2561.5	2639.9	2729.2	2753.8	2713.7	2798.9	2847.7	2800.3	2764.7	2799.4	2783.0
30.5°	2483.6	2562.0	2669.5	2690.5	2635.3	2729.7	2792.5	2736.5	2687.3	2731.0	2727.8
31°	2406.1	2485.4	2613.0	2625.3	2557.4	2661.3	2735.1	2670.4	2605.7	2662.2	2673.6
31.5°	2330.0	2409.3	2557.4	2559.2	2476.7	2589.8	2677.2	2603.0	2524.6	2589.3	2619.4
32°	2254.8	2335.5	2507.7	2491.3	2395.6	2516.8	2618.9	2531.9	2443.9	2516.4	2562.4
32.5°	2178.3	2260.3	2456.7	2420.2	2313.1	2441.7	2567.0	2459.0	2360.1	2440.7	2502.3
33°	2099.4	2186.5	2406.6	2348.7	2234.3	2362.8	2515.9	2385.1	2279.9	2364.6	2446.2
33.5°	2021.5	2114.5	2354.6	2274.4	2153.6	2284.9	2464.9	2309.5	2195.6	2284.9	2392.9
34°	1943.6	2041.1	2300.4	2199.2	2077.1	2207.0	2410.2	2231.6	2118.1	2203.8	2338.2
34.5°	1863.4	1967.3	2243.4	2123.1	2000.5	2129.5	2351.4	2153.6	2039.7	2125.4	2283.5
35°	1782.7	1893.0	2193.3	2047.5	1928.1	2053.4	2301.8	2078.9	1965.0	2051.6	2234.8
35.5°	1703.0	1817.3	2135.9	1971.4	1853.8	1979.1	2253.0	2002.8	1886.2	1973.2	2185.5
36°	1621.8	1742.6	2067.5	1897.1	1781.3	1906.2	2192.8	1928.5	1812.3	1898.9	2125.8
36.5°	1550.3	1666.5	2000.5	1825.5	1709.8	1834.7	2134.1	1855.6	1738.0	1823.7	2061.6
37°	1478.8	1595.9	1935.4	1754.5	1636.0	1764.0	2078.0	1783.2	1666.0	1755.8	2003.3
37.5°	1407.2	1525.2	1865.6	1684.3	1561.2	1694.8	2015.1	1713.4	1590.9	1683.8	1936.3
38°	1335.2	1454.6	1796.4	1610.9	1488.8	1626.4	1952.2	1644.6	1514.8	1615.9	1866.1
38.5°	1266.9	1383.5	1727.6	1546.2	1416.3	1557.6	1889.8	1577.2	1441.4	1547.6	1794.6
39°	1199.9	1313.3	1659.7	1481.0	1345.2	1492.9	1821.4	1509.7	1371.7	1480.1	1722.1
39.5°	1132.0	1247.7	1591.3	1416.3	1275.1	1423.6	1753.1	1440.9	1299.7	1411.8	1647.8
40°	1066.8	1183.9	1523.4	1351.6	1206.7	1355.7	1685.2	1374.4	1230.4	1345.7	1575.8
40.5°	1000.3	1119.2	1455.5	1286.9	1140.6	1288.3	1615.0	1308.3	1162.0	1279.2	1503.8
41°	936.0	1058.6	1387.6	1223.1	1076.4	1224.5	1543.9	1242.7	1098.7	1214.4	1433.6
41.5°	873.1	996.6	1319.7	1160.7	1013.9	1159.8	1471.5	1178.0	1034.0	1148.8	1364.4
42°	812.1	937.4	1251.8	1097.8	951.1	1098.2	1399.9	1116.0	972.9	1087.8	1296.5
42.5°	753.3	879.0	1185.3	1039.9	892.3	1036.3	1331.1	1055.9	911.9	1028.5	1229.9
43°	698.1	821.2	1118.3	982.5	832.1	980.7	1262.8	997.5	850.8	969.3	1166.6
43.5°	644.8	763.8	1051.8	926.9	773.8	921.4	1197.1	941.0	792.9	912.3	1103.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	498.1	609.7	869.0	769.2	609.3	759.7	1012.1	779.7	628.0	752.8	924.6
45.5°	452.5	561.4	813.9	719.6	559.1	707.2	953.8	729.1	577.4	702.7	868.6
46°	410.1	517.7	759.2	669.9	511.3	657.1	898.2	680.4	529.1	653.5	813.0
46.5°	369.6	475.3	708.6	622.5	466.2	608.8	843.5	631.1	483.0	605.6	758.7
47°	330.8	432.9	658.9	575.6	426.1	562.3	792.0	584.7	443.9	560.5	707.2
47.5°	295.3	393.3	611.6	531.8	386.0	516.3	739.6	540.9	404.7	516.8	657.6
48°	262.5	355.4	565.1	489.9	346.3	474.4	690.8	497.2	365.5	474.8	610.2
48.5°	232.4	319.9	521.3	449.3	306.7	437.5	642.1	456.6	326.7	438.8	565.1
49°	205.5	285.7	478.9	412.0	272.5	400.1	596.5	420.6	287.5	402.8	522.2
49.5°	180.9	255.2	438.8	376.9	241.5	363.2	550.5	384.6	255.6	367.3	480.3
50°	159.0	226.9	399.2	342.7	211.9	326.3	507.7	348.6	225.6	331.3	444.8
50.5°	142.6	200.5	364.1	308.1	185.0	289.4	466.6	312.6	198.2	295.3	409.7
51°	126.2	176.4	329.5	277.1	160.9	258.8	430.6	280.3	173.6	266.1	374.1
51.5°	109.8	155.4	298.0	247.4	138.5	230.6	394.2	250.6	150.4	237.9	338.6
52°	93.4	139.4	268.0	220.1	118.5	204.6	357.7	222.4	128.5	211.4	303.5
52.5°	80.7	123.5	241.1	194.1	99.8	179.1	321.3	196.9	108.9	186.4	273.9
53°	68.8	107.1	213.7	169.5	83.4	155.9	290.3	171.8	91.6	163.1	246.1
53.5°	57.4	91.6	191.4	150.4	68.4	134.9	261.6	149.5	75.6	141.3	220.6
54°	46.9	79.3	168.6	131.2	57.0	115.3	233.3	128.1	63.3	121.2	196.0
54.5°	36.0	67.9	151.3	112.6	45.6	97.5	206.9	109.4	51.0	103.9	173.6
55°	26.4	57.4	134.9	93.4	34.2	82.0	183.2	91.6	38.7	87.0	153.1
55.5°	19.1	46.9	118.0	74.7	23.2	66.5	160.4	75.6	26.4	72.0	134.4
56°	17.3	36.5	101.2	60.6	11.8	55.6	139.4	63.3	14.1	60.2	117.6
56.5°	15.5	27.3	84.3	47.8	10.9	44.2	119.8	51.5	10.0	48.3	101.6
57°	13.7	19.1	71.1	36.5	10.5	33.3	102.5	39.6	9.6	36.9	87.5
57.5°	11.8	16.9	60.6	25.1	10.0	22.3	86.6	27.8	9.1	25.1	75.2
58°	10.0	15.0	51.0	16.4	9.6	10.9	72.5	15.9	8.7	13.2	64.3
58.5°	9.6	13.2	42.8	14.6	9.1	9.6	60.6	9.6	8.2	9.6	54.2
59°	9.1	11.4	35.5	12.8	8.7	9.1	52.9	8.7	7.7	8.7	47.8
59.5°	9.1	9.1	29.6	10.9	8.2	8.7	45.1	8.2	7.3	8.7	41.5
60°	8.7	8.7	25.1	8.7	8.2	8.2	37.8	7.7	7.3	8.2	34.6
60.5°	8.2	8.7	21.0	8.7	7.7	8.2	30.1	7.7	6.8	7.7	28.3
61°	7.7	8.2	17.3	8.2	7.3	7.7	22.3	7.3	6.8	7.3	21.9
61.5°	7.7	7.7	15.0	7.7	7.3	7.3	18.2	6.8	6.4	7.3	17.8
62°	7.3	7.7	12.8	7.3	6.8	7.3	15.0	6.8	5.9	6.8	15.0
62.5°	6.8	7.3	10.5	7.3	6.8	6.8	12.3	6.4	5.9	6.8	12.3
63°	6.8	6.8	8.2	6.8	6.4	6.4	10.0	6.4	5.5	6.4	10.0
63.5°	6.4	6.8	7.3	6.8	5.9	6.4	8.2	5.9	5.5	5.9	8.7
64°	6.4	6.4	6.8	6.4	5.9	5.9	6.8	5.9	5.5	5.9	7.3
64.5°	5.9	6.4	6.4	6.4	5.5	5.9	6.4	5.5	5.0	5.5	6.4
65°	5.9	5.9	6.4	5.9	5.5	5.5	5.9	5.5	5.0	5.5	6.4
65.5°	5.5	5.9	5.9	5.9	5.5	5.5	5.5	5.0	4.6	5.5	5.9
66°	5.5	5.5	5.5	5.5	5.0	5.0	5.5	5.0	4.6	5.0	5.5



TEST NUMBER: P776620
 CATALOG NUMBER: HCDJBL54050CSD-HCD4TSQC-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	4.6	5.0	5.0	5.0	4.6	4.6	5.0	4.6	4.1	4.6	5.0
68°	4.6	4.6	5.0	4.6	4.1	4.6	4.6	4.1	3.6	4.6	4.6
68.5°	4.1	4.6	4.6	4.6	4.1	4.1	4.6	4.1	3.6	4.1	4.6
69°	4.1	4.1	4.6	4.1	4.1	4.1	4.1	3.6	3.6	4.1	4.6
69.5°	4.1	4.1	4.1	4.1	3.6	4.1	4.1	3.6	3.2	3.6	4.1
70°	3.6	4.1	4.1	4.1	3.6	3.6	4.1	3.6	3.2	3.6	4.1
70.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.2	3.2	3.6	3.6
71°	3.2	3.6	3.6	3.6	3.2	3.6	3.6	3.2	3.2	3.2	3.6
71.5°	3.2	3.6	3.6	3.6	3.2	3.2	3.2	3.2	2.7	3.2	3.6
72°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	2.7	2.7	3.2	3.2
72.5°	2.7	3.2	3.2	3.2	2.7	3.2	3.2	2.7	2.7	2.7	3.2
73°	2.7	2.7	3.2	3.2	2.7	2.7	2.7	2.7	2.3	2.7	3.2
73.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.3	2.7	2.7
74°	2.3	2.7	2.7	2.7	2.3	2.7	2.7	2.3	2.3	2.7	2.7
74.5°	2.3	2.3	2.7	2.7	2.3	2.3	2.7	2.3	2.3	2.3	2.7
75°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	1.8	2.3	2.3
75.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	1.8	1.8	2.3	2.3
76°	1.8	2.3	2.3	2.3	1.8	2.3	2.3	1.8	1.8	1.8	2.3
76.5°	1.8	1.8	2.3	2.3	1.8	1.8	2.3	1.8	1.8	1.8	2.3
77°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.4	1.8	1.8
77.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.4	1.4	1.8	1.8
78°	1.4	1.4	1.8	1.8	1.4	1.8	1.8	1.4	1.4	1.4	1.8
78.5°	1.4	1.4	1.8	1.4	1.4	1.4	1.8	1.4	1.4	1.4	1.8
79°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.9	1.4	1.4
79.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.9	0.9	1.4	1.4
80°	0.9	0.9	1.4	1.4	0.9	1.4	1.4	0.9	0.9	0.9	1.4
80.5°	0.9	0.9	1.4	1.4	0.9	1.4	1.4	0.9	0.9	0.9	1.4
81°	0.9	0.9	1.4	0.9	0.9	0.9	1.4	0.9	0.9	0.9	0.9
81.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.5	0.9	0.9	0.9
82°	0.9	0.5	0.9	0.9	0.9	0.9	0.9	0.5	0.5	0.5	0.9
82.5°	0.5	0.5	0.9	0.9	0.9	0.9	0.9	0.5	0.5	0.5	0.9
83°	0.5	0.5	0.9	0.9	0.5	0.9	0.9	0.5	0.5	0.5	0.9
83.5°	0.5	0.5	0.9	0.5	0.5	0.5	0.9	0.5	0.5	0.5	0.5
84°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
84.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5
85°	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.5
85.5°	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.5
86°	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.5
86.5°	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.5
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: P776620
CATALOG NUMBER: HCDJBL54050CSD-HCD4TSQC-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: P776620

CATALOG NUMBER: HCDJBL54050CSD-HCD4TSQC-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	4903.8	4903.8	4903.8	4903.8	4903.8	4903.8
0.5°	4902.9	4902.9	4900.2	4897.4	4900.6	4902.9
1°	4901.1	4900.6	4896.5	4892.9	4897.0	4897.9
1.5°	4897.9	4897.4	4892.4	4887.4	4891.0	4892.9
2°	4893.8	4892.4	4886.5	4879.7	4884.7	4885.1
2.5°	4887.4	4885.6	4878.3	4871.5	4876.5	4876.5
3°	4880.1	4877.8	4868.7	4860.5	4867.8	4867.8
3.5°	4871.9	4868.3	4858.2	4850.0	4857.8	4856.9
4°	4861.9	4858.2	4846.4	4836.8	4845.9	4845.0
4.5°	4850.0	4845.0	4832.7	4823.6	4832.3	4830.4
5°	4837.3	4830.9	4818.1	4807.7	4817.7	4814.5
5.5°	4822.2	4815.4	4801.3	4790.8	4800.4	4796.7
6°	4805.8	4798.1	4783.0	4773.5	4782.1	4777.1
6.5°	4787.1	4778.5	4763.5	4752.5	4761.6	4756.6
7°	4767.1	4757.1	4741.1	4730.2	4739.8	4733.4
7.5°	4744.3	4734.3	4718.3	4706.9	4717.0	4709.7
8°	4721.1	4708.8	4691.9	4681.4	4691.9	4683.7
8.5°	4695.1	4681.4	4664.6	4654.5	4666.4	4655.9
9°	4667.3	4650.9	4635.4	4626.3	4637.2	4624.5
9.5°	4637.7	4619.9	4604.4	4596.7	4607.1	4593.5
10°	4606.7	4588.0	4571.1	4562.5	4575.7	4563.9
10.5°	4574.8	4553.8	4536.5	4532.4	4544.3	4531.0
11°	4541.1	4520.1	4502.3	4496.9	4511.9	4498.7
11.5°	4507.3	4483.7	4466.3	4459.0	4478.2	4465.0
12°	4470.9	4447.7	4429.0	4418.9	4443.1	4432.6
12.5°	4435.3	4412.6	4391.1	4380.2	4408.0	4398.9
13°	4398.9	4376.6	4352.9	4338.7	4372.9	4363.3
13.5°	4362.0	4341.0	4315.5	4296.8	4336.5	4327.8
14°	4324.6	4304.6	4276.3	4252.6	4298.6	4291.8
14.5°	4286.8	4268.6	4238.9	4209.8	4261.3	4254.9
15°	4249.4	4229.4	4199.3	4165.1	4222.5	4218.0
15.5°	4211.1	4190.6	4158.7	4120.9	4182.4	4180.6
16°	4171.5	4151.9	4117.3	4076.3	4142.8	4140.1
16.5°	4130.9	4111.8	4076.7	4032.1	4102.2	4100.0
17°	4088.6	4069.4	4034.3	3986.9	4059.8	4058.0
17.5°	4047.5	4027.5	3991.0	3942.7	4017.5	4013.8
18°	4003.8	3981.5	3945.9	3898.1	3973.7	3966.0
18.5°	3960.1	3934.1	3900.8	3852.5	3928.2	3916.3
19°	3914.0	3887.6	3853.4	3807.4	3879.8	3865.7
19.5°	3866.2	3839.3	3805.1	3761.8	3829.7	3817.9
20°	3818.3	3789.2	3756.8	3713.5	3778.7	3768.2
20.5°	3768.2	3740.4	3705.8	3667.0	3727.6	3719.9
21°	3718.5	3689.8	3655.6	3619.6	3674.8	3672.5

TEST NUMBER: P776620

CATALOG NUMBER: HCDJBL54050CSD-HCD4TSQC-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	3565.9	3539.0	3498.4	3476.1	3518.9	3524.4
23°	3512.1	3488.9	3445.1	3426.9	3467.0	3467.0
23.5°	3459.7	3437.4	3391.8	3376.8	3416.4	3406.4
24°	3406.8	3379.5	3339.4	3324.3	3362.6	3348.5
24.5°	3354.0	3318.4	3285.6	3269.2	3305.7	3298.4
25°	3301.6	3261.0	3229.6	3214.5	3245.5	3248.2
25.5°	3248.7	3211.3	3171.2	3159.8	3184.9	3198.6
26°	3187.6	3162.6	3109.7	3104.2	3123.4	3146.2
26.5°	3126.1	3102.0	3051.8	3046.4	3070.1	3081.0
27°	3068.7	3036.3	3000.3	2990.8	3018.1	3018.1
27.5°	3015.4	2976.6	2948.4	2932.4	2967.5	2953.4
28°	2963.9	2901.0	2887.3	2875.5	2914.2	2875.5
28.5°	2905.1	2824.0	2820.8	2819.4	2854.1	2795.3
29°	2836.7	2745.1	2761.1	2765.2	2788.9	2716.9
29.5°	2776.6	2667.7	2688.6	2710.5	2728.7	2639.4
30°	2702.8	2590.7	2612.5	2655.8	2658.1	2561.5
30.5°	2630.3	2515.0	2534.6	2599.3	2585.2	2483.6
31°	2551.9	2438.9	2459.0	2541.5	2510.0	2406.1
31.5°	2476.7	2362.8	2384.2	2478.1	2433.9	2330.0
32°	2403.4	2288.5	2310.9	2416.1	2359.2	2254.8
32.5°	2331.4	2214.7	2236.1	2357.3	2285.3	2178.3
33°	2255.7	2139.5	2166.4	2304.0	2214.7	2099.4
33.5°	2186.0	2062.1	2095.3	2258.5	2142.7	2021.5
34°	2113.5	1983.2	2025.1	2214.3	2071.6	1943.6
34.5°	2045.2	1903.9	1951.8	2155.9	1999.2	1863.4
35°	1971.4	1824.6	1881.6	2102.2	1929.4	1782.7
35.5°	1901.2	1746.7	1807.8	2047.0	1857.9	1703.0
36°	1827.4	1669.2	1735.3	1975.9	1787.7	1621.8
36.5°	1757.6	1596.8	1661.5	1908.9	1715.3	1550.3
37°	1682.0	1524.3	1591.8	1838.3	1645.5	1478.8
37.5°	1608.6	1452.3	1522.0	1762.2	1576.3	1407.2
38°	1535.7	1379.9	1452.8	1685.6	1506.6	1335.2
38.5°	1465.1	1307.9	1383.5	1608.2	1437.3	1266.9
39°	1395.8	1241.8	1314.2	1539.8	1368.0	1199.9
39.5°	1329.3	1176.2	1249.1	1471.9	1298.8	1132.0
40°	1263.2	1109.2	1188.0	1403.6	1235.9	1066.8
40.5°	1200.3	1042.2	1125.6	1335.7	1173.0	1000.3
41°	1139.3	979.8	1065.9	1271.4	1112.8	936.0
41.5°	1079.1	912.8	1006.2	1209.0	1051.8	873.1
42°	1019.9	854.4	947.4	1147.9	993.9	812.1
42.5°	960.6	795.2	889.5	1089.1	936.5	753.3
43°	902.7	740.1	832.1	1029.9	881.8	698.1
43.5°	846.7	683.1	777.0	972.5	826.2	644.8

TEST NUMBER: P776620

CATALOG NUMBER: HCDJBL54050CSD-HCD4TSQC-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	687.2	535.0	624.3	805.7	668.5	498.1
45.5°	638.0	487.6	577.8	754.2	620.7	452.5
46°	591.0	444.8	533.6	703.1	573.7	410.1
46.5°	545.9	402.8	490.8	656.2	530.0	369.6
47°	502.6	362.7	449.8	610.2	487.1	330.8
47.5°	461.6	324.5	409.2	566.9	445.2	295.3
48°	424.3	291.6	371.4	524.5	406.9	262.5
48.5°	386.9	259.3	335.9	486.2	369.1	232.4
49°	349.5	230.6	302.1	448.9	333.6	205.5
49.5°	312.6	204.6	271.1	414.2	298.9	180.9
50°	280.3	180.5	241.5	379.1	269.8	159.0
50.5°	250.2	158.6	214.6	347.2	241.1	142.6
51°	223.7	142.6	190.5	315.8	213.7	126.2
51.5°	198.2	126.7	169.1	287.5	188.2	109.8
52°	174.5	111.2	153.1	260.7	166.8	93.4
52.5°	153.6	95.2	137.2	234.7	150.4	80.7
53°	134.9	82.5	121.2	210.1	134.0	68.8
53.5°	118.5	70.6	105.3	188.2	117.6	57.4
54°	103.4	59.2	89.3	167.7	101.2	46.9
54.5°	90.2	48.8	77.9	151.3	84.8	36.0
55°	78.4	38.3	66.5	135.3	72.9	26.4
55.5°	67.0	28.3	56.1	118.9	62.4	19.1
56°	58.3	21.0	45.1	103.0	52.0	17.3
56.5°	49.7	15.0	35.5	86.6	42.4	15.5
57°	41.0	14.1	26.0	74.3	33.3	13.7
57.5°	32.4	13.2	18.7	63.8	24.6	11.8
58°	23.7	12.8	16.9	54.2	17.3	10.0
58.5°	15.0	11.8	15.0	45.6	15.5	9.6
59°	11.8	11.4	13.7	38.3	13.7	9.1
59.5°	10.9	10.9	11.8	31.9	11.4	9.1
60°	10.5	10.0	10.5	26.4	9.6	8.7
60.5°	10.0	9.6	10.0	21.9	9.1	8.2
61°	9.6	9.1	9.6	18.2	8.7	7.7
61.5°	9.1	8.7	9.1	15.9	8.2	7.7
62°	8.7	8.7	8.7	13.7	7.7	7.3
62.5°	8.2	8.2	8.2	11.4	7.7	6.8
63°	7.7	7.7	7.7	9.1	7.3	6.8
63.5°	7.3	7.3	7.3	7.7	6.8	6.4
64°	7.3	6.8	7.3	6.8	6.8	6.4
64.5°	6.8	6.8	6.8	6.8	6.4	5.9
65°	6.4	6.4	6.4	6.4	6.4	5.9
65.5°	6.4	6.4	6.4	6.4	5.9	5.5
66°	5.9	5.9	5.9	5.9	5.9	5.5



TEST NUMBER: P776620

CATALOG NUMBER: HCDJBL54050CSD-HCD4TSQC-5000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	5.5	5.0	5.5	5.0	5.0	4.6
68°	5.0	5.0	5.0	5.0	5.0	4.6
68.5°	5.0	4.6	5.0	4.6	4.6	4.1
69°	4.6	4.6	4.6	4.6	4.6	4.1
69.5°	4.6	4.6	4.6	4.6	4.1	4.1
70°	4.1	4.1	4.1	4.1	4.1	3.6
70.5°	4.1	4.1	4.1	4.1	4.1	3.6
71°	3.6	3.6	3.6	3.6	3.6	3.2
71.5°	3.6	3.6	3.6	3.6	3.6	3.2
72°	3.6	3.6	3.6	3.6	3.2	3.2
72.5°	3.2	3.2	3.2	3.2	3.2	2.7
73°	3.2	3.2	3.2	3.2	3.2	2.7
73.5°	3.2	3.2	3.2	3.2	2.7	2.7
74°	2.7	2.7	2.7	2.7	2.7	2.3
74.5°	2.7	2.7	2.7	2.7	2.7	2.3
75°	2.7	2.7	2.7	2.7	2.3	2.3
75.5°	2.3	2.3	2.3	2.3	2.3	2.3
76°	2.3	2.3	2.3	2.3	2.3	1.8
76.5°	2.3	2.3	2.3	2.3	2.3	1.8
77°	2.3	1.8	2.3	2.3	1.8	1.8
77.5°	1.8	1.8	1.8	1.8	1.8	1.8
78°	1.8	1.8	1.8	1.8	1.8	1.4
78.5°	1.8	1.8	1.8	1.8	1.4	1.4
79°	1.4	1.4	1.8	1.8	1.4	1.4
79.5°	1.4	1.4	1.4	1.4	1.4	1.4
80°	1.4	1.4	1.4	1.4	1.4	0.9
80.5°	1.4	1.4	1.4	1.4	0.9	0.9
81°	1.4	1.4	1.4	1.4	0.9	0.9
81.5°	0.9	0.9	0.9	0.9	0.9	0.9
82°	0.9	0.9	0.9	0.9	0.9	0.9
82.5°	0.9	0.9	0.9	0.9	0.5	0.5
83°	0.9	0.9	0.9	0.9	0.5	0.5
83.5°	0.9	0.9	0.9	0.9	0.5	0.5
84°	0.5	0.5	0.5	0.5	0.5	0.5
84.5°	0.5	0.5	0.5	0.5	0.5	0.5
85°	0.5	0.5	0.5	0.5	0.0	0.5
85.5°	0.5	0.5	0.5	0.5	0.0	0.0
86°	0.5	0.5	0.5	0.5	0.0	0.0
86.5°	0.5	0.5	0.5	0.5	0.0	0.0
87°	0.0	0.5	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: P776620

CATALOG NUMBER: HCDJBL54050CSD-HCD4TSQC-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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21.5°	3626.0	3625.6	3628.8	3651.1	3667.0	3719.0	3723.5	3713.1	3730.8	3732.7	3680.7
22°	3577.3	3574.1	3582.3	3601.9	3622.4	3668.4	3676.6	3664.8	3683.0	3682.1	3633.8



44°	593.3	710.4	988.0	871.8	717.3	866.7	1132.0	884.5	736.9	856.7	1043.6
44.5°	543.7	658.9	926.4	820.7	661.7	812.1	1070.4	831.7	682.2	804.3	982.9



66.5°	5.0	5.5	5.5	5.5	5.0	5.0	5.0	4.6	4.6	5.0	5.5
67°	5.0	5.0	5.0	5.0	4.6	5.0	5.0	4.6	4.1	4.6	5.0



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°	3668.4	3637.9	3603.7	3571.3	3623.3	3626.0
22°	3616.9	3588.7	3551.7	3524.4	3571.3	3577.3



44°	792.0	632.5	724.1	915.0	770.6	593.3
44.5°	737.8	583.3	674.0	860.4	717.7	543.7

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

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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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Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)