

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: P776796

Luminaire Tested: HCDJBL54050CSD-HCD8TRC-5000lm-3000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776796
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-HCD8TRC-5000lm-3000K
Description: 8 INCH ROUND MEDIUM SPECULAR CLEAR TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3000K CCT
Ballast/Driver: -

Summary

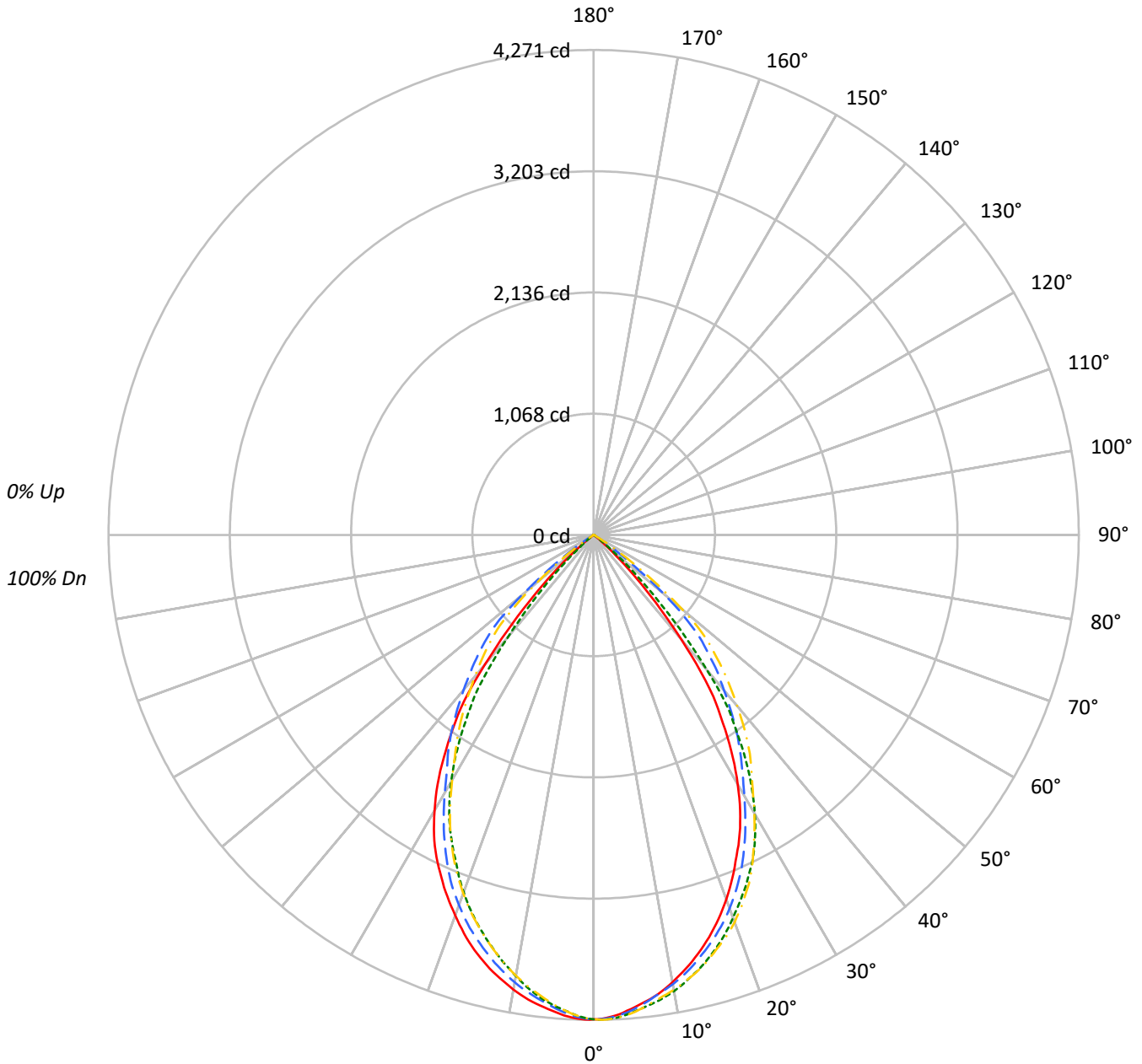
Lumens per Lamp: N/A
Luminaire Lumens: 5065.5 lumens
Efficiency: N/A
Efficacy: 105.5 lumens/watt
Spacing Criteria (0/90/45): 1 / 1 / 1.05
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

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										
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	99	97	97	95	94	92
	1	113	110	107	105	111	108	105	103	104	102	100	100	99	97	97	95	94	92	92	91	88	86	85	85	85
	2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86	85	85	82	80	85	82	79	78
	3	101	94	88	84	99	92	87	83	89	85	82	87	83	80	85	82	79	78	78	77	74	79	76	73	71
	4	95	86	80	76	93	85	80	75	83	78	74	81	77	74	79	76	73	71	71	76	71	74	70	67	65
	5	89	80	74	69	88	79	73	69	77	72	68	76	71	67	74	70	67	65	65	71	67	70	67	65	65
	6	84	74	68	63	83	73	67	63	72	66	62	70	66	62	69	65	61	60	60	66	62	69	65	61	60
	7	79	69	62	58	78	68	62	58	67	61	57	66	61	57	65	60	57	55	55	61	57	65	60	57	55
	8	75	64	58	53	74	64	58	53	63	57	53	62	56	53	61	56	52	51	51	56	53	61	56	52	51
	9	71	60	54	49	70	60	54	49	59	53	49	58	53	49	57	52	49	47	47	53	49	57	52	49	47
	10	67	56	50	46	66	56	50	46	55	50	46	54	49	45	54	49	45	44	44	49	45	54	49	45	44

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	130267	130267	130267	130267
5°	127917	129014	128886	127289
10°	123962	126470	126039	122319
15°	118350	122345	121846	116087
20°	110933	116550	115796	108772
25°	101568	109744	108757	99783
30°	89448	100035	98805	88465
35°	72514	84642	83236	71977
40°	47626	61723	59224	46960
45°	20910	31709	29740	20448
50°	4569	9205	8212	4417
55°	596	889	814	570
60°	482	708	653	452
65°	405	607	535	368
70°	330	500	455	295
75°	271	436	389	271
80°	246	404	334	246
85°	175	315	315	175

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 135°
 Vertical Angle: 45°
 Luminance: 66444 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	393.9	7.8
10°-20°	1060.1	20.9
20°-30°	1425.9	28.1
30°-40°	1347.3	26.6
40°-50°	723.1	14.3
50°-60°	104.6	2.1
60°-70°	6.9	0.1
70°-80°	3.1	0.1
80°-90°	0.7	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°	2879.8	56.9
0°-40°	4227.1	83.4
0°-60°	5054.8	99.8
0°-90°	5065.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5065.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4267	4267	4267	4267	4267	
5°	4174	4210	4206	4153	4174	393
15°	3744	3871	3855	3673	3744	1049
25°	3015	3258	3228	2962	3015	1377
35°	1946	2271	2233	1931	1946	1191
45°	484	734	689	474	484	402
55°	11	17	15	11	11	18
65°	6	8	7	5	6	5
75°	2	4	3	2	2	3
85°	0	1	1	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°	4266.8	4266.8	4266.8	4266.8	4266.8	4266.8	4266.8	4266.8	4266.8	4266.8	4266.8
0.5°	4266.4	4266.8	4266.4	4267.3	4268.2	4269.1	4269.6	4271.0	4270.1	4267.8	4264.0
1°	4262.2	4263.6	4264.0	4266.8	4269.1	4270.1	4271.0	4271.0	4269.1	4265.0	4259.4
1.5°	4255.7	4258.9	4259.9	4263.6	4267.3	4269.1	4269.6	4269.6	4265.9	4260.8	4254.3
2°	4248.2	4252.9	4254.3	4258.9	4264.5	4265.9	4266.4	4266.4	4261.7	4254.7	4246.8
2.5°	4239.4	4245.0	4246.8	4252.9	4259.9	4261.2	4262.2	4261.7	4255.7	4246.8	4238.0
3°	4228.2	4234.8	4238.0	4244.5	4252.9	4255.2	4255.7	4254.7	4248.7	4238.5	4227.3
3.5°	4216.2	4223.1	4227.3	4234.8	4244.5	4247.3	4247.8	4246.4	4239.4	4227.8	4215.2
4°	4201.3	4209.7	4215.7	4224.1	4234.3	4237.5	4238.5	4237.1	4228.7	4215.7	4201.3
4.5°	4188.3	4196.6	4202.2	4210.1	4222.2	4226.4	4227.8	4225.5	4217.1	4202.7	4186.4
5°	4173.9	4184.1	4186.9	4196.2	4209.7	4213.4	4215.2	4213.4	4205.5	4188.7	4170.6
5.5°	4159.5	4169.2	4171.1	4180.4	4197.1	4200.4	4200.8	4200.4	4194.8	4174.8	4155.3
6°	4144.6	4153.9	4154.8	4166.4	4185.9	4187.8	4185.9	4189.2	4182.7	4161.3	4139.5
6.5°	4131.6	4139.5	4137.6	4151.6	4174.8	4175.7	4171.1	4176.2	4171.5	4146.9	4123.2
7°	4117.2	4125.5	4119.9	4136.7	4163.2	4163.2	4154.8	4163.6	4159.9	4133.0	4107.9
7.5°	4100.0	4109.7	4102.3	4122.7	4152.5	4151.1	4139.5	4149.7	4146.0	4117.6	4091.6
8°	4082.8	4093.0	4085.6	4108.3	4139.9	4138.5	4125.5	4134.8	4132.0	4101.8	4074.4
8.5°	4064.6	4074.9	4068.4	4093.0	4126.5	4125.5	4110.2	4119.0	4117.2	4084.6	4057.2
9°	4043.3	4055.3	4051.6	4075.3	4110.7	4110.2	4096.7	4103.2	4100.4	4067.9	4040.0
9.5°	4021.4	4034.4	4034.4	4058.1	4095.8	4094.8	4082.3	4085.1	4083.7	4050.7	4021.4
10°	3998.6	4012.6	4017.2	4040.0	4079.5	4079.0	4067.0	4066.5	4065.6	4032.1	4001.9
10.5°	3974.9	3989.3	3998.6	4021.9	4061.8	4062.3	4052.1	4047.4	4046.5	4013.5	3981.0
11°	3951.2	3963.8	3979.6	4001.4	4043.7	4043.7	4035.4	4027.9	4026.1	3992.6	3959.6
11.5°	3928.5	3938.7	3959.1	3981.0	4022.8	4024.7	4017.7	4006.5	4006.5	3971.7	3937.3
12°	3904.7	3914.0	3936.8	3958.7	4001.4	4003.7	4000.0	3985.2	3987.5	3950.3	3914.5
12.5°	3880.6	3889.4	3913.6	3936.4	3981.0	3981.4	3981.9	3963.8	3968.0	3930.3	3890.8
13°	3855.5	3863.8	3891.3	3913.1	3961.0	3959.1	3963.8	3944.3	3948.9	3909.9	3868.0
13.5°	3828.1	3838.7	3865.7	3891.3	3941.5	3938.7	3944.3	3924.3	3926.6	3890.3	3842.5
14°	3800.6	3812.3	3841.5	3869.4	3920.1	3918.2	3924.3	3905.2	3902.9	3869.4	3816.4
14.5°	3772.3	3784.4	3815.5	3847.6	3895.5	3896.8	3902.4	3883.8	3879.6	3846.2	3790.4
15°	3744.4	3755.5	3790.4	3824.3	3870.8	3874.5	3879.6	3861.1	3855.0	3821.5	3763.4
15.5°	3715.1	3727.7	3763.4	3798.8	3845.3	3849.9	3855.5	3837.4	3830.4	3796.4	3737.4
16°	3685.4	3698.4	3739.3	3772.7	3820.6	3825.3	3831.3	3815.0	3804.4	3770.4	3710.9
16.5°	3654.2	3669.6	3712.3	3746.3	3795.5	3799.2	3807.6	3789.9	3777.9	3744.4	3684.9
17°	3622.2	3639.3	3684.0	3718.8	3768.6	3774.6	3783.9	3765.3	3750.9	3716.5	3656.1
17.5°	3589.6	3610.1	3654.2	3690.9	3741.6	3748.1	3760.7	3739.7	3721.6	3688.2	3628.7
18°	3555.7	3578.5	3627.3	3662.6	3712.3	3721.6	3738.4	3713.7	3690.5	3657.9	3597.5
18.5°	3520.8	3545.9	3596.6	3633.8	3682.6	3693.3	3712.8	3686.3	3659.3	3626.8	3565.9
19°	3486.0	3513.4	3565.4	3603.1	3651.9	3664.0	3686.3	3657.0	3628.7	3594.7	3533.8
19.5°	3450.6	3480.4	3533.4	3570.6	3619.4	3634.2	3657.5	3626.8	3595.7	3562.7	3500.8
20°	3414.4	3445.5	3500.8	3538.0	3587.3	3603.1	3628.2	3596.1	3564.1	3529.7	3467.4
20.5°	3377.7	3410.7	3466.0	3504.1	3555.7	3571.5	3596.6	3564.5	3532.4	3495.3	3433.9
21°	3338.6	3375.3	3430.2	3469.7	3523.6	3539.0	3565.9	3532.9	3500.4	3460.9	3400.4



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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°	3218.7	3262.4	3321.9	3362.8	3427.4	3443.2	3464.6	3436.2	3404.2	3358.1	3291.7
23°	3175.5	3221.5	3282.4	3326.1	3394.9	3411.1	3429.7	3403.7	3372.1	3321.4	3252.2
23.5°	3133.7	3181.5	3243.8	3291.2	3362.8	3379.1	3394.9	3371.2	3334.0	3284.7	3211.7
24°	3092.7	3138.3	3202.9	3255.0	3326.5	3343.3	3360.0	3334.4	3297.7	3247.5	3169.9
24.5°	3053.7	3097.4	3160.6	3219.2	3291.7	3308.9	3320.0	3297.7	3262.4	3209.9	3127.6
25°	3015.1	3057.4	3118.3	3182.0	3257.8	3272.6	3279.1	3260.5	3228.5	3171.8	3083.5
25.5°	2973.8	3018.4	3074.6	3144.3	3225.2	3235.4	3236.4	3221.5	3194.1	3135.5	3039.8
26°	2931.0	2982.1	3030.5	3106.7	3189.4	3199.7	3193.6	3183.8	3157.8	3100.7	2995.1
26.5°	2887.3	2944.5	2985.8	3069.5	3150.4	3165.3	3147.6	3147.1	3118.8	3065.8	2950.1
27°	2841.3	2905.0	2938.9	3034.2	3110.4	3132.7	3101.1	3112.7	3077.9	3030.5	2905.0
27.5°	2794.4	2863.6	2892.4	2999.3	3069.0	3097.9	3056.0	3077.9	3036.0	2993.3	2859.0
28°	2744.6	2819.4	2843.6	2961.7	3025.8	3061.1	3010.9	3041.6	2992.4	2953.8	2812.5
28.5°	2695.3	2776.2	2796.2	2923.1	2981.2	3023.0	2965.4	3001.6	2947.7	2913.3	2766.0
29°	2643.3	2731.6	2747.9	2880.8	2934.3	2982.6	2921.7	2963.1	2900.8	2871.0	2718.6
29.5°	2591.2	2685.6	2699.5	2838.5	2886.4	2941.2	2874.3	2920.3	2851.5	2826.9	2668.9
30°	2537.3	2637.2	2652.6	2794.4	2837.6	2898.0	2829.2	2876.6	2802.7	2781.3	2618.7
30.5°	2482.5	2586.6	2606.1	2748.3	2786.4	2852.5	2781.8	2831.5	2751.1	2733.0	2570.8
31°	2423.0	2535.9	2560.1	2700.9	2734.9	2806.0	2734.9	2785.5	2700.5	2684.7	2524.8
31.5°	2370.0	2485.7	2517.3	2652.1	2680.9	2757.6	2687.0	2736.3	2646.5	2634.5	2480.6
32°	2311.0	2434.1	2474.6	2602.9	2627.0	2708.4	2642.4	2687.9	2593.1	2584.3	2439.7
32.5°	2253.3	2380.7	2432.3	2553.6	2571.7	2658.2	2598.7	2637.2	2535.0	2533.1	2399.7
33°	2191.5	2327.7	2390.0	2503.9	2515.5	2607.0	2558.2	2586.1	2478.3	2481.5	2362.6
33.5°	2133.9	2273.3	2347.2	2452.7	2456.9	2555.0	2519.2	2533.6	2417.9	2426.7	2324.4
34°	2070.7	2218.0	2306.3	2400.7	2396.5	2503.4	2481.5	2480.1	2357.0	2373.2	2286.3
34.5°	2009.3	2161.3	2265.4	2347.2	2333.3	2448.1	2443.4	2426.7	2294.2	2316.1	2245.9
35°	1945.6	2103.7	2224.0	2295.2	2271.0	2391.8	2405.8	2371.9	2233.3	2259.8	2206.8
35.5°	1887.5	2045.6	2182.2	2240.8	2209.2	2335.1	2365.8	2317.0	2169.7	2202.2	2164.6
36°	1828.0	1987.5	2137.6	2185.0	2146.4	2278.4	2324.4	2259.8	2107.8	2144.1	2123.2
36.5°	1770.9	1928.0	2093.4	2128.8	2085.1	2218.0	2282.1	2201.7	2048.4	2084.6	2080.0
37°	1696.5	1870.8	2048.8	2071.1	2025.6	2157.6	2238.5	2143.6	1988.4	2026.5	2036.7
37.5°	1613.3	1814.6	2004.7	2014.0	1968.9	2097.2	2192.9	2085.5	1918.2	1967.0	1992.6
38°	1530.1	1759.3	1959.1	1956.3	1896.8	2037.7	2147.4	2027.9	1844.8	1909.8	1949.8
38.5°	1447.4	1703.0	1914.0	1900.1	1818.7	1980.0	2102.3	1969.8	1761.1	1853.6	1907.1
39°	1364.2	1626.8	1871.3	1847.6	1735.5	1924.3	2057.2	1915.9	1673.3	1798.3	1864.8
39.5°	1281.0	1549.6	1827.6	1793.2	1641.7	1871.7	2010.7	1861.0	1578.4	1734.6	1821.5
40°	1195.0	1472.5	1785.7	1742.5	1548.7	1805.3	1965.6	1804.8	1486.0	1663.5	1779.7
40.5°	1109.5	1395.3	1742.1	1682.6	1456.7	1733.7	1921.5	1745.3	1396.2	1586.8	1738.3
41°	1030.9	1318.2	1700.7	1607.3	1368.4	1656.5	1877.3	1675.6	1309.8	1505.9	1697.4
41.5°	952.4	1236.4	1677.9	1531.5	1283.8	1571.5	1834.5	1601.7	1226.6	1422.3	1657.9
42°	880.3	1157.8	1632.8	1455.7	1198.7	1485.0	1790.4	1522.7	1141.5	1340.0	1617.5
42.5°	810.1	1079.3	1587.3	1380.4	1119.7	1400.0	1749.0	1442.3	1061.6	1262.4	1578.9
43°	742.3	1000.7	1542.2	1304.7	1034.2	1318.6	1707.7	1362.8	979.3	1185.7	1540.3
43.5°	672.1	925.9	1496.6	1228.0	955.6	1240.1	1665.4	1284.7	900.8	1112.7	1500.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	484.3	723.2	1377.2	1014.2	734.4	1008.6	1538.9	1064.4	688.8	891.9	1381.4
45.5°	427.1	657.2	1337.7	942.6	669.3	932.8	1496.2	990.5	624.2	823.2	1342.8
46°	374.6	594.5	1294.5	875.7	601.9	860.3	1454.3	917.5	561.5	754.4	1303.8
46.5°	322.6	533.1	1243.3	806.4	542.0	791.5	1413.4	847.3	502.0	693.9	1258.7
47°	274.7	476.0	1184.3	741.8	488.0	724.6	1375.3	779.0	449.9	629.8	1215.0
47.5°	230.1	420.6	1123.9	677.7	434.6	658.6	1326.5	713.9	397.9	571.2	1163.8
48°	192.9	368.1	1063.9	619.1	381.1	595.9	1278.2	650.2	345.3	511.7	1113.7
48.5°	160.4	318.4	1006.3	558.7	327.2	535.4	1222.9	589.4	293.8	460.1	1046.3
49°	138.5	271.9	939.4	502.4	274.2	482.0	1156.4	529.4	250.1	408.1	974.2
49.5°	117.6	228.7	871.5	446.7	231.9	429.5	1087.6	477.8	210.6	356.5	897.1
50°	96.2	189.6	797.6	394.1	193.8	376.5	1012.3	425.8	172.9	304.9	821.8
50.5°	75.3	155.2	723.2	342.6	159.0	324.0	938.0	374.2	139.9	261.2	750.2
51°	58.6	134.3	650.7	297.0	127.8	271.0	862.7	322.6	110.6	221.2	680.9
51.5°	42.3	113.4	582.9	253.3	101.8	229.6	789.7	271.0	92.0	185.0	614.0
52°	26.5	92.0	518.7	213.3	85.1	191.5	715.8	228.7	73.0	149.7	548.0
52.5°	16.3	71.1	458.3	177.1	68.3	155.7	647.5	189.6	54.4	118.5	493.1
53°	14.4	54.8	400.2	150.6	51.1	125.0	579.1	154.8	35.3	91.6	437.8
53.5°	13.5	39.5	345.8	124.6	34.4	99.0	515.0	122.7	17.2	75.8	383.0
54°	12.5	24.2	296.1	98.1	18.1	81.8	458.8	94.8	16.3	60.0	327.7
54.5°	11.6	13.5	251.0	71.6	17.2	65.1	402.5	78.6	15.8	44.2	272.8
55°	11.2	12.5	210.1	45.5	16.7	48.3	346.7	62.3	15.3	28.4	231.0
55.5°	10.7	11.6	173.8	26.5	15.8	31.6	290.5	45.5	14.9	13.0	192.9
56°	10.2	11.2	149.2	14.4	15.3	14.9	244.5	29.3	14.4	12.5	158.0
56.5°	10.2	10.2	125.0	13.5	14.9	13.9	202.2	13.5	13.9	12.1	127.8
57°	9.8	9.8	100.4	13.0	14.4	13.5	164.5	13.0	13.5	11.6	101.3
57.5°	9.3	9.8	76.2	12.5	13.9	13.0	131.1	12.5	13.0	11.6	79.9
58°	8.8	9.3	52.1	12.1	13.5	12.5	102.3	12.5	12.5	11.2	67.4
58.5°	8.8	8.8	40.0	11.6	13.0	12.1	78.6	12.1	12.1	10.7	55.3
59°	8.4	8.8	30.7	11.2	12.5	12.1	66.0	11.6	11.6	10.2	42.8
59.5°	8.4	8.4	23.7	10.7	12.1	11.6	53.9	11.2	11.2	10.2	30.7
60°	7.9	8.4	18.1	10.7	11.6	11.2	42.3	10.7	10.7	9.8	18.6
60.5°	7.4	7.9	15.3	10.2	11.2	10.7	30.2	10.7	10.7	9.3	13.9
61°	7.4	7.9	13.0	9.8	11.2	10.2	18.1	10.2	10.2	9.3	10.2
61.5°	7.0	7.4	10.7	9.8	10.7	10.2	13.5	9.8	9.8	8.8	8.4
62°	7.0	7.4	7.9	9.3	10.2	9.8	10.7	9.8	9.3	8.4	7.4
62.5°	6.5	7.0	7.9	8.8	9.8	9.3	8.8	9.3	9.3	8.4	7.4
63°	6.5	7.0	7.4	8.8	9.8	9.3	8.4	8.8	8.8	7.9	7.0
63.5°	6.0	6.5	7.4	8.4	9.3	8.8	8.4	8.8	8.4	7.9	7.0
64°	6.0	6.5	7.0	8.4	8.8	8.8	7.9	8.4	8.4	7.4	6.5
64.5°	5.6	6.0	7.0	7.9	8.8	8.4	7.9	7.9	7.9	7.4	6.5
65°	5.6	6.0	6.5	7.4	8.4	7.9	7.4	7.9	7.4	7.0	6.0
65.5°	5.1	6.0	6.5	7.4	7.9	7.9	7.4	7.4	7.4	7.0	6.0
66°	5.1	5.6	6.0	7.0	7.9	7.4	7.0	7.4	7.0	6.5	5.6



TEST NUMBER: P776796

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRC-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	4.6	5.1	5.6	6.5	7.0	7.0	6.5	6.5	6.0	6.0	5.1
68°	4.2	4.6	5.6	6.0	6.5	6.5	6.0	6.0	6.0	5.6	5.1
68.5°	4.2	4.6	5.1	6.0	6.5	6.5	6.0	6.0	5.6	5.6	4.6
69°	4.2	4.2	5.1	5.6	6.0	6.0	5.6	5.6	5.6	5.1	4.6
69.5°	3.7	4.2	4.6	5.6	6.0	6.0	5.6	5.6	5.1	5.1	4.6
70°	3.7	4.2	4.6	5.1	5.6	5.6	5.1	5.1	5.1	4.6	4.2
70.5°	3.7	3.7	4.2	5.1	5.6	5.6	5.1	5.1	5.1	4.6	4.2
71°	3.3	3.7	4.2	4.6	5.6	5.1	4.6	4.6	4.6	4.6	3.7
71.5°	3.3	3.7	4.2	4.6	5.1	5.1	4.6	4.6	4.6	4.2	3.7
72°	3.3	3.3	3.7	4.6	5.1	4.6	4.2	4.6	4.2	4.2	3.7
72.5°	3.3	3.3	3.7	4.2	4.6	4.6	4.2	4.2	4.2	3.7	3.3
73°	2.8	3.3	3.3	4.2	4.6	4.6	3.7	4.2	4.2	3.7	3.3
73.5°	2.8	3.3	3.3	3.7	4.2	4.2	3.7	3.7	3.7	3.7	2.8
74°	2.8	2.8	3.3	3.7	4.2	4.2	3.7	3.7	3.7	3.3	2.8
74.5°	2.8	2.8	2.8	3.7	4.2	4.2	3.3	3.7	3.7	3.3	2.8
75°	2.3	2.8	2.8	3.3	3.7	3.7	3.3	3.3	3.3	3.3	2.3
75.5°	2.3	2.3	2.8	3.3	3.7	3.7	2.8	3.3	3.3	2.8	2.3
76°	2.3	2.3	2.3	3.3	3.7	3.3	2.8	3.3	3.3	2.8	2.3
76.5°	2.3	2.3	2.3	2.8	3.3	3.3	2.8	2.8	2.8	2.8	2.3
77°	1.9	2.3	2.3	2.8	3.3	3.3	2.3	2.8	2.8	2.3	1.9
77.5°	1.9	1.9	1.9	2.8	3.3	2.8	2.3	2.8	2.8	2.3	1.9
78°	1.9	1.9	1.9	2.3	2.8	2.8	2.3	2.3	2.3	2.3	1.9
78.5°	1.9	1.9	1.9	2.3	2.8	2.8	1.9	2.3	2.3	2.3	1.9
79°	1.9	1.9	1.9	2.3	2.8	2.3	1.9	2.3	2.3	1.9	1.4
79.5°	1.4	1.4	1.4	2.3	2.3	2.3	1.9	1.9	2.3	1.9	1.4
80°	1.4	1.4	1.4	1.9	2.3	2.3	1.9	1.9	1.9	1.9	1.4
80.5°	1.4	1.4	1.4	1.9	2.3	1.9	1.4	1.9	1.9	1.4	1.4
81°	1.4	1.4	1.4	1.9	1.9	1.9	1.4	1.4	1.9	1.4	0.9
81.5°	0.9	1.4	0.9	1.4	1.9	1.9	1.4	1.4	1.9	1.4	0.9
82°	0.9	0.9	0.9	1.4	1.9	1.9	1.4	1.4	1.4	1.4	0.9
82.5°	0.9	0.9	0.9	1.4	1.9	1.4	0.9	1.4	1.4	0.9	0.9
83°	0.9	0.9	0.9	0.9	1.4	1.4	0.9	0.9	1.4	0.9	0.9
83.5°	0.9	0.9	0.9	0.9	1.4	1.4	0.9	0.9	1.4	0.9	0.5
84°	0.5	0.5	0.5	0.9	1.4	0.9	0.9	0.9	0.9	0.9	0.5
84.5°	0.5	0.5	0.5	0.9	1.4	0.9	0.9	0.9	0.9	0.5	0.5
85°	0.5	0.5	0.5	0.5	0.9	0.9	0.5	0.5	0.9	0.5	0.5
85.5°	0.5	0.5	0.5	0.5	0.9	0.9	0.5	0.5	0.9	0.5	0.5
86°	0.5	0.5	0.5	0.5	0.9	0.5	0.5	0.5	0.5	0.5	0.5
86.5°	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
87°	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.0	0.5	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.5	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: P776796
CATALOG NUMBER: HCDJBL54050CSD-HCD8TRC-5000lm-3000K

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: P776796

CATALOG NUMBER: HCDJBLS4050CSD-HCD8TRC-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	4266.8	4266.8	4266.8	4266.8	4266.8	4266.8
0.5°	4263.1	4260.3	4261.2	4262.2	4264.5	4266.4
1°	4258.0	4254.3	4253.3	4255.7	4259.4	4262.2
1.5°	4250.6	4245.0	4244.5	4246.8	4251.9	4255.7
2°	4241.7	4234.8	4232.9	4236.1	4242.2	4248.2
2.5°	4231.5	4222.2	4220.3	4224.1	4231.5	4239.4
3°	4218.9	4208.7	4207.3	4210.6	4219.4	4228.2
3.5°	4205.5	4195.2	4191.5	4196.2	4205.0	4216.2
4°	4192.0	4181.8	4178.0	4179.0	4189.7	4201.3
4.5°	4179.0	4168.3	4162.7	4161.8	4172.9	4188.3
5°	4165.0	4153.4	4146.9	4145.0	4156.7	4173.9
5.5°	4150.2	4137.1	4129.7	4126.5	4139.5	4159.5
6°	4133.9	4121.8	4112.5	4107.4	4120.9	4144.6
6.5°	4117.6	4103.7	4094.8	4088.8	4103.2	4131.6
7°	4100.9	4085.6	4074.4	4069.3	4086.5	4117.2
7.5°	4081.8	4064.2	4053.5	4048.8	4067.9	4100.0
8°	4061.4	4042.8	4031.6	4029.3	4048.8	4082.8
8.5°	4039.1	4019.6	4007.5	4007.0	4028.8	4064.6
9°	4016.3	3995.4	3983.3	3985.6	4007.9	4043.3
9.5°	3992.1	3971.2	3957.3	3963.8	3986.1	4021.4
10°	3967.5	3945.6	3932.2	3941.0	3962.8	3998.6
10.5°	3942.9	3919.6	3904.7	3917.8	3938.7	3974.9
11°	3916.8	3894.1	3877.3	3893.6	3914.0	3951.2
11.5°	3890.8	3869.0	3849.9	3868.5	3889.4	3928.5
12°	3865.2	3842.9	3824.3	3842.5	3863.8	3904.7
12.5°	3840.6	3815.0	3797.4	3816.0	3839.2	3880.6
13°	3815.5	3787.2	3771.4	3789.0	3814.1	3855.5
13.5°	3788.1	3758.8	3741.6	3761.1	3789.5	3828.1
14°	3762.1	3730.0	3712.3	3731.8	3763.9	3800.6
14.5°	3733.7	3701.6	3682.6	3703.5	3737.0	3772.3
15°	3706.3	3672.8	3654.2	3675.1	3708.6	3744.4
15.5°	3677.5	3643.1	3624.0	3646.3	3679.3	3715.1
16°	3649.6	3612.4	3594.3	3617.0	3650.0	3685.4
16.5°	3620.8	3582.6	3563.6	3586.8	3620.3	3654.2
17°	3591.5	3551.0	3533.4	3557.5	3589.6	3622.2
17.5°	3561.3	3518.5	3502.2	3525.9	3558.5	3589.6
18°	3531.1	3485.0	3469.7	3494.3	3525.9	3555.7
18.5°	3498.5	3452.5	3437.6	3462.3	3492.5	3520.8
19°	3466.0	3418.1	3403.7	3427.9	3458.5	3486.0
19.5°	3433.4	3383.2	3369.8	3394.4	3423.2	3450.6
20°	3400.9	3347.9	3334.4	3359.5	3386.0	3414.4
20.5°	3367.9	3310.7	3300.0	3323.8	3349.3	3377.7
21°	3332.6	3273.1	3264.7	3287.0	3311.7	3338.6



TEST NUMBER: P776796

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRC-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	3219.6	3153.6	3151.3	3174.6	3195.0	3218.7
23°	3181.1	3112.3	3112.3	3134.1	3154.1	3175.5
23.5°	3139.7	3075.1	3070.4	3095.1	3113.2	3133.7
24°	3098.3	3037.4	3029.1	3052.3	3071.4	3092.7
24.5°	3055.1	2999.8	2990.5	3010.5	3027.2	3053.7
25°	3014.7	2962.1	2952.4	2966.8	2982.1	3015.1
25.5°	2975.2	2924.0	2917.1	2924.5	2940.3	2973.8
26°	2938.4	2884.5	2879.4	2878.5	2898.9	2931.0
26.5°	2902.6	2843.2	2842.2	2832.9	2860.4	2887.3
27°	2866.9	2799.9	2805.0	2786.0	2820.8	2841.3
27.5°	2829.2	2754.4	2765.5	2737.6	2779.5	2794.4
28°	2790.6	2707.0	2725.6	2688.4	2737.6	2744.6
28.5°	2749.7	2659.6	2683.3	2640.0	2694.4	2695.3
29°	2707.9	2611.2	2639.6	2590.3	2649.3	2643.3
29.5°	2663.7	2560.1	2595.0	2541.5	2602.4	2591.2
30°	2619.6	2509.4	2548.0	2492.2	2554.5	2537.3
30.5°	2573.1	2456.4	2500.1	2445.8	2505.7	2482.5
31°	2527.1	2402.1	2450.4	2399.3	2455.5	2423.0
31.5°	2477.8	2346.8	2400.7	2354.2	2404.4	2370.0
32°	2430.4	2291.4	2350.0	2308.6	2352.3	2311.0
32.5°	2380.7	2232.9	2299.3	2266.3	2299.8	2253.3
33°	2330.0	2174.8	2245.9	2224.0	2247.3	2191.5
33.5°	2279.4	2114.8	2190.6	2183.6	2194.3	2133.9
34°	2227.8	2053.5	2136.2	2143.2	2141.3	2070.7
34.5°	2173.4	1992.1	2077.6	2100.9	2085.5	2009.3
35°	2120.4	1931.2	2020.0	2058.1	2030.7	1945.6
35.5°	2066.5	1873.6	1961.9	2015.4	1975.8	1887.5
36°	2012.1	1817.8	1903.8	1970.3	1920.1	1828.0
36.5°	1955.9	1760.6	1844.8	1926.1	1864.8	1770.9
37°	1900.1	1688.1	1788.5	1882.9	1808.5	1696.5
37.5°	1844.8	1603.1	1732.8	1839.2	1752.7	1613.3
38°	1790.4	1518.0	1684.0	1795.5	1697.4	1530.1
38.5°	1739.3	1433.4	1608.2	1751.3	1637.9	1447.4
39°	1691.9	1348.4	1532.0	1710.0	1578.4	1364.2
39.5°	1640.3	1263.3	1455.7	1662.1	1518.5	1281.0
40°	1574.7	1178.3	1380.0	1624.0	1459.0	1195.0
40.5°	1499.4	1094.1	1304.2	1585.4	1399.0	1109.5
41°	1423.2	1013.7	1228.0	1546.8	1327.9	1030.9
41.5°	1347.4	935.6	1149.9	1508.3	1257.3	952.4
42°	1274.0	864.1	1071.8	1469.2	1187.6	880.3
42.5°	1199.6	795.7	994.7	1429.7	1114.6	810.1
43°	1124.3	726.9	921.2	1391.1	1042.1	742.3
43.5°	1047.6	658.6	851.5	1351.6	970.5	672.1



TEST NUMBER: P776796

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRC-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	836.2	473.6	658.2	1239.6	773.9	484.3
45.5°	771.1	418.8	595.9	1195.5	712.5	427.1
46°	706.5	365.8	537.8	1147.1	652.1	374.6
46.5°	643.7	315.1	480.6	1086.2	589.8	322.6
47°	582.9	267.3	427.1	1027.7	533.1	274.7
47.5°	523.4	225.0	373.7	971.4	476.4	230.1
48°	471.8	188.2	324.0	912.9	423.4	192.9
48.5°	420.2	157.1	277.5	850.1	370.9	160.4
49°	369.0	135.3	234.7	777.6	323.5	138.5
49.5°	317.5	113.9	196.6	705.6	275.6	117.6
50°	265.9	93.0	162.7	640.0	232.9	96.2
50.5°	223.6	72.0	141.3	576.3	193.8	75.3
51°	185.9	55.3	120.4	517.8	160.8	58.6
51.5°	153.4	39.0	99.0	461.1	139.9	42.3
52°	126.4	23.7	78.1	407.6	119.0	26.5
52.5°	103.6	13.9	56.7	357.4	98.1	16.3
53°	84.6	13.0	40.4	310.5	77.2	14.4
53.5°	70.2	12.5	25.1	265.9	56.7	13.5
54°	55.8	11.6	13.9	226.8	40.4	12.5
54.5°	40.9	11.2	13.0	191.0	25.6	11.6
55°	26.5	10.7	11.6	158.5	14.4	11.2
55.5°	12.1	10.2	10.7	134.8	13.0	10.7
56°	9.8	9.8	9.8	111.1	11.6	10.2
56.5°	9.8	9.8	9.3	87.4	10.2	10.2
57°	9.3	9.3	8.8	63.7	9.3	9.8
57.5°	8.8	8.8	8.8	48.3	8.8	9.3
58°	8.8	8.8	8.4	36.7	8.4	8.8
58.5°	8.4	8.4	8.4	27.0	8.4	8.8
59°	8.4	7.9	7.9	20.0	7.9	8.4
59.5°	7.9	7.9	7.9	17.7	7.9	8.4
60°	7.9	7.4	7.4	14.9	7.4	7.9
60.5°	7.4	7.4	7.4	12.1	7.4	7.4
61°	7.4	7.0	7.0	9.3	7.0	7.4
61.5°	7.0	7.0	7.0	7.0	7.0	7.0
62°	7.0	6.5	6.5	6.5	6.5	7.0
62.5°	6.5	6.5	6.5	6.5	6.5	6.5
63°	6.5	6.0	6.0	6.0	6.5	6.5
63.5°	6.0	5.6	6.0	6.0	6.0	6.0
64°	6.0	5.6	5.6	6.0	6.0	6.0
64.5°	5.6	5.1	5.6	5.6	5.6	5.6
65°	5.6	5.1	5.6	5.6	5.6	5.6
65.5°	5.6	5.1	5.1	5.1	5.6	5.1
66°	5.1	4.6	5.1	5.1	5.1	5.1



TEST NUMBER: P776796

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRC-5000lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	4.6	4.2	4.6	4.6	4.6	4.6
68°	4.2	4.2	4.2	4.6	4.6	4.2
68.5°	4.2	3.7	4.2	4.2	4.2	4.2
69°	4.2	3.7	4.2	4.2	4.2	4.2
69.5°	3.7	3.7	3.7	4.2	4.2	3.7
70°	3.7	3.3	3.7	3.7	3.7	3.7
70.5°	3.7	3.3	3.7	3.7	3.7	3.7
71°	3.3	3.3	3.3	3.3	3.7	3.3
71.5°	3.3	3.3	3.3	3.3	3.3	3.3
72°	3.3	2.8	3.3	3.3	3.3	3.3
72.5°	3.3	2.8	2.8	2.8	3.3	3.3
73°	2.8	2.8	2.8	2.8	3.3	2.8
73.5°	2.8	2.8	2.8	2.8	2.8	2.8
74°	2.8	2.3	2.8	2.3	2.8	2.8
74.5°	2.3	2.3	2.3	2.3	2.8	2.8
75°	2.3	2.3	2.3	2.3	2.3	2.3
75.5°	2.3	2.3	2.3	2.3	2.3	2.3
76°	2.3	1.9	2.3	1.9	2.3	2.3
76.5°	2.3	1.9	1.9	1.9	2.3	2.3
77°	1.9	1.9	1.9	1.9	1.9	1.9
77.5°	1.9	1.9	1.9	1.9	1.9	1.9
78°	1.9	1.9	1.9	1.4	1.9	1.9
78.5°	1.9	1.9	1.9	1.4	1.9	1.9
79°	1.4	1.4	1.4	1.4	1.9	1.9
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	1.4
80.5°	1.4	1.4	1.4	0.9	1.4	1.4
81°	1.4	1.4	1.4	0.9	1.4	1.4
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	0.9	0.9
83°	0.9	0.9	0.9	0.5	0.9	0.9
83.5°	0.9	0.9	0.9	0.5	0.5	0.9
84°	0.5	0.9	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	0.5	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°	0.5	0.5	0.5	0.0	0.0	0.5
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: P776796

CATALOG NUMBER: HCDJBL54050CSD-HCD8TRC-5000lm-3000K

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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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°	3300.0	3338.2	3394.9	3433.9	3491.5	3506.9	3534.3	3500.8	3468.3	3426.5	3367.0
22°	3260.5	3301.0	3358.6	3397.7	3459.5	3474.8	3499.9	3468.3	3436.2	3392.5	3330.3



44°	606.1	857.1	1456.2	1156.4	875.7	1162.9	1623.5	1209.4	825.0	1037.0	1461.3
44.5°	542.9	789.2	1415.3	1084.4	806.0	1087.2	1580.8	1137.4	754.8	964.9	1421.3



66.5°	4.6	5.6	6.0	7.0	7.4	7.4	6.5	7.0	6.5	6.5	5.6
67°	4.6	5.1	6.0	6.5	7.0	7.0	6.5	6.5	6.5	6.0	5.6



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°	3296.3	3235.0	3226.6	3251.2	3274.0	3300.0
22°	3258.2	3194.1	3188.5	3213.1	3235.0	3260.5



44°	973.3	594.9	786.9	1312.6	900.8	606.1
44.5°	903.6	531.7	721.8	1273.5	836.2	542.9

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66.5°	5.1	4.6	4.6	5.1	5.1	4.6
67°	4.6	4.2	4.6	4.6	4.6	4.6

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Peachtree City, GA 30269

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)