

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: P776829

Luminaire Tested: HCDJBL54050CSD-HCD8TSQH-5000lm-5000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776829
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B005-HCD4TSQC)
Test Lab:
Issue Date: 2/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL54050CSD-HCD8TSQH-5000lm-5000K
Description: 8 INCH SQUARE MEDIUM HAZE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 5000K CCT
Ballast/Driver: -

Summary

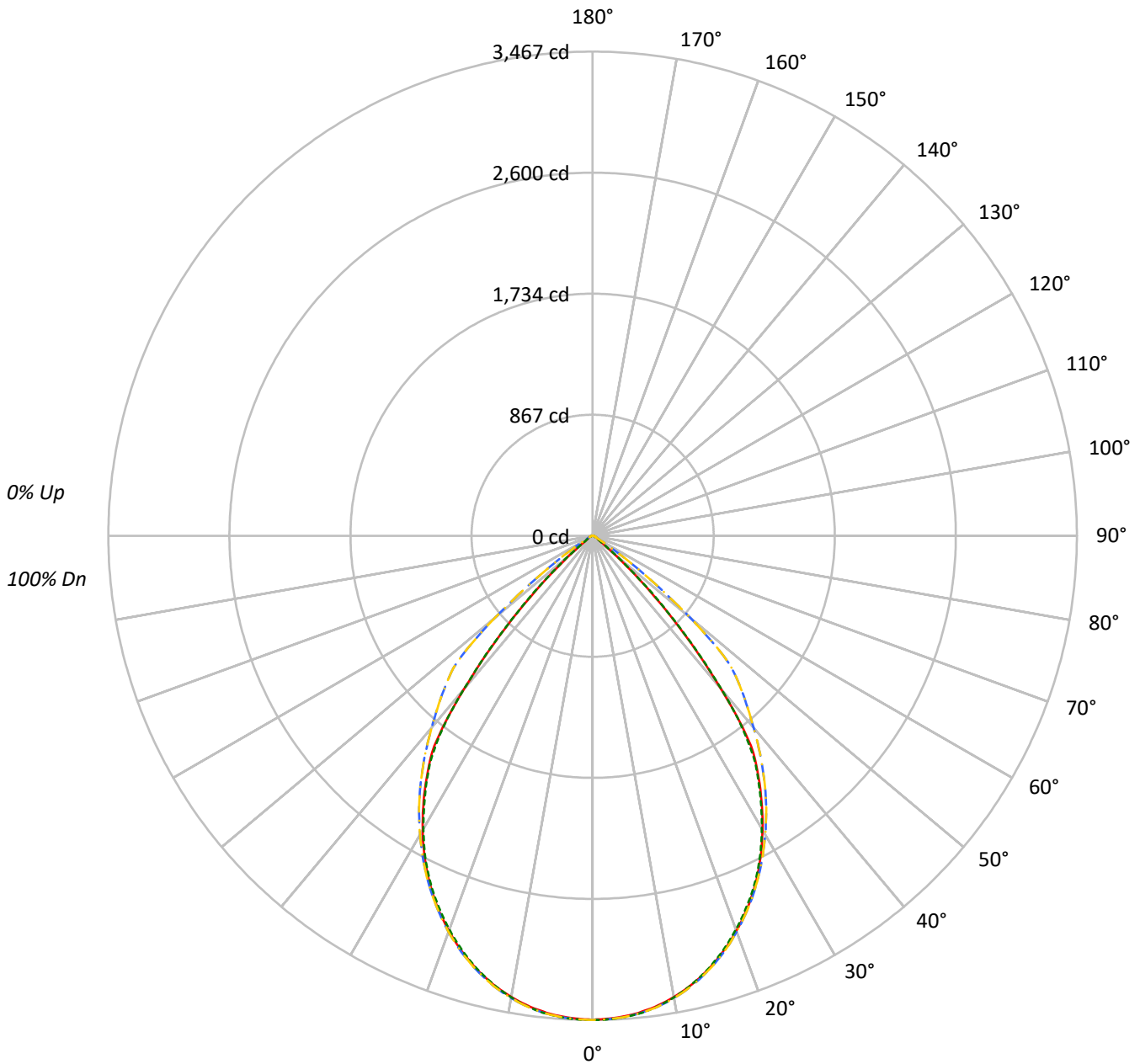
Lumens per Lamp: N/A
Luminaire Lumens: 4773.0 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.08 / 1.15
Luminous Opening: Rectangular (W 0.67' x L: 0.67' x H: 0')
CIE Type: Direct

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									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																			
1	113	110	107	104	110	107	105	103	103	101	99	100	98	97	96	95	94	92																			
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84																			
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76																			
4	94	85	79	74	92	84	78	73	82	77	72	80	75	72	78	74	71	69																			
5	88	78	72	67	86	77	71	66	76	70	66	74	69	65	72	68	65	63																			
6	83	72	66	61	81	72	65	60	70	64	60	69	63	60	67	63	59	58																			
7	78	67	60	55	76	66	60	55	65	59	55	64	59	55	63	58	54	53																			
8	73	62	56	51	72	62	55	51	61	55	51	59	54	50	58	54	50	48																			
9	69	58	51	47	68	58	51	47	57	51	47	56	50	46	55	50	46	45																			
10	65	54	48	43	64	54	48	43	53	47	43	52	47	43	51	46	43	41																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	83119	83119	83119	83119
5°	82724	82900	82724	82900
10°	81650	81720	81650	81720
15°	79703	79607	79703	79607
20°	76825	76542	76825	76542
25°	72863	72620	72863	72620
30°	67384	67077	67384	67077
35°	60216	59906	60216	59906
40°	44721	44965	44721	44965
45°	23436	24026	23436	24026
50°	7603	8218	7603	8218
55°	2517	2312	2517	2312
60°	1909	1794	1909	1794
65°	1458	1401	1458	1401
70°	1157	1122	1157	1122
75°	945	945	945	945
80°	732	801	732	801
85°	523	523	523	523

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 49815 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	325.9	6.8
10°-20°	903.1	18.9
20°-30°	1265.1	26.5
30°-40°	1299.5	27.2
40°-50°	787.2	16.5
50°-60°	148.0	3.1
60°-70°	28.7	0.6
70°-80°	12.8	0.3
80°-90°	2.8	0.1
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°	2494.1	52.3
0°-40°	3793.6	79.5
0°-60°	4728.7	99.1
0°-90°	4773.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4773.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3466	3466	3466	3466	3466	
5°	3437	3444	3437	3444	3437	325
15°	3211	3207	3211	3207	3211	902
25°	2754	2745	2754	2745	2754	1262
35°	2057	2046	2057	2046	2057	1256
45°	691	708	691	708	691	552
55°	60	55	60	55	60	69
65°	26	25	26	25	26	26
75°	10	10	10	10	10	11
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



TEST NUMBER: P776829

CATALOG NUMBER: HCDJBL4050CSD-HCD8TSQH-5000lm-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	3466.4	3466.4	3466.4	3466.4	3466.4	3466.4	3466.4	3466.4	3466.4	3466.4	3466.4
0.5°	3463.0	3464.5	3466.9	3468.4	3467.4	3468.4	3466.9	3464.5	3463.0	3464.5	3466.9
1°	3462.6	3464.0	3465.9	3467.4	3466.9	3467.4	3465.9	3464.0	3462.6	3464.0	3465.9
1.5°	3461.1	3462.6	3465.0	3466.4	3465.9	3466.4	3465.0	3462.6	3461.1	3462.6	3465.0
2°	3459.2	3460.6	3463.0	3465.0	3464.0	3465.0	3463.0	3460.6	3459.2	3460.6	3463.0
2.5°	3456.7	3458.2	3461.1	3462.6	3462.1	3462.6	3461.1	3458.2	3456.7	3458.2	3461.1
3°	3453.8	3455.8	3458.2	3460.1	3459.6	3460.1	3458.2	3455.8	3453.8	3455.8	3458.2
3.5°	3450.4	3452.4	3455.3	3457.2	3456.7	3457.2	3455.3	3452.4	3450.4	3452.4	3455.3
4°	3446.5	3448.5	3451.4	3453.8	3453.3	3453.8	3451.4	3448.5	3446.5	3448.5	3451.4
4.5°	3442.2	3443.6	3447.0	3449.4	3449.0	3449.4	3447.0	3443.6	3442.2	3443.6	3447.0
5°	3436.8	3438.8	3442.7	3445.1	3444.1	3445.1	3442.7	3438.8	3436.8	3438.8	3442.7
5.5°	3431.5	3433.4	3437.3	3439.7	3438.3	3439.7	3437.3	3433.4	3431.5	3433.4	3437.3
6°	3424.7	3427.1	3431.5	3433.9	3432.5	3433.9	3431.5	3427.1	3424.7	3427.1	3431.5
6.5°	3417.9	3420.8	3425.2	3427.1	3425.2	3427.1	3425.2	3420.8	3417.9	3420.8	3425.2
7°	3410.6	3413.5	3417.9	3419.4	3417.4	3419.4	3417.9	3413.5	3410.6	3413.5	3417.9
7.5°	3402.4	3405.8	3410.1	3411.1	3408.7	3411.1	3410.1	3405.8	3402.4	3405.8	3410.1
8°	3393.6	3397.5	3401.9	3402.4	3399.9	3402.4	3401.9	3397.5	3393.6	3397.5	3401.9
8.5°	3384.4	3388.3	3392.7	3392.2	3389.8	3392.2	3392.7	3388.3	3384.4	3388.3	3392.7
9°	3374.7	3378.6	3383.0	3382.0	3379.1	3382.0	3383.0	3378.6	3374.7	3378.6	3383.0
9.5°	3364.5	3368.4	3372.8	3370.8	3367.9	3370.8	3372.8	3368.4	3364.5	3368.4	3372.8
10°	3353.4	3358.2	3361.6	3359.7	3356.3	3359.7	3361.6	3358.2	3353.4	3358.2	3361.6
10.5°	3341.7	3346.6	3350.0	3347.5	3344.1	3347.5	3350.0	3346.6	3341.7	3346.6	3350.0
11°	3329.6	3334.9	3337.8	3334.9	3331.0	3334.9	3337.8	3334.9	3329.6	3334.9	3337.8
11.5°	3317.0	3322.3	3324.7	3321.3	3317.5	3321.3	3324.7	3322.3	3317.0	3322.3	3324.7
12°	3303.4	3309.2	3311.1	3307.7	3303.9	3307.7	3311.1	3309.2	3303.4	3309.2	3311.1
12.5°	3289.3	3295.6	3297.1	3293.2	3288.8	3293.2	3297.1	3295.6	3289.3	3295.6	3297.1
13°	3274.7	3281.1	3282.5	3278.1	3273.8	3278.1	3282.5	3281.1	3274.7	3281.1	3282.5
13.5°	3259.7	3266.0	3267.0	3262.6	3257.8	3262.6	3267.0	3266.0	3259.7	3266.0	3267.0
14°	3243.7	3251.0	3251.5	3246.6	3241.3	3246.6	3251.5	3251.0	3243.7	3251.0	3251.5
14.5°	3227.7	3234.5	3235.0	3229.6	3224.3	3229.6	3235.0	3234.5	3227.7	3234.5	3235.0
15°	3210.7	3218.0	3218.5	3212.1	3206.8	3212.1	3218.5	3218.0	3210.7	3218.0	3218.5
15.5°	3193.2	3201.0	3200.5	3194.2	3188.4	3194.2	3200.5	3201.0	3193.2	3201.0	3200.5
16°	3175.3	3183.0	3182.5	3175.7	3169.9	3175.7	3182.5	3183.0	3175.3	3183.0	3182.5
16.5°	3156.8	3164.6	3163.6	3156.8	3150.5	3156.8	3163.6	3164.6	3156.8	3164.6	3163.6
17°	3137.9	3145.7	3144.7	3136.9	3130.6	3136.9	3144.7	3145.7	3137.9	3145.7	3144.7
17.5°	3118.0	3126.2	3124.8	3117.0	3110.2	3117.0	3124.8	3126.2	3118.0	3126.2	3124.8
18°	3097.6	3105.9	3103.9	3096.2	3088.9	3096.2	3103.9	3105.9	3097.6	3105.9	3103.9
18.5°	3076.7	3085.0	3083.5	3075.3	3067.0	3075.3	3083.5	3085.0	3076.7	3085.0	3083.5
19°	3055.4	3064.1	3062.2	3053.5	3045.2	3053.5	3062.2	3064.1	3055.4	3064.1	3062.2
19.5°	3033.1	3042.3	3039.9	3031.1	3022.4	3031.1	3039.9	3042.3	3033.1	3042.3	3039.9
20°	3010.7	3020.0	3017.5	3008.8	2999.6	3008.8	3017.5	3020.0	3010.7	3020.0	3017.5
20.5°	2987.9	2997.2	2994.7	2985.0	2975.8	2985.0	2994.7	2997.2	2987.9	2997.2	2994.7
21°	2964.2	2973.4	2971.4	2961.2	2951.5	2961.2	2971.4	2973.4	2964.2	2973.4	2971.4



TEST NUMBER: P776829

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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°	2889.9	2900.1	2897.7	2887.0	2877.8	2887.0	2897.7	2900.1	2889.9	2900.1	2897.7
23°	2864.2	2874.4	2872.4	2861.3	2852.1	2861.3	2872.4	2874.4	2864.2	2874.4	2872.4
23.5°	2837.5	2848.7	2846.7	2835.6	2826.8	2835.6	2846.7	2848.7	2837.5	2848.7	2846.7
24°	2810.8	2821.5	2820.5	2809.4	2800.6	2809.4	2820.5	2821.5	2810.8	2821.5	2820.5
24.5°	2782.7	2794.3	2793.8	2783.1	2773.0	2783.1	2793.8	2794.3	2782.7	2794.3	2793.8
25°	2754.0	2766.6	2766.2	2756.5	2744.8	2756.5	2766.2	2766.6	2754.0	2766.6	2766.2
25.5°	2725.4	2738.5	2738.5	2728.3	2716.7	2728.3	2738.5	2738.5	2725.4	2738.5	2738.5
26°	2695.3	2709.4	2710.4	2701.1	2687.5	2701.1	2710.4	2709.4	2695.3	2709.4	2710.4
26.5°	2665.2	2679.8	2681.7	2672.5	2657.0	2672.5	2681.7	2679.8	2665.2	2679.8	2681.7
27°	2633.7	2649.7	2652.6	2643.4	2625.4	2643.4	2652.6	2649.7	2633.7	2649.7	2652.6
27.5°	2602.6	2619.1	2623.5	2613.3	2593.9	2613.3	2623.5	2619.1	2602.6	2619.1	2623.5
28°	2570.1	2587.6	2593.9	2582.2	2560.4	2582.2	2593.9	2587.6	2570.1	2587.6	2593.9
28.5°	2537.1	2555.5	2563.3	2550.7	2526.4	2550.7	2563.3	2555.5	2537.1	2555.5	2563.3
29°	2502.6	2524.0	2533.2	2518.7	2492.5	2518.7	2533.2	2524.0	2502.6	2524.0	2533.2
29.5°	2468.2	2491.5	2503.1	2485.2	2457.5	2485.2	2503.1	2491.5	2468.2	2491.5	2503.1
30°	2433.7	2458.0	2471.6	2451.7	2422.6	2451.7	2471.6	2458.0	2433.7	2458.0	2471.6
30.5°	2398.3	2424.0	2440.5	2417.2	2386.7	2417.2	2440.5	2424.0	2398.3	2424.0	2440.5
31°	2361.4	2389.6	2408.5	2383.3	2350.8	2383.3	2408.5	2389.6	2361.4	2389.6	2408.5
31.5°	2325.5	2355.1	2377.0	2348.3	2313.9	2348.3	2377.0	2355.1	2325.5	2355.1	2377.0
32°	2288.6	2319.7	2344.9	2313.4	2276.5	2313.4	2344.9	2319.7	2288.6	2319.7	2344.9
32.5°	2251.3	2283.8	2312.4	2277.0	2239.1	2277.0	2312.4	2283.8	2251.3	2283.8	2312.4
33°	2213.4	2247.9	2279.4	2242.0	2201.8	2242.0	2279.4	2247.9	2213.4	2247.9	2279.4
33.5°	2175.6	2212.4	2245.9	2206.1	2163.4	2206.1	2245.9	2212.4	2175.6	2212.4	2245.9
34°	2136.3	2176.0	2212.0	2170.2	2124.6	2170.2	2212.0	2176.0	2136.3	2176.0	2212.0
34.5°	2097.4	2139.2	2178.0	2134.3	2085.3	2134.3	2178.0	2139.2	2097.4	2139.2	2178.0
35°	2057.1	2102.3	2144.0	2097.4	2046.5	2097.4	2144.0	2102.3	2057.1	2102.3	2144.0
35.5°	2018.3	2065.9	2108.6	2061.0	2007.6	2061.0	2108.6	2065.9	2018.3	2065.9	2108.6
36°	1978.0	2028.5	2073.2	2024.1	1961.5	2024.1	2073.2	2028.5	1978.0	2028.5	2073.2
36.5°	1934.9	1990.2	2038.7	1986.8	1909.6	1986.8	2038.7	1990.2	1934.9	1990.2	2038.7
37°	1882.9	1952.8	2003.3	1949.4	1852.4	1949.4	2003.3	1952.8	1882.9	1952.8	2003.3
37.5°	1815.0	1914.5	1968.3	1911.6	1793.2	1911.6	1968.3	1914.5	1815.0	1914.5	1968.3
38°	1746.6	1876.6	1931.9	1874.2	1730.1	1874.2	1931.9	1876.6	1746.6	1876.6	1931.9
38.5°	1670.9	1838.3	1897.0	1832.9	1665.5	1832.9	1897.0	1838.3	1670.9	1838.3	1897.0
39°	1592.2	1798.5	1862.1	1784.9	1593.2	1784.9	1862.1	1798.5	1592.2	1798.5	1862.1
39.5°	1510.2	1740.7	1827.6	1731.0	1517.0	1731.0	1827.6	1740.7	1510.2	1740.7	1827.6
40°	1428.7	1678.6	1792.7	1672.3	1436.5	1672.3	1792.7	1678.6	1428.7	1678.6	1792.7
40.5°	1347.2	1608.3	1758.2	1609.7	1356.9	1609.7	1758.2	1608.3	1347.2	1608.3	1758.2
41°	1270.0	1535.5	1724.7	1542.7	1280.2	1542.7	1724.7	1535.5	1270.0	1535.5	1724.7
41.5°	1193.3	1460.7	1692.2	1472.4	1204.0	1472.4	1692.2	1460.7	1193.3	1460.7	1692.2
42°	1118.6	1386.0	1659.7	1398.6	1130.2	1398.6	1659.7	1386.0	1118.6	1386.0	1659.7
42.5°	1043.9	1312.2	1627.7	1324.8	1055.5	1324.8	1627.7	1312.2	1043.9	1312.2	1627.7
43°	970.1	1237.5	1595.6	1250.6	983.2	1250.6	1595.6	1237.5	970.1	1237.5	1595.6
43.5°	895.8	1164.7	1564.1	1177.8	910.4	1177.8	1564.1	1164.7	895.8	1164.7	1564.1



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CATALOG NUMBER: HCDJBL54050CSD-HCD8TSQH-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	691.1	953.1	1469.0	969.6	708.5	969.6	1469.0	953.1	691.1	953.1	1469.0
45.5°	627.0	883.7	1437.4	900.7	646.9	900.7	1437.4	883.7	627.0	883.7	1437.4
46°	567.3	816.7	1405.4	832.8	587.7	832.8	1405.4	816.7	567.3	816.7	1405.4
46.5°	508.6	751.7	1372.4	766.8	527.5	766.8	1372.4	751.7	508.6	751.7	1372.4
47°	450.8	687.7	1326.3	702.2	469.3	702.2	1326.3	687.7	450.8	687.7	1326.3
47.5°	395.5	626.0	1270.0	642.0	417.4	642.0	1270.0	626.0	395.5	626.0	1270.0
48°	348.4	566.3	1203.0	582.8	371.7	582.8	1203.0	566.3	348.4	566.3	1203.0
48.5°	305.2	509.6	1132.2	525.6	329.0	525.6	1132.2	509.6	305.2	509.6	1132.2
49°	266.9	454.2	1057.9	469.3	290.2	469.3	1057.9	454.2	266.9	454.2	1057.9
49.5°	233.4	400.9	981.7	418.8	253.8	418.8	981.7	400.9	233.4	400.9	981.7
50°	203.8	350.9	904.6	370.3	220.3	370.3	904.6	350.9	203.8	350.9	904.6
50.5°	176.2	305.7	828.4	325.6	188.8	325.6	828.4	305.7	176.2	305.7	828.4
51°	150.9	265.5	753.2	283.9	158.7	283.9	753.2	265.5	150.9	265.5	753.2
51.5°	130.5	230.0	682.8	246.0	133.5	246.0	682.8	230.0	130.5	230.0	682.8
52°	110.2	199.0	618.3	213.0	113.6	213.0	618.3	199.0	110.2	199.0	618.3
52.5°	92.7	171.3	555.2	182.5	100.0	182.5	555.2	171.3	92.7	171.3	555.2
53°	80.1	146.1	496.5	154.3	86.9	154.3	496.5	146.1	80.1	146.1	496.5
53.5°	68.4	124.7	438.7	128.1	73.3	128.1	438.7	124.7	68.4	124.7	438.7
54°	65.5	104.3	385.8	104.8	60.2	104.8	385.8	104.3	65.5	104.3	385.8
54.5°	62.6	87.4	335.3	86.9	57.3	86.9	335.3	87.4	62.6	87.4	335.3
55°	60.2	72.3	290.7	72.8	55.3	72.8	290.7	72.3	60.2	72.3	290.7
55.5°	57.7	61.6	250.4	62.6	52.9	62.6	250.4	61.6	57.7	61.6	250.4
56°	55.3	56.8	214.0	54.8	51.0	54.8	214.0	56.8	55.3	56.8	214.0
56.5°	52.9	54.4	181.5	51.0	49.0	51.0	181.5	54.4	52.9	54.4	181.5
57°	51.0	52.4	154.3	49.0	47.1	49.0	154.3	52.4	51.0	52.4	154.3
57.5°	48.5	50.5	130.5	47.1	45.1	47.1	130.5	50.5	48.5	50.5	130.5
58°	46.6	48.5	111.1	45.6	43.7	45.6	111.1	48.5	46.6	48.5	111.1
58.5°	44.6	46.6	93.7	43.7	41.7	43.7	93.7	46.6	44.6	46.6	93.7
59°	43.2	45.1	79.6	42.2	40.3	42.2	79.6	45.1	43.2	45.1	79.6
59.5°	41.2	43.7	67.5	40.8	38.8	40.8	67.5	43.7	41.2	43.7	67.5
60°	39.8	41.7	56.8	39.3	37.4	39.3	56.8	41.7	39.8	41.7	56.8
60.5°	37.9	40.3	50.5	37.9	35.4	37.9	50.5	40.3	37.9	40.3	50.5
61°	36.4	38.8	45.6	36.9	34.5	36.9	45.6	38.8	36.4	38.8	45.6
61.5°	34.9	37.4	41.7	35.4	33.0	35.4	41.7	37.4	34.9	37.4	41.7
62°	33.5	36.4	39.3	34.0	31.5	34.0	39.3	36.4	33.5	36.4	39.3
62.5°	32.0	34.9	37.4	33.0	30.6	33.0	37.4	34.9	32.0	34.9	37.4
63°	30.6	33.5	35.9	32.0	29.1	32.0	35.9	33.5	30.6	33.5	35.9
63.5°	29.6	32.5	34.5	30.6	28.1	30.6	34.5	32.5	29.6	32.5	34.5
64°	28.1	31.1	33.5	29.6	26.7	29.6	33.5	31.1	28.1	31.1	33.5
64.5°	27.2	30.1	32.0	28.6	25.7	28.6	32.0	30.1	27.2	30.1	32.0
65°	25.7	29.1	31.1	27.7	24.7	27.7	31.1	29.1	25.7	29.1	31.1
65.5°	24.7	27.7	29.6	26.7	23.8	26.7	29.6	27.7	24.7	27.7	29.6
66°	23.8	26.7	28.6	25.7	22.8	25.7	28.6	26.7	23.8	26.7	28.6



TEST NUMBER: P776829

CATALOG NUMBER: HCDJBL54050CSD-HCD8TSQH-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	20.9	23.8	25.7	22.8	19.9	22.8	25.7	23.8	20.9	23.8	25.7
68°	19.9	22.8	24.7	21.8	19.4	21.8	24.7	22.8	19.9	22.8	24.7
68.5°	18.9	21.8	23.8	21.4	18.4	21.4	23.8	21.8	18.9	21.8	23.8
69°	18.4	20.9	22.8	20.4	17.5	20.4	22.8	20.9	18.4	20.9	22.8
69.5°	17.5	20.4	21.8	19.4	17.0	19.4	21.8	20.4	17.5	20.4	21.8
70°	16.5	19.4	20.9	18.9	16.0	18.9	20.9	19.4	16.5	19.4	20.9
70.5°	16.0	18.4	20.4	18.0	15.5	18.0	20.4	18.4	16.0	18.4	20.4
71°	15.0	18.0	19.4	17.5	15.0	17.5	19.4	18.0	15.0	18.0	19.4
71.5°	14.6	17.0	18.4	16.5	14.1	16.5	18.4	17.0	14.6	17.0	18.4
72°	13.6	16.5	18.0	16.0	13.6	16.0	18.0	16.5	13.6	16.5	18.0
72.5°	13.1	15.5	17.0	15.0	13.1	15.0	17.0	15.5	13.1	15.5	17.0
73°	12.6	15.0	16.0	14.6	12.1	14.6	16.0	15.0	12.6	15.0	16.0
73.5°	11.6	14.1	15.5	14.1	11.6	14.1	15.5	14.1	11.6	14.1	15.5
74°	11.2	13.6	14.6	13.1	11.2	13.1	14.6	13.6	11.2	13.6	14.6
74.5°	10.7	13.1	14.1	12.6	10.7	12.6	14.1	13.1	10.7	13.1	14.1
75°	10.2	12.1	13.1	12.1	10.2	12.1	13.1	12.1	10.2	12.1	13.1
75.5°	9.7	11.6	12.6	11.6	9.7	11.6	12.6	11.6	9.7	11.6	12.6
76°	9.2	11.2	12.1	10.7	9.2	10.7	12.1	11.2	9.2	11.2	12.1
76.5°	8.7	10.2	11.2	10.2	8.7	10.2	11.2	10.2	8.7	10.2	11.2
77°	7.8	9.7	10.7	9.7	8.2	9.7	10.7	9.7	7.8	9.7	10.7
77.5°	7.3	9.2	10.2	9.2	7.8	9.2	10.2	9.2	7.3	9.2	10.2
78°	7.3	8.7	9.2	8.7	7.3	8.7	9.2	8.7	7.3	8.7	9.2
78.5°	6.8	8.2	8.7	8.2	6.8	8.2	8.7	8.2	6.8	8.2	8.7
79°	6.3	7.8	8.2	7.8	6.3	7.8	8.2	7.8	6.3	7.8	8.2
79.5°	5.8	6.8	7.8	7.3	5.8	7.3	7.8	6.8	5.8	6.8	7.8
80°	5.3	6.3	7.3	6.8	5.8	6.8	7.3	6.3	5.3	6.3	7.3
80.5°	4.9	5.8	6.8	6.3	5.3	6.3	6.8	5.8	4.9	5.8	6.8
81°	4.4	5.3	6.3	5.8	4.9	5.8	6.3	5.3	4.4	5.3	6.3
81.5°	4.4	4.9	5.8	5.3	4.4	5.3	5.8	4.9	4.4	4.9	5.8
82°	3.9	4.4	5.3	4.9	4.4	4.9	5.3	4.4	3.9	4.4	5.3
82.5°	3.4	3.9	4.9	4.4	3.9	4.4	4.9	3.9	3.4	3.9	4.9
83°	2.9	3.9	4.4	3.9	3.4	3.9	4.4	3.9	2.9	3.9	4.4
83.5°	2.9	3.4	3.9	3.9	2.9	3.9	3.9	3.4	2.9	3.4	3.9
84°	2.4	2.9	3.4	3.4	2.9	3.4	3.4	2.9	2.4	2.9	3.4
84.5°	1.9	2.4	2.9	2.9	2.4	2.9	2.9	2.4	1.9	2.4	2.9
85°	1.9	1.9	2.4	2.4	1.9	2.4	2.4	1.9	1.9	1.9	2.4
85.5°	1.5	1.5	1.9	1.9	1.9	1.9	1.9	1.5	1.5	1.5	1.9
86°	1.0	1.5	1.9	1.9	1.5	1.9	1.9	1.5	1.0	1.5	1.9
86.5°	1.0	1.0	1.5	1.5	1.5	1.5	1.5	1.0	1.0	1.0	1.5
87°	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.0
87.5°	0.5	0.5	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	1.0
88°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
88.5°	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.5



TEST NUMBER: P776829

CATALOG NUMBER: HCDJBL54050CSD-HCD8TSQH-5000lm-5000K

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: P776829

CATALOG NUMBER: HCDJBL54050CSD-HCD8TSQH-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	3466.4	3466.4	3466.4	3466.4	3466.4	3466.4
0.5°	3468.4	3467.4	3468.4	3466.9	3464.5	3463.0
1°	3467.4	3466.9	3467.4	3465.9	3464.0	3462.6
1.5°	3466.4	3465.9	3466.4	3465.0	3462.6	3461.1
2°	3465.0	3464.0	3465.0	3463.0	3460.6	3459.2
2.5°	3462.6	3462.1	3462.6	3461.1	3458.2	3456.7
3°	3460.1	3459.6	3460.1	3458.2	3455.8	3453.8
3.5°	3457.2	3456.7	3457.2	3455.3	3452.4	3450.4
4°	3453.8	3453.3	3453.8	3451.4	3448.5	3446.5
4.5°	3449.4	3449.0	3449.4	3447.0	3443.6	3442.2
5°	3445.1	3444.1	3445.1	3442.7	3438.8	3436.8
5.5°	3439.7	3438.3	3439.7	3437.3	3433.4	3431.5
6°	3433.9	3432.5	3433.9	3431.5	3427.1	3424.7
6.5°	3427.1	3425.2	3427.1	3425.2	3420.8	3417.9
7°	3419.4	3417.4	3419.4	3417.9	3413.5	3410.6
7.5°	3411.1	3408.7	3411.1	3410.1	3405.8	3402.4
8°	3402.4	3399.9	3402.4	3401.9	3397.5	3393.6
8.5°	3392.2	3389.8	3392.2	3392.7	3388.3	3384.4
9°	3382.0	3379.1	3382.0	3383.0	3378.6	3374.7
9.5°	3370.8	3367.9	3370.8	3372.8	3368.4	3364.5
10°	3359.7	3356.3	3359.7	3361.6	3358.2	3353.4
10.5°	3347.5	3344.1	3347.5	3350.0	3346.6	3341.7
11°	3334.9	3331.0	3334.9	3337.8	3334.9	3329.6
11.5°	3321.3	3317.5	3321.3	3324.7	3322.3	3317.0
12°	3307.7	3303.9	3307.7	3311.1	3309.2	3303.4
12.5°	3293.2	3288.8	3293.2	3297.1	3295.6	3289.3
13°	3278.1	3273.8	3278.1	3282.5	3281.1	3274.7
13.5°	3262.6	3257.8	3262.6	3267.0	3266.0	3259.7
14°	3246.6	3241.3	3246.6	3251.5	3251.0	3243.7
14.5°	3229.6	3224.3	3229.6	3235.0	3234.5	3227.7
15°	3212.1	3206.8	3212.1	3218.5	3218.0	3210.7
15.5°	3194.2	3188.4	3194.2	3200.5	3201.0	3193.2
16°	3175.7	3169.9	3175.7	3182.5	3183.0	3175.3
16.5°	3156.8	3150.5	3156.8	3163.6	3164.6	3156.8
17°	3136.9	3130.6	3136.9	3144.7	3145.7	3137.9
17.5°	3117.0	3110.2	3117.0	3124.8	3126.2	3118.0
18°	3096.2	3088.9	3096.2	3103.9	3105.9	3097.6
18.5°	3075.3	3067.0	3075.3	3083.5	3085.0	3076.7
19°	3053.5	3045.2	3053.5	3062.2	3064.1	3055.4
19.5°	3031.1	3022.4	3031.1	3039.9	3042.3	3033.1
20°	3008.8	2999.6	3008.8	3017.5	3020.0	3010.7
20.5°	2985.0	2975.8	2985.0	2994.7	2997.2	2987.9
21°	2961.2	2951.5	2961.2	2971.4	2973.4	2964.2

TEST NUMBER: P776829

CATALOG NUMBER: HCDJBLS4050CSD-HCD8TSQH-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2887.0	2877.8	2887.0	2897.7	2900.1	2889.9
23°	2861.3	2852.1	2861.3	2872.4	2874.4	2864.2
23.5°	2835.6	2826.8	2835.6	2846.7	2848.7	2837.5
24°	2809.4	2800.6	2809.4	2820.5	2821.5	2810.8
24.5°	2783.1	2773.0	2783.1	2793.8	2794.3	2782.7
25°	2756.5	2744.8	2756.5	2766.2	2766.6	2754.0
25.5°	2728.3	2716.7	2728.3	2738.5	2738.5	2725.4
26°	2701.1	2687.5	2701.1	2710.4	2709.4	2695.3
26.5°	2672.5	2657.0	2672.5	2681.7	2679.8	2665.2
27°	2643.4	2625.4	2643.4	2652.6	2649.7	2633.7
27.5°	2613.3	2593.9	2613.3	2623.5	2619.1	2602.6
28°	2582.2	2560.4	2582.2	2593.9	2587.6	2570.1
28.5°	2550.7	2526.4	2550.7	2563.3	2555.5	2537.1
29°	2518.7	2492.5	2518.7	2533.2	2524.0	2502.6
29.5°	2485.2	2457.5	2485.2	2503.1	2491.5	2468.2
30°	2451.7	2422.6	2451.7	2471.6	2458.0	2433.7
30.5°	2417.2	2386.7	2417.2	2440.5	2424.0	2398.3
31°	2383.3	2350.8	2383.3	2408.5	2389.6	2361.4
31.5°	2348.3	2313.9	2348.3	2377.0	2355.1	2325.5
32°	2313.4	2276.5	2313.4	2344.9	2319.7	2288.6
32.5°	2277.0	2239.1	2277.0	2312.4	2283.8	2251.3
33°	2242.0	2201.8	2242.0	2279.4	2247.9	2213.4
33.5°	2206.1	2163.4	2206.1	2245.9	2212.4	2175.6
34°	2170.2	2124.6	2170.2	2212.0	2176.0	2136.3
34.5°	2134.3	2085.3	2134.3	2178.0	2139.2	2097.4
35°	2097.4	2046.5	2097.4	2144.0	2102.3	2057.1
35.5°	2061.0	2007.6	2061.0	2108.6	2065.9	2018.3
36°	2024.1	1961.5	2024.1	2073.2	2028.5	1978.0
36.5°	1986.8	1909.6	1986.8	2038.7	1990.2	1934.9
37°	1949.4	1852.4	1949.4	2003.3	1952.8	1882.9
37.5°	1911.6	1793.2	1911.6	1968.3	1914.5	1815.0
38°	1874.2	1730.1	1874.2	1931.9	1876.6	1746.6
38.5°	1832.9	1665.5	1832.9	1897.0	1838.3	1670.9
39°	1784.9	1593.2	1784.9	1862.1	1798.5	1592.2
39.5°	1731.0	1517.0	1731.0	1827.6	1740.7	1510.2
40°	1672.3	1436.5	1672.3	1792.7	1678.6	1428.7
40.5°	1609.7	1356.9	1609.7	1758.2	1608.3	1347.2
41°	1542.7	1280.2	1542.7	1724.7	1535.5	1270.0
41.5°	1472.4	1204.0	1472.4	1692.2	1460.7	1193.3
42°	1398.6	1130.2	1398.6	1659.7	1386.0	1118.6
42.5°	1324.8	1055.5	1324.8	1627.7	1312.2	1043.9
43°	1250.6	983.2	1250.6	1595.6	1237.5	970.1
43.5°	1177.8	910.4	1177.8	1564.1	1164.7	895.8



TEST NUMBER: P776829

CATALOG NUMBER: HCDJBL54050CSD-HCD8TSQH-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	969.6	708.5	969.6	1469.0	953.1	691.1
45.5°	900.7	646.9	900.7	1437.4	883.7	627.0
46°	832.8	587.7	832.8	1405.4	816.7	567.3
46.5°	766.8	527.5	766.8	1372.4	751.7	508.6
47°	702.2	469.3	702.2	1326.3	687.7	450.8
47.5°	642.0	417.4	642.0	1270.0	626.0	395.5
48°	582.8	371.7	582.8	1203.0	566.3	348.4
48.5°	525.6	329.0	525.6	1132.2	509.6	305.2
49°	469.3	290.2	469.3	1057.9	454.2	266.9
49.5°	418.8	253.8	418.8	981.7	400.9	233.4
50°	370.3	220.3	370.3	904.6	350.9	203.8
50.5°	325.6	188.8	325.6	828.4	305.7	176.2
51°	283.9	158.7	283.9	753.2	265.5	150.9
51.5°	246.0	133.5	246.0	682.8	230.0	130.5
52°	213.0	113.6	213.0	618.3	199.0	110.2
52.5°	182.5	100.0	182.5	555.2	171.3	92.7
53°	154.3	86.9	154.3	496.5	146.1	80.1
53.5°	128.1	73.3	128.1	438.7	124.7	68.4
54°	104.8	60.2	104.8	385.8	104.3	65.5
54.5°	86.9	57.3	86.9	335.3	87.4	62.6
55°	72.8	55.3	72.8	290.7	72.3	60.2
55.5°	62.6	52.9	62.6	250.4	61.6	57.7
56°	54.8	51.0	54.8	214.0	56.8	55.3
56.5°	51.0	49.0	51.0	181.5	54.4	52.9
57°	49.0	47.1	49.0	154.3	52.4	51.0
57.5°	47.1	45.1	47.1	130.5	50.5	48.5
58°	45.6	43.7	45.6	111.1	48.5	46.6
58.5°	43.7	41.7	43.7	93.7	46.6	44.6
59°	42.2	40.3	42.2	79.6	45.1	43.2
59.5°	40.8	38.8	40.8	67.5	43.7	41.2
60°	39.3	37.4	39.3	56.8	41.7	39.8
60.5°	37.9	35.4	37.9	50.5	40.3	37.9
61°	36.9	34.5	36.9	45.6	38.8	36.4
61.5°	35.4	33.0	35.4	41.7	37.4	34.9
62°	34.0	31.5	34.0	39.3	36.4	33.5
62.5°	33.0	30.6	33.0	37.4	34.9	32.0
63°	32.0	29.1	32.0	35.9	33.5	30.6
63.5°	30.6	28.1	30.6	34.5	32.5	29.6
64°	29.6	26.7	29.6	33.5	31.1	28.1
64.5°	28.6	25.7	28.6	32.0	30.1	27.2
65°	27.7	24.7	27.7	31.1	29.1	25.7
65.5°	26.7	23.8	26.7	29.6	27.7	24.7
66°	25.7	22.8	25.7	28.6	26.7	23.8



TEST NUMBER: P776829

CATALOG NUMBER: HCDJBL54050CSD-HCD8TSQH-5000lm-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	22.8	19.9	22.8	25.7	23.8	20.9
68°	21.8	19.4	21.8	24.7	22.8	19.9
68.5°	21.4	18.4	21.4	23.8	21.8	18.9
69°	20.4	17.5	20.4	22.8	20.9	18.4
69.5°	19.4	17.0	19.4	21.8	20.4	17.5
70°	18.9	16.0	18.9	20.9	19.4	16.5
70.5°	18.0	15.5	18.0	20.4	18.4	16.0
71°	17.5	15.0	17.5	19.4	18.0	15.0
71.5°	16.5	14.1	16.5	18.4	17.0	14.6
72°	16.0	13.6	16.0	18.0	16.5	13.6
72.5°	15.0	13.1	15.0	17.0	15.5	13.1
73°	14.6	12.1	14.6	16.0	15.0	12.6
73.5°	14.1	11.6	14.1	15.5	14.1	11.6
74°	13.1	11.2	13.1	14.6	13.6	11.2
74.5°	12.6	10.7	12.6	14.1	13.1	10.7
75°	12.1	10.2	12.1	13.1	12.1	10.2
75.5°	11.6	9.7	11.6	12.6	11.6	9.7
76°	10.7	9.2	10.7	12.1	11.2	9.2
76.5°	10.2	8.7	10.2	11.2	10.2	8.7
77°	9.7	8.2	9.7	10.7	9.7	7.8
77.5°	9.2	7.8	9.2	10.2	9.2	7.3
78°	8.7	7.3	8.7	9.2	8.7	7.3
78.5°	8.2	6.8	8.2	8.7	8.2	6.8
79°	7.8	6.3	7.8	8.2	7.8	6.3
79.5°	7.3	5.8	7.3	7.8	6.8	5.8
80°	6.8	5.8	6.8	7.3	6.3	5.3
80.5°	6.3	5.3	6.3	6.8	5.8	4.9
81°	5.8	4.9	5.8	6.3	5.3	4.4
81.5°	5.3	4.4	5.3	5.8	4.9	4.4
82°	4.9	4.4	4.9	5.3	4.4	3.9
82.5°	4.4	3.9	4.4	4.9	3.9	3.4
83°	3.9	3.4	3.9	4.4	3.9	2.9
83.5°	3.9	2.9	3.9	3.9	3.4	2.9
84°	3.4	2.9	3.4	3.4	2.9	2.4
84.5°	2.9	2.4	2.9	2.9	2.4	1.9
85°	2.4	1.9	2.4	2.4	1.9	1.9
85.5°	1.9	1.9	1.9	1.9	1.5	1.5
86°	1.9	1.5	1.9	1.9	1.5	1.0
86.5°	1.5	1.5	1.5	1.5	1.0	1.0
87°	1.0	1.0	1.0	1.0	1.0	0.5
87.5°	1.0	1.0	1.0	1.0	0.5	0.5
88°	0.5	0.5	0.5	0.5	0.5	0.5
88.5°	0.5	0.5	0.5	0.5	0.0	0.0



TEST NUMBER: P776829

CATALOG NUMBER: HCDJBL54050CSD-HCD8TSQH-5000lm-5000K

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
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report





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

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Peachtree City, GA 30269

Scaled Data Report



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Peachtree City, GA 30269

Scaled Data Report





21.5°	2940.4	2949.6	2947.2	2937.0	2927.8	2937.0	2947.2	2949.6	2940.4	2949.6	2947.2
22°	2914.7	2925.3	2922.4	2912.2	2902.5	2912.2	2922.4	2925.3	2914.7	2925.3	2922.4



44°	824.5	1093.8	1532.1	1107.9	839.6	1107.9	1532.1	1093.8	824.5	1093.8	1532.1
44.5°	757.5	1024.4	1501.0	1038.5	770.2	1038.5	1501.0	1024.4	757.5	1024.4	1501.0



66.5°	22.8	25.7	27.7	24.7	21.8	24.7	27.7	25.7	22.8	25.7	27.7
67°	21.8	24.7	26.7	23.8	20.9	23.8	26.7	24.7	21.8	24.7	26.7



89°	0.0	0.0	0.0	0.0	0.5	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°	2937.0	2927.8	2937.0	2947.2	2949.6	2940.4
22°	2912.2	2902.5	2912.2	2922.4	2925.3	2914.7



44°	1107.9	839.6	1107.9	1532.1	1093.8	824.5
44.5°	1038.5	770.2	1038.5	1501.0	1024.4	757.5

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66.5°	24.7	21.8	24.7	27.7	25.7	22.8
67°	23.8	20.9	23.8	26.7	24.7	21.8

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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



89°	0.0	0.5	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)