

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: P776692

Luminaire Tested: HCDJBS4050CSD-HCD62TRMW-5000lm-3500K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P776692
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B057-HCD62TRMW)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBS4050CSD-HCD62TRMW-5000lm-3500K
Description: 6 INCH ROUND NARROW MATTE WHITE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3500K CCT
Ballast/Driver: -

Summary

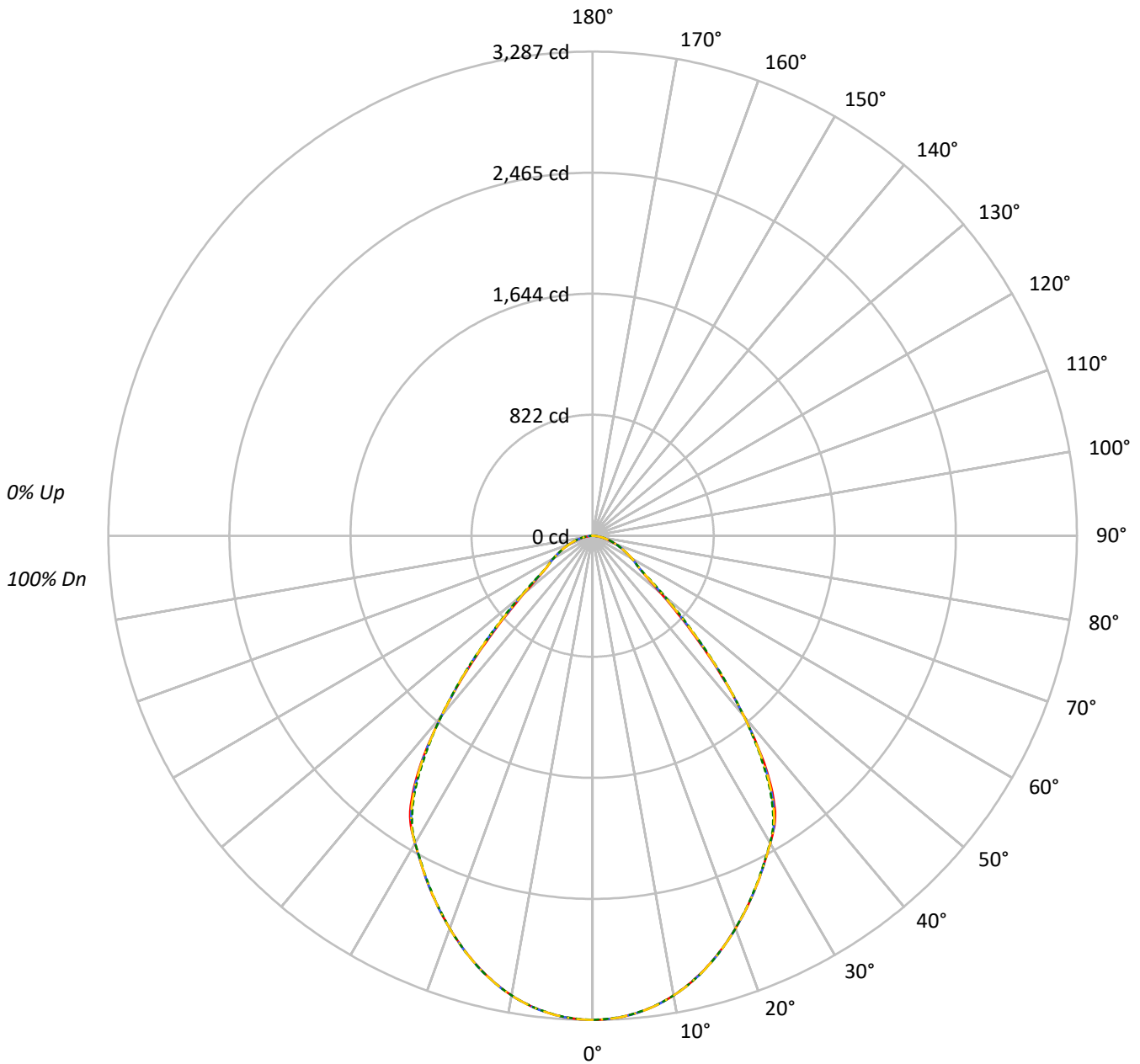
Lumens per Lamp: N/A
Luminaire Lumens: 5232.3 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.11 / 1.14
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

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									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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89																			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79																			
3	97	89	82	77	95	87	81	76	84	79	75	82	77	74	79	76	73	71																			
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63																			
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57																			
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52																			
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47																			
8	69	58	51	45	68	57	50	45	56	50	45	55	49	45	54	49	45	43																			
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	40																			
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	180177	180177	180177	180177
5°	179231	179154	179231	179154
10°	176372	176372	176372	176372
15°	171550	171630	171550	171630
20°	165471	165419	165471	165419
25°	158900	158646	158900	158646
30°	152650	152416	152650	152416
35°	142359	140277	142359	140277
40°	114264	114400	114264	114400
45°	79954	82365	79954	82365
50°	51111	54455	51111	54455
55°	37179	37772	37179	37772
60°	33758	33605	33758	33605
65°	30340	30211	30340	30211
70°	26912	27280	26912	27280
75°	23468	24676	23468	24676
80°	19352	21878	19352	21878
85°	11888	18115	11888	18115

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 82365 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	308.1	5.9
10°-20°	850.1	16.2
20°-30°	1208.8	23.1
30°-40°	1292.2	24.7
40°-50°	816.5	15.6
50°-60°	371.6	7.1
60°-70°	232.7	4.4
70°-80°	122.2	2.3
80°-90°	30.1	0.6
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°	2367.0	45.2
0°-40°	3659.2	69.9
0°-60°	4847.2	92.6
0°-90°	5232.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5232.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3287	3287	3287	3287	3287	
5°	3257	3256	3257	3256	3257	308
15°	3023	3024	3023	3024	3023	850
25°	2627	2623	2627	2623	2627	1209
35°	2127	2096	2127	2096	2127	1298
45°	1031	1062	1031	1062	1031	804
55°	389	395	389	395	389	367
65°	234	233	234	233	234	233
75°	111	116	111	116	111	118
85°	19	29	19	29	19	25
90°	0	1	0	1	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°	3286.7	3286.7	3286.7	3286.7	3286.7	3286.7	3286.7	3286.7	3286.7	3286.7	3286.7
0.5°	3286.3	3286.7	3286.3	3286.3	3284.9	3286.3	3286.3	3286.7	3286.3	3286.7	3286.3
1°	3285.3	3285.8	3285.8	3285.3	3283.9	3285.3	3285.8	3285.8	3285.3	3285.8	3285.8
1.5°	3283.9	3284.4	3283.9	3283.9	3282.5	3283.9	3283.9	3284.4	3283.9	3284.4	3283.9
2°	3282.0	3282.0	3282.0	3282.0	3280.1	3282.0	3282.0	3282.0	3282.0	3282.0	3282.0
2.5°	3279.2	3279.2	3279.7	3279.2	3277.8	3279.2	3279.7	3279.2	3279.2	3279.2	3279.7
3°	3275.9	3276.4	3276.4	3276.4	3274.5	3276.4	3276.4	3276.4	3275.9	3276.4	3276.4
3.5°	3272.1	3272.1	3272.6	3272.6	3270.7	3272.6	3272.6	3272.1	3272.1	3272.1	3272.6
4°	3267.9	3267.9	3267.9	3267.9	3266.5	3267.9	3267.9	3267.9	3267.9	3267.9	3267.9
4.5°	3262.7	3263.2	3263.2	3263.2	3261.3	3263.2	3263.2	3263.2	3262.7	3263.2	3263.2
5°	3257.0	3257.5	3257.5	3257.5	3255.6	3257.5	3257.5	3257.5	3257.0	3257.5	3257.5
5.5°	3250.9	3251.4	3251.4	3251.4	3249.5	3251.4	3251.4	3251.4	3250.9	3251.4	3251.4
6°	3244.3	3244.3	3244.3	3244.3	3242.9	3244.3	3244.3	3244.3	3244.3	3244.3	3244.3
6.5°	3236.8	3236.8	3237.2	3237.2	3235.8	3237.2	3237.2	3236.8	3236.8	3236.8	3237.2
7°	3228.7	3229.2	3229.2	3229.2	3227.8	3229.2	3229.2	3229.2	3228.7	3229.2	3229.2
7.5°	3220.3	3220.3	3220.7	3220.7	3219.3	3220.7	3220.7	3220.3	3220.3	3220.3	3220.7
8°	3210.8	3211.3	3211.8	3211.8	3210.3	3211.8	3211.8	3211.3	3210.8	3211.3	3211.8
8.5°	3200.9	3201.4	3201.9	3201.9	3200.4	3201.9	3201.9	3201.4	3200.9	3201.4	3201.9
9°	3190.5	3191.0	3191.5	3192.0	3190.5	3192.0	3191.5	3191.0	3190.5	3191.0	3191.5
9.5°	3179.7	3180.2	3180.6	3181.1	3179.7	3181.1	3180.6	3180.2	3179.7	3180.2	3180.6
10°	3168.4	3168.4	3168.9	3169.8	3168.4	3169.8	3168.9	3168.4	3168.4	3168.4	3168.9
10.5°	3156.1	3156.1	3157.1	3157.5	3156.1	3157.5	3157.1	3156.1	3156.1	3156.1	3157.1
11°	3143.4	3143.4	3144.3	3145.3	3143.4	3145.3	3144.3	3143.4	3143.4	3143.4	3144.3
11.5°	3129.7	3130.2	3131.1	3132.1	3130.7	3132.1	3131.1	3130.2	3129.7	3130.2	3131.1
12°	3116.0	3116.5	3117.5	3118.4	3117.0	3118.4	3117.5	3116.5	3116.0	3116.5	3117.5
12.5°	3101.9	3102.4	3102.8	3103.8	3102.8	3103.8	3102.8	3102.4	3101.9	3102.4	3102.8
13°	3086.8	3087.3	3088.2	3089.2	3088.2	3089.2	3088.2	3087.3	3086.8	3087.3	3088.2
13.5°	3071.7	3072.2	3073.1	3074.1	3072.7	3074.1	3073.1	3072.2	3071.7	3072.2	3073.1
14°	3055.7	3056.6	3057.6	3058.0	3057.1	3058.0	3057.6	3056.6	3055.7	3056.6	3057.6
14.5°	3039.6	3040.1	3041.1	3042.0	3041.1	3042.0	3041.1	3040.1	3039.6	3040.1	3041.1
15°	3022.7	3023.6	3024.6	3025.5	3024.1	3025.5	3024.6	3023.6	3022.7	3023.6	3024.6
15.5°	3005.7	3006.2	3007.1	3008.1	3006.6	3008.1	3007.1	3006.2	3005.7	3006.2	3007.1
16°	2987.8	2988.7	2989.7	2990.6	2989.2	2990.6	2989.7	2988.7	2987.8	2988.7	2989.7
16.5°	2970.3	2970.8	2971.7	2972.7	2971.3	2972.7	2971.7	2970.8	2970.3	2970.8	2971.7
17°	2951.9	2952.4	2953.4	2954.3	2952.9	2954.3	2953.4	2952.4	2951.9	2952.4	2953.4
17.5°	2933.5	2933.5	2934.5	2935.4	2934.0	2935.4	2934.5	2933.5	2933.5	2933.5	2934.5
18°	2914.2	2915.2	2915.6	2916.1	2914.7	2916.1	2915.6	2915.2	2914.2	2915.2	2915.6
18.5°	2894.9	2895.8	2896.3	2896.8	2895.4	2896.8	2896.3	2895.8	2894.9	2895.8	2896.3
19°	2875.5	2876.5	2877.0	2877.0	2876.0	2877.0	2877.0	2876.5	2875.5	2876.5	2877.0
19.5°	2856.2	2856.7	2857.2	2857.6	2856.2	2857.6	2857.2	2856.7	2856.2	2856.7	2857.2
20°	2836.4	2836.9	2837.3	2837.3	2835.5	2837.3	2837.3	2836.9	2836.4	2836.9	2837.3
20.5°	2816.6	2816.6	2816.6	2816.6	2815.2	2816.6	2816.6	2816.6	2816.6	2816.6	2816.6
21°	2795.4	2795.9	2796.3	2795.9	2794.4	2795.9	2796.3	2795.9	2795.4	2795.9	2796.3



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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°	2734.1	2734.1	2733.6	2733.1	2731.2	2733.1	2733.6	2734.1	2734.1	2734.1	2733.6
23°	2712.9	2712.9	2712.4	2711.9	2710.0	2711.9	2712.4	2712.9	2712.9	2712.9	2712.4
23.5°	2691.6	2691.6	2691.2	2690.2	2688.8	2690.2	2691.2	2691.6	2691.6	2691.6	2691.2
24°	2670.4	2670.4	2669.9	2668.5	2666.6	2668.5	2669.9	2670.4	2670.4	2670.4	2669.9
24.5°	2649.2	2648.7	2648.3	2646.8	2645.0	2646.8	2648.3	2648.7	2649.2	2648.7	2648.3
25°	2627.0	2627.0	2626.6	2625.1	2622.8	2625.1	2626.6	2627.0	2627.0	2627.0	2626.6
25.5°	2605.3	2605.3	2604.9	2603.0	2601.1	2603.0	2604.9	2605.3	2605.3	2605.3	2604.9
26°	2583.7	2583.7	2583.2	2581.8	2579.4	2581.8	2583.2	2583.7	2583.7	2583.7	2583.2
26.5°	2561.5	2561.5	2561.0	2559.1	2557.2	2559.1	2561.0	2561.5	2561.5	2561.5	2561.0
27°	2539.3	2539.8	2539.3	2537.4	2535.1	2537.4	2539.3	2539.8	2539.3	2539.8	2539.3
27.5°	2517.6	2517.6	2517.2	2515.7	2513.4	2515.7	2517.2	2517.6	2517.6	2517.6	2517.2
28°	2495.0	2495.9	2495.5	2494.1	2492.2	2494.1	2495.5	2495.9	2495.0	2495.9	2495.5
28.5°	2473.8	2474.7	2474.3	2472.8	2471.0	2472.8	2474.3	2474.7	2473.8	2474.7	2474.3
29°	2452.6	2453.5	2453.0	2452.1	2449.7	2452.1	2453.0	2453.5	2452.6	2453.5	2453.0
29.5°	2431.8	2432.3	2432.3	2430.9	2429.0	2430.9	2432.3	2432.3	2431.8	2432.3	2432.3
30°	2411.5	2411.5	2411.5	2409.6	2407.8	2409.6	2411.5	2411.5	2411.5	2411.5	2411.5
30.5°	2390.8	2391.3	2390.3	2388.9	2386.5	2388.9	2390.3	2391.3	2390.8	2391.3	2390.3
31°	2370.5	2370.5	2369.6	2367.2	2364.4	2367.2	2369.6	2370.5	2370.5	2370.5	2369.6
31.5°	2348.8	2348.8	2346.9	2344.6	2340.8	2344.6	2346.9	2348.8	2348.8	2348.8	2346.9
32°	2326.7	2325.2	2321.9	2317.7	2312.5	2317.7	2321.9	2325.2	2326.7	2325.2	2321.9
32.5°	2302.6	2299.3	2294.1	2287.0	2280.9	2287.0	2294.1	2299.3	2302.6	2299.3	2294.1
33°	2275.3	2271.5	2262.5	2254.5	2247.9	2254.5	2262.5	2271.5	2275.3	2271.5	2262.5
33.5°	2243.7	2240.4	2228.1	2219.6	2213.0	2219.6	2228.1	2240.4	2243.7	2240.4	2228.1
34°	2207.8	2206.4	2191.8	2182.4	2176.7	2182.4	2191.8	2206.4	2207.8	2206.4	2191.8
34.5°	2168.7	2166.3	2153.1	2142.7	2137.6	2142.7	2153.1	2166.3	2168.7	2166.3	2153.1
35°	2127.2	2123.4	2112.1	2100.8	2096.1	2100.8	2112.1	2123.4	2127.2	2123.4	2112.1
35.5°	2083.3	2078.1	2069.2	2057.4	2051.3	2057.4	2069.2	2078.1	2083.3	2078.1	2069.2
36°	2036.6	2030.0	2024.4	2012.6	2005.1	2012.6	2024.4	2030.0	2036.6	2030.0	2024.4
36.5°	1987.6	1980.5	1976.8	1965.4	1956.0	1965.4	1976.8	1980.5	1987.6	1980.5	1976.8
37°	1936.2	1929.6	1926.8	1916.4	1907.0	1916.4	1926.8	1929.6	1936.2	1929.6	1926.8
37.5°	1882.4	1877.7	1874.9	1866.4	1857.0	1866.4	1874.9	1877.7	1882.4	1877.7	1874.9
38°	1826.8	1824.0	1821.1	1815.5	1807.5	1815.5	1821.1	1824.0	1826.8	1824.0	1821.1
38.5°	1769.7	1769.7	1765.0	1763.1	1756.1	1763.1	1765.0	1769.7	1769.7	1769.7	1765.0
39°	1713.2	1714.1	1709.4	1708.9	1706.1	1708.9	1709.4	1714.1	1713.2	1714.1	1709.4
39.5°	1655.2	1656.6	1651.9	1653.3	1652.8	1653.3	1651.9	1656.6	1655.2	1656.6	1651.9
40°	1596.7	1599.5	1595.3	1597.6	1598.6	1597.6	1595.3	1599.5	1596.7	1599.5	1595.3
40.5°	1537.3	1541.5	1538.7	1542.5	1543.4	1542.5	1538.7	1541.5	1537.3	1541.5	1538.7
41°	1479.3	1484.0	1483.0	1486.3	1489.6	1486.3	1483.0	1484.0	1479.3	1484.0	1483.0
41.5°	1421.7	1425.0	1427.9	1432.1	1433.5	1432.1	1427.9	1425.0	1421.7	1425.0	1427.9
42°	1364.2	1367.0	1372.7	1376.5	1380.2	1376.5	1372.7	1367.0	1364.2	1367.0	1372.7
42.5°	1307.2	1310.0	1318.0	1322.7	1326.0	1322.7	1318.0	1310.0	1307.2	1310.0	1318.0
43°	1250.1	1253.9	1264.2	1268.5	1271.8	1268.5	1264.2	1253.9	1250.1	1253.9	1264.2
43.5°	1194.0	1197.3	1210.0	1214.3	1217.1	1214.3	1210.0	1197.3	1194.0	1197.3	1210.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	1031.3	1037.0	1051.1	1059.1	1062.4	1059.1	1051.1	1037.0	1031.3	1037.0	1051.1
45.5°	978.9	986.0	1000.6	1009.6	1012.9	1009.6	1000.6	986.0	978.9	986.0	1000.6
46°	929.0	937.0	951.1	961.5	965.7	961.5	951.1	937.0	929.0	937.0	951.1
46.5°	880.4	889.4	903.0	914.8	919.5	914.8	903.0	889.4	880.4	889.4	903.0
47°	833.2	843.1	856.3	869.1	874.3	869.1	856.3	843.1	833.2	843.1	856.3
47.5°	788.4	797.9	812.0	825.2	829.9	825.2	812.0	797.9	788.4	797.9	812.0
48°	746.0	755.4	769.6	783.3	788.4	783.3	769.6	755.4	746.0	755.4	769.6
48.5°	706.4	714.4	728.6	742.7	748.4	742.7	728.6	714.4	706.4	714.4	728.6
49°	668.2	675.7	689.4	704.5	709.7	704.5	689.4	675.7	668.2	675.7	689.4
49.5°	632.4	639.0	653.1	667.3	673.4	667.3	653.1	639.0	632.4	639.0	653.1
50°	599.3	604.1	618.7	632.8	638.5	632.8	618.7	604.1	599.3	604.1	618.7
50.5°	568.7	572.0	586.6	599.8	605.5	599.8	586.6	572.0	568.7	572.0	586.6
51°	540.4	543.2	556.4	568.2	574.8	568.2	556.4	543.2	540.4	543.2	556.4
51.5°	514.0	516.4	528.6	539.5	545.6	539.5	528.6	516.4	514.0	516.4	528.6
52°	489.9	492.3	503.6	512.6	517.8	512.6	503.6	492.3	489.9	492.3	503.6
52.5°	467.8	469.7	479.6	487.1	491.8	487.1	479.6	469.7	467.8	469.7	479.6
53°	447.5	450.8	457.9	464.0	467.8	464.0	457.9	450.8	447.5	450.8	457.9
53.5°	431.5	433.4	438.1	443.3	446.1	443.3	438.1	433.4	431.5	433.4	438.1
54°	416.4	416.9	420.2	423.9	426.3	423.9	420.2	416.9	416.4	416.9	420.2
54.5°	402.7	402.7	404.1	407.0	409.8	407.0	404.1	402.7	402.7	402.7	404.1
55°	389.0	389.5	391.4	393.3	395.2	393.3	391.4	389.5	389.0	389.5	391.4
55.5°	376.3	378.2	380.1	381.5	384.8	381.5	380.1	378.2	376.3	378.2	380.1
56°	367.3	368.3	369.7	370.6	374.4	370.6	369.7	368.3	367.3	368.3	369.7
56.5°	359.8	359.8	359.8	360.7	364.0	360.7	359.8	359.8	359.8	359.8	359.8
57°	352.7	352.7	351.8	351.3	353.7	351.3	351.8	352.7	352.7	352.7	351.8
57.5°	346.1	345.7	344.7	343.8	343.3	343.8	344.7	345.7	346.1	345.7	344.7
58°	339.0	338.6	337.6	336.7	335.7	336.7	337.6	338.6	339.0	338.6	337.6
58.5°	331.5	331.0	330.1	329.1	328.7	329.1	330.1	331.0	331.5	331.0	330.1
59°	324.0	323.5	323.0	322.1	321.1	322.1	323.0	323.5	324.0	323.5	323.0
59.5°	315.9	315.9	315.0	314.5	314.1	314.5	315.0	315.9	315.9	315.9	315.0
60°	307.9	307.9	307.5	307.0	306.5	307.0	307.5	307.9	307.9	307.9	307.5
60.5°	299.9	299.9	299.4	299.0	298.5	299.0	299.4	299.9	299.9	299.9	299.4
61°	292.4	292.4	291.9	291.4	290.9	291.4	291.9	292.4	292.4	292.4	291.9
61.5°	284.8	284.8	284.3	283.9	283.4	283.9	284.3	284.8	284.8	284.8	284.3
62°	277.3	277.3	276.8	276.3	275.9	276.3	276.8	277.3	277.3	277.3	276.8
62.5°	269.7	269.7	269.3	268.8	268.3	268.8	269.3	269.7	269.7	269.7	269.3
63°	262.7	262.2	262.2	261.2	261.2	261.2	262.2	262.2	262.7	262.2	262.2
63.5°	255.1	255.1	254.6	254.2	254.2	254.2	254.6	255.1	255.1	255.1	254.6
64°	248.0	248.0	247.6	247.1	246.6	247.1	247.6	248.0	248.0	248.0	247.6
64.5°	241.0	241.0	240.5	240.0	240.0	240.0	240.5	241.0	241.0	241.0	240.5
65°	233.9	234.4	233.9	233.4	232.9	233.4	233.9	234.4	233.9	234.4	233.9
65.5°	226.8	227.3	227.3	226.8	226.3	226.8	227.3	227.3	226.8	227.3	227.3
66°	220.2	220.7	220.2	219.7	219.7	219.7	220.2	220.7	220.2	220.7	220.2



TEST NUMBER: P776692

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMW-5000lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	199.9	200.9	200.9	200.4	200.4	200.4	200.9	200.9	199.9	200.9	200.9
68°	193.3	194.3	194.8	194.3	194.3	194.3	194.8	194.3	193.3	194.3	194.8
68.5°	187.2	188.2	188.6	188.2	188.2	188.2	188.6	188.2	187.2	188.2	188.6
69°	180.6	182.0	182.5	182.5	182.0	182.5	182.5	182.0	180.6	182.0	182.5
69.5°	174.0	175.9	176.8	176.4	176.4	176.4	176.8	175.9	174.0	175.9	176.8
70°	167.9	169.3	170.7	170.7	170.2	170.7	170.7	169.3	167.9	169.3	170.7
70.5°	161.7	163.6	165.0	164.6	164.6	164.6	165.0	163.6	161.7	163.6	165.0
71°	156.1	158.0	159.4	159.4	158.9	159.4	159.4	158.0	156.1	158.0	159.4
71.5°	150.0	151.8	153.7	153.7	153.3	153.7	153.7	151.8	150.0	151.8	153.7
72°	144.3	146.2	148.1	148.1	147.6	148.1	148.1	146.2	144.3	146.2	148.1
72.5°	138.6	140.5	142.9	142.4	142.4	142.4	142.9	140.5	138.6	140.5	142.9
73°	132.5	134.9	137.2	137.2	136.8	137.2	137.2	134.9	132.5	134.9	137.2
73.5°	126.8	129.2	132.0	132.0	131.6	132.0	132.0	129.2	126.8	129.2	132.0
74°	121.7	123.5	126.4	126.8	126.4	126.8	126.4	123.5	121.7	123.5	126.4
74.5°	116.0	118.4	121.2	121.7	121.2	121.7	121.2	118.4	116.0	118.4	121.2
75°	110.8	112.7	116.0	116.5	116.5	116.5	116.0	112.7	110.8	112.7	116.0
75.5°	105.6	107.5	111.3	111.3	111.3	111.3	111.3	107.5	105.6	107.5	111.3
76°	100.4	102.3	106.1	106.6	106.6	106.6	106.1	102.3	100.4	102.3	106.1
76.5°	95.3	97.1	100.9	101.9	101.4	101.9	100.9	97.1	95.3	97.1	100.9
77°	90.1	92.4	96.2	97.1	96.7	97.1	96.2	92.4	90.1	92.4	96.2
77.5°	84.9	87.2	91.5	92.4	92.0	92.4	91.5	87.2	84.9	87.2	91.5
78°	80.2	82.5	86.3	87.7	87.2	87.7	86.3	82.5	80.2	82.5	86.3
78.5°	75.4	77.3	81.6	83.0	83.0	83.0	81.6	77.3	75.4	77.3	81.6
79°	70.7	72.6	76.9	78.3	78.3	78.3	76.9	72.6	70.7	72.6	76.9
79.5°	66.0	67.9	72.6	74.0	74.0	74.0	72.6	67.9	66.0	67.9	72.6
80°	61.3	63.2	67.9	69.3	69.3	69.3	67.9	63.2	61.3	63.2	67.9
80.5°	57.1	58.9	63.7	65.1	65.1	65.1	63.7	58.9	57.1	58.9	63.7
81°	52.3	54.2	58.9	60.8	60.8	60.8	58.9	54.2	52.3	54.2	58.9
81.5°	48.1	49.5	54.7	56.6	56.6	56.6	54.7	49.5	48.1	49.5	54.7
82°	43.9	45.3	50.5	52.3	52.3	52.3	50.5	45.3	43.9	45.3	50.5
82.5°	39.1	41.0	46.2	48.6	48.6	48.6	46.2	41.0	39.1	41.0	46.2
83°	34.9	36.8	42.0	44.3	44.3	44.3	42.0	36.8	34.9	36.8	42.0
83.5°	30.7	32.5	38.2	40.6	40.1	40.6	38.2	32.5	30.7	32.5	38.2
84°	26.9	28.3	34.4	36.3	36.3	36.3	34.4	28.3	26.9	28.3	34.4
84.5°	22.6	24.0	30.7	32.5	32.5	32.5	30.7	24.0	22.6	24.0	30.7
85°	18.9	20.3	26.9	28.8	28.8	28.8	26.9	20.3	18.9	20.3	26.9
85.5°	15.1	17.0	23.1	25.0	25.0	25.0	23.1	17.0	15.1	17.0	23.1
86°	12.3	13.7	19.8	21.2	21.2	21.2	19.8	13.7	12.3	13.7	19.8
86.5°	9.9	11.3	16.0	17.4	17.9	17.4	16.0	11.3	9.9	11.3	16.0
87°	7.5	9.0	13.2	14.1	14.1	14.1	13.2	9.0	7.5	9.0	13.2
87.5°	5.7	6.6	9.9	10.8	10.8	10.8	9.9	6.6	5.7	6.6	9.9
88°	3.8	4.7	7.1	7.5	8.0	7.5	7.1	4.7	3.8	4.7	7.1
88.5°	1.9	2.8	4.7	5.7	6.1	5.7	4.7	2.8	1.9	2.8	4.7



TEST NUMBER: P776692

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMW-5000lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.5	0.5	0.9	1.4	0.9	0.5	0.5	0.0	0.5	0.5



TEST NUMBER: P776692

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMW-5000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	3286.7	3286.7	3286.7	3286.7	3286.7	3286.7
0.5°	3286.3	3284.9	3286.3	3286.3	3286.7	3286.3
1°	3285.3	3283.9	3285.3	3285.8	3285.8	3285.3
1.5°	3283.9	3282.5	3283.9	3283.9	3284.4	3283.9
2°	3282.0	3280.1	3282.0	3282.0	3282.0	3282.0
2.5°	3279.2	3277.8	3279.2	3279.7	3279.2	3279.2
3°	3276.4	3274.5	3276.4	3276.4	3276.4	3275.9
3.5°	3272.6	3270.7	3272.6	3272.6	3272.1	3272.1
4°	3267.9	3266.5	3267.9	3267.9	3267.9	3267.9
4.5°	3263.2	3261.3	3263.2	3263.2	3263.2	3262.7
5°	3257.5	3255.6	3257.5	3257.5	3257.5	3257.0
5.5°	3251.4	3249.5	3251.4	3251.4	3251.4	3250.9
6°	3244.3	3242.9	3244.3	3244.3	3244.3	3244.3
6.5°	3237.2	3235.8	3237.2	3237.2	3236.8	3236.8
7°	3229.2	3227.8	3229.2	3229.2	3229.2	3228.7
7.5°	3220.7	3219.3	3220.7	3220.7	3220.3	3220.3
8°	3211.8	3210.3	3211.8	3211.8	3211.3	3210.8
8.5°	3201.9	3200.4	3201.9	3201.9	3201.4	3200.9
9°	3192.0	3190.5	3192.0	3191.5	3191.0	3190.5
9.5°	3181.1	3179.7	3181.1	3180.6	3180.2	3179.7
10°	3169.8	3168.4	3169.8	3168.9	3168.4	3168.4
10.5°	3157.5	3156.1	3157.5	3157.1	3156.1	3156.1
11°	3145.3	3143.4	3145.3	3144.3	3143.4	3143.4
11.5°	3132.1	3130.7	3132.1	3131.1	3130.2	3129.7
12°	3118.4	3117.0	3118.4	3117.5	3116.5	3116.0
12.5°	3103.8	3102.8	3103.8	3102.8	3102.4	3101.9
13°	3089.2	3088.2	3089.2	3088.2	3087.3	3086.8
13.5°	3074.1	3072.7	3074.1	3073.1	3072.2	3071.7
14°	3058.0	3057.1	3058.0	3057.6	3056.6	3055.7
14.5°	3042.0	3041.1	3042.0	3041.1	3040.1	3039.6
15°	3025.5	3024.1	3025.5	3024.6	3023.6	3022.7
15.5°	3008.1	3006.6	3008.1	3007.1	3006.2	3005.7
16°	2990.6	2989.2	2990.6	2989.7	2988.7	2987.8
16.5°	2972.7	2971.3	2972.7	2971.7	2970.8	2970.3
17°	2954.3	2952.9	2954.3	2953.4	2952.4	2951.9
17.5°	2935.4	2934.0	2935.4	2934.5	2933.5	2933.5
18°	2916.1	2914.7	2916.1	2915.6	2915.2	2914.2
18.5°	2896.8	2895.4	2896.8	2896.3	2895.8	2894.9
19°	2877.0	2876.0	2877.0	2877.0	2876.5	2875.5
19.5°	2857.6	2856.2	2857.6	2857.2	2856.7	2856.2
20°	2837.3	2835.5	2837.3	2837.3	2836.9	2836.4
20.5°	2816.6	2815.2	2816.6	2816.6	2816.6	2816.6
21°	2795.9	2794.4	2795.9	2796.3	2795.9	2795.4



TEST NUMBER: P776692

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMW-5000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2733.1	2731.2	2733.1	2733.6	2734.1	2734.1
23°	2711.9	2710.0	2711.9	2712.4	2712.9	2712.9
23.5°	2690.2	2688.8	2690.2	2691.2	2691.6	2691.6
24°	2668.5	2666.6	2668.5	2669.9	2670.4	2670.4
24.5°	2646.8	2645.0	2646.8	2648.3	2648.7	2649.2
25°	2625.1	2622.8	2625.1	2626.6	2627.0	2627.0
25.5°	2603.0	2601.1	2603.0	2604.9	2605.3	2605.3
26°	2581.8	2579.4	2581.8	2583.2	2583.7	2583.7
26.5°	2559.1	2557.2	2559.1	2561.0	2561.5	2561.5
27°	2537.4	2535.1	2537.4	2539.3	2539.8	2539.3
27.5°	2515.7	2513.4	2515.7	2517.2	2517.6	2517.6
28°	2494.1	2492.2	2494.1	2495.5	2495.9	2495.0
28.5°	2472.8	2471.0	2472.8	2474.3	2474.7	2473.8
29°	2452.1	2449.7	2452.1	2453.0	2453.5	2452.6
29.5°	2430.9	2429.0	2430.9	2432.3	2432.3	2431.8
30°	2409.6	2407.8	2409.6	2411.5	2411.5	2411.5
30.5°	2388.9	2386.5	2388.9	2390.3	2391.3	2390.8
31°	2367.2	2364.4	2367.2	2369.6	2370.5	2370.5
31.5°	2344.6	2340.8	2344.6	2346.9	2348.8	2348.8
32°	2317.7	2312.5	2317.7	2321.9	2325.2	2326.7
32.5°	2287.0	2280.9	2287.0	2294.1	2299.3	2302.6
33°	2254.5	2247.9	2254.5	2262.5	2271.5	2275.3
33.5°	2219.6	2213.0	2219.6	2228.1	2240.4	2243.7
34°	2182.4	2176.7	2182.4	2191.8	2206.4	2207.8
34.5°	2142.7	2137.6	2142.7	2153.1	2166.3	2168.7
35°	2100.8	2096.1	2100.8	2112.1	2123.4	2127.2
35.5°	2057.4	2051.3	2057.4	2069.2	2078.1	2083.3
36°	2012.6	2005.1	2012.6	2024.4	2030.0	2036.6
36.5°	1965.4	1956.0	1965.4	1976.8	1980.5	1987.6
37°	1916.4	1907.0	1916.4	1926.8	1929.6	1936.2
37.5°	1866.4	1857.0	1866.4	1874.9	1877.7	1882.4
38°	1815.5	1807.5	1815.5	1821.1	1824.0	1826.8
38.5°	1763.1	1756.1	1763.1	1765.0	1769.7	1769.7
39°	1708.9	1706.1	1708.9	1709.4	1714.1	1713.2
39.5°	1653.3	1652.8	1653.3	1651.9	1656.6	1655.2
40°	1597.6	1598.6	1597.6	1595.3	1599.5	1596.7
40.5°	1542.5	1543.4	1542.5	1538.7	1541.5	1537.3
41°	1486.3	1489.6	1486.3	1483.0	1484.0	1479.3
41.5°	1432.1	1433.5	1432.1	1427.9	1425.0	1421.7
42°	1376.5	1380.2	1376.5	1372.7	1367.0	1364.2
42.5°	1322.7	1326.0	1322.7	1318.0	1310.0	1307.2
43°	1268.5	1271.8	1268.5	1264.2	1253.9	1250.1
43.5°	1214.3	1217.1	1214.3	1210.0	1197.3	1194.0



TEST NUMBER: P776692

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMW-5000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	1059.1	1062.4	1059.1	1051.1	1037.0	1031.3
45.5°	1009.6	1012.9	1009.6	1000.6	986.0	978.9
46°	961.5	965.7	961.5	951.1	937.0	929.0
46.5°	914.8	919.5	914.8	903.0	889.4	880.4
47°	869.1	874.3	869.1	856.3	843.1	833.2
47.5°	825.2	829.9	825.2	812.0	797.9	788.4
48°	783.3	788.4	783.3	769.6	755.4	746.0
48.5°	742.7	748.4	742.7	728.6	714.4	706.4
49°	704.5	709.7	704.5	689.4	675.7	668.2
49.5°	667.3	673.4	667.3	653.1	639.0	632.4
50°	632.8	638.5	632.8	618.7	604.1	599.3
50.5°	599.8	605.5	599.8	586.6	572.0	568.7
51°	568.2	574.8	568.2	556.4	543.2	540.4
51.5°	539.5	545.6	539.5	528.6	516.4	514.0
52°	512.6	517.8	512.6	503.6	492.3	489.9
52.5°	487.1	491.8	487.1	479.6	469.7	467.8
53°	464.0	467.8	464.0	457.9	450.8	447.5
53.5°	443.3	446.1	443.3	438.1	433.4	431.5
54°	423.9	426.3	423.9	420.2	416.9	416.4
54.5°	407.0	409.8	407.0	404.1	402.7	402.7
55°	393.3	395.2	393.3	391.4	389.5	389.0
55.5°	381.5	384.8	381.5	380.1	378.2	376.3
56°	370.6	374.4	370.6	369.7	368.3	367.3
56.5°	360.7	364.0	360.7	359.8	359.8	359.8
57°	351.3	353.7	351.3	351.8	352.7	352.7
57.5°	343.8	343.3	343.8	344.7	345.7	346.1
58°	336.7	335.7	336.7	337.6	338.6	339.0
58.5°	329.1	328.7	329.1	330.1	331.0	331.5
59°	322.1	321.1	322.1	323.0	323.5	324.0
59.5°	314.5	314.1	314.5	315.0	315.9	315.9
60°	307.0	306.5	307.0	307.5	307.9	307.9
60.5°	299.0	298.5	299.0	299.4	299.9	299.9
61°	291.4	290.9	291.4	291.9	292.4	292.4
61.5°	283.9	283.4	283.9	284.3	284.8	284.8
62°	276.3	275.9	276.3	276.8	277.3	277.3
62.5°	268.8	268.3	268.8	269.3	269.7	269.7
63°	261.2	261.2	261.2	262.2	262.2	262.7
63.5°	254.2	254.2	254.2	254.6	255.1	255.1
64°	247.1	246.6	247.1	247.6	248.0	248.0
64.5°	240.0	240.0	240.0	240.5	241.0	241.0
65°	233.4	232.9	233.4	233.9	234.4	233.9
65.5°	226.8	226.3	226.8	227.3	227.3	226.8
66°	219.7	219.7	219.7	220.2	220.7	220.2

TEST NUMBER: P776692

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMW-5000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	200.4	200.4	200.4	200.9	200.9	199.9
68°	194.3	194.3	194.3	194.8	194.3	193.3
68.5°	188.2	188.2	188.2	188.6	188.2	187.2
69°	182.5	182.0	182.5	182.5	182.0	180.6
69.5°	176.4	176.4	176.4	176.8	175.9	174.0
70°	170.7	170.2	170.7	170.7	169.3	167.9
70.5°	164.6	164.6	164.6	165.0	163.6	161.7
71°	159.4	158.9	159.4	159.4	158.0	156.1
71.5°	153.7	153.3	153.7	153.7	151.8	150.0
72°	148.1	147.6	148.1	148.1	146.2	144.3
72.5°	142.4	142.4	142.4	142.9	140.5	138.6
73°	137.2	136.8	137.2	137.2	134.9	132.5
73.5°	132.0	131.6	132.0	132.0	129.2	126.8
74°	126.8	126.4	126.8	126.4	123.5	121.7
74.5°	121.7	121.2	121.7	121.2	118.4	116.0
75°	116.5	116.5	116.5	116.0	112.7	110.8
75.5°	111.3	111.3	111.3	111.3	107.5	105.6
76°	106.6	106.6	106.6	106.1	102.3	100.4
76.5°	101.9	101.4	101.9	100.9	97.1	95.3
77°	97.1	96.7	97.1	96.2	92.4	90.1
77.5°	92.4	92.0	92.4	91.5	87.2	84.9
78°	87.7	87.2	87.7	86.3	82.5	80.2
78.5°	83.0	83.0	83.0	81.6	77.3	75.4
79°	78.3	78.3	78.3	76.9	72.6	70.7
79.5°	74.0	74.0	74.0	72.6	67.9	66.0
80°	69.3	69.3	69.3	67.9	63.2	61.3
80.5°	65.1	65.1	65.1	63.7	58.9	57.1
81°	60.8	60.8	60.8	58.9	54.2	52.3
81.5°	56.6	56.6	56.6	54.7	49.5	48.1
82°	52.3	52.3	52.3	50.5	45.3	43.9
82.5°	48.6	48.6	48.6	46.2	41.0	39.1
83°	44.3	44.3	44.3	42.0	36.8	34.9
83.5°	40.6	40.1	40.6	38.2	32.5	30.7
84°	36.3	36.3	36.3	34.4	28.3	26.9
84.5°	32.5	32.5	32.5	30.7	24.0	22.6
85°	28.8	28.8	28.8	26.9	20.3	18.9
85.5°	25.0	25.0	25.0	23.1	17.0	15.1
86°	21.2	21.2	21.2	19.8	13.7	12.3
86.5°	17.4	17.9	17.4	16.0	11.3	9.9
87°	14.1	14.1	14.1	13.2	9.0	7.5
87.5°	10.8	10.8	10.8	9.9	6.6	5.7
88°	7.5	8.0	7.5	7.1	4.7	3.8
88.5°	5.7	6.1	5.7	4.7	2.8	1.9



TEST NUMBER: P776692

CATALOG NUMBER: HCDJBL54050CSD-HCD62TRMW-5000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.9	1.4	0.9	0.5	0.5	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°	2775.1	2775.6	2775.1	2775.1	2773.7	2775.1	2775.1	2775.6	2775.1	2775.6	2775.1
22°	2754.8	2754.8	2754.8	2753.9	2752.5	2753.9	2754.8	2754.8	2754.8	2754.8	2754.8



44°	1138.3	1141.6	1155.8	1161.9	1164.7	1161.9	1155.8	1141.6	1138.3	1141.6	1155.8
44.5°	1083.6	1088.8	1102.5	1110.0	1112.9	1110.0	1102.5	1088.8	1083.6	1088.8	1102.5



66.5°	213.1	214.1	214.1	213.6	213.1	213.6	214.1	214.1	213.1	214.1	214.1
67°	206.5	207.5	207.5	207.0	206.5	207.0	207.5	207.5	206.5	207.5	207.5



89°	0.9	1.4	2.8	3.8	4.2	3.8	2.8	1.4	0.9	1.4	2.8
89.5°	0.5	0.5	1.4	2.4	2.8	2.4	1.4	0.5	0.5	0.5	1.4

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21.5°	2775.1	2773.7	2775.1	2775.1	2775.6	2775.1
22°	2753.9	2752.5	2753.9	2754.8	2754.8	2754.8



44°	1161.9	1164.7	1161.9	1155.8	1141.6	1138.3
44.5°	1110.0	1112.9	1110.0	1102.5	1088.8	1083.6



66.5°	213.6	213.1	213.6	214.1	214.1	213.1
67°	207.0	206.5	207.0	207.5	207.5	206.5



89°	3.8	4.2	3.8	2.8	1.4	0.9
89.5°	2.4	2.8	2.4	1.4	0.5	0.5

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Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)