

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: P776718

Luminaire Tested: HCDJBS4050CSD-HCD6TRMW-5000lm-4000K

Issue Date: 2/7/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P776718  
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-HCD6TRMW-5000lm-4000K  
Description: 6 INCH ROUND MEDIUM MATTE WHITE TRIM  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

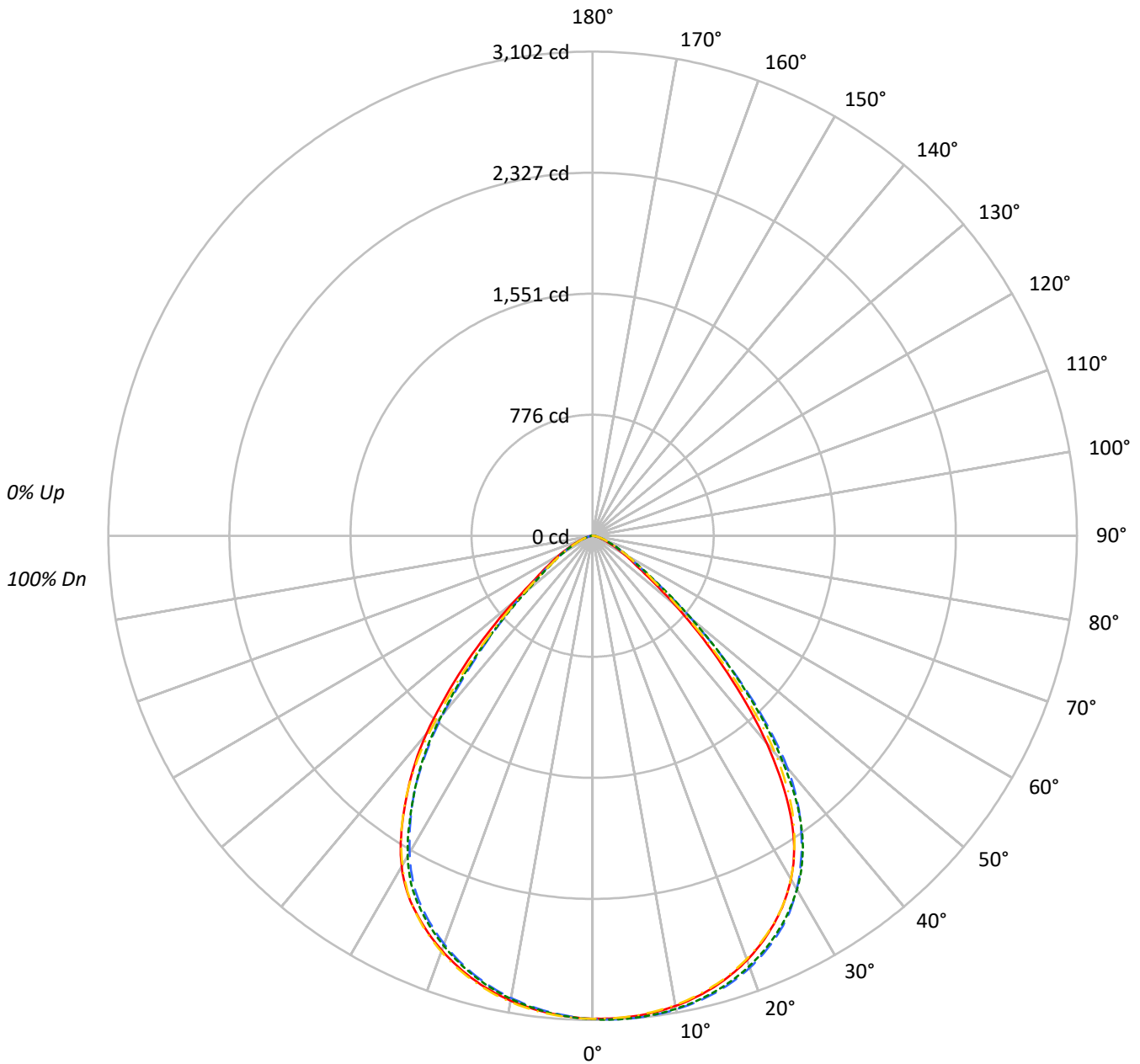
Lumens per Lamp: N/A  
Luminaire Lumens: 5171.8 lumens  
Efficiency: N/A  
Efficacy: 107.7 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.18  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 48  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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								
1	112	109	106	103	109	106	104	101	102	100	98	99	97	95	95	94	92	90								
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81								
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72								
4	91	82	75	70	89	81	74	69	78	73	69	76	72	68	74	70	67	65								
5	85	75	68	62	83	74	67	62	72	66	62	70	65	61	69	64	60	59								
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53								
7	75	63	56	51	73	63	56	51	61	55	51	60	54	50	59	54	50	48								
8	70	59	51	46	69	58	51	46	57	51	46	56	50	46	55	49	46	44								
9	66	54	47	43	65	54	47	42	53	47	42	52	46	42	51	46	42	40								
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37								

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	169690	169690	169690	169690
5°	169992	170597	169073	168968
10°	170254	171295	168367	167727
15°	169973	171630	167067	165818
20°	168773	171147	164864	162968
25°	166080	169437	161507	158785
30°	160873	165658	154847	150036
35°	148569	156700	139990	132916
40°	124154	135797	118644	107866
45°	91413	104693	87629	76434
50°	58668	70573	56382	47163
55°	35067	42560	36845	31961
60°	24702	28945	26697	23233
65°	16876	20534	18796	16630
70°	11572	14874	13111	12037
75°	8006	11035	9320	8705
80°	5430	8461	6630	6188
85°	2390	6604	3900	3585

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 67.5°  
 Vertical Angle: 45°  
 Luminance: 107841 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	293.0	5.7
10°-20°	837.7	16.2
20°-30°	1243.8	24.0
30°-40°	1334.6	25.8
40°-50°	894.5	17.3
50°-60°	364.0	7.0
60°-70°	145.4	2.8
70°-80°	49.7	1.0
80°-90°	9.1	0.2
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°	2374.5	45.9
0°-40°	3709.1	71.7
0°-60°	4967.6	96.1
0°-90°	5171.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5171.8	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	3095	3095	3095	3095	3095	
5°	3089	3100	3072	3070	3089	294
15°	2995	3024	2944	2922	2995	845
25°	2746	2801	2670	2625	2746	1262
35°	2220	2342	2092	1986	2220	1366
45°	1179	1350	1130	986	1179	910
55°	367	445	386	334	367	354
65°	130	158	145	128	130	134
75°	38	52	44	41	38	42
85°	4	10	6	6	4	6
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°	3095.4	3095.4	3095.4	3095.4	3095.4	3095.4	3095.4	3095.4	3095.4	3095.4	3095.4
0.5°	3093.9	3095.4	3097.3	3098.7	3099.2	3098.7	3094.9	3092.0	3092.5	3092.5	3093.9
1°	3094.9	3096.8	3098.7	3100.1	3100.6	3099.7	3094.9	3091.5	3091.0	3090.6	3091.5
1.5°	3094.9	3097.7	3100.1	3101.6	3101.1	3099.7	3094.9	3090.6	3090.1	3088.2	3089.1
2°	3094.4	3098.2	3101.1	3102.5	3101.6	3100.1	3094.4	3089.6	3088.2	3085.8	3086.3
2.5°	3093.9	3098.7	3101.6	3103.0	3102.1	3100.1	3093.9	3088.2	3086.3	3083.4	3083.4
3°	3093.4	3098.7	3102.1	3103.5	3102.1	3099.7	3093.0	3086.7	3084.4	3080.5	3080.5
3.5°	3093.0	3098.7	3102.5	3103.5	3102.1	3099.2	3091.5	3084.8	3081.5	3077.2	3076.7
4°	3092.0	3098.7	3102.1	3103.5	3101.6	3098.2	3090.1	3082.4	3078.6	3073.8	3073.3
4.5°	3090.6	3097.7	3102.1	3103.5	3101.1	3097.3	3088.7	3080.5	3075.7	3070.0	3069.5
5°	3089.1	3097.3	3101.6	3102.5	3100.1	3095.8	3086.3	3077.7	3072.4	3066.2	3065.2
5.5°	3087.7	3095.8	3100.6	3102.1	3099.2	3093.9	3084.4	3074.8	3069.0	3061.9	3060.4
6°	3085.3	3094.9	3099.7	3101.1	3097.7	3092.0	3082.0	3071.4	3065.2	3057.6	3056.1
6.5°	3082.9	3093.0	3098.2	3099.7	3095.8	3090.1	3079.1	3068.1	3061.4	3052.8	3050.9
7°	3080.5	3091.5	3096.8	3098.2	3094.4	3087.7	3075.7	3064.3	3057.1	3047.5	3045.6
7.5°	3077.7	3089.1	3094.9	3096.3	3092.0	3084.8	3072.9	3060.4	3052.3	3042.3	3039.9
8°	3074.3	3086.7	3093.0	3094.4	3089.6	3082.0	3069.0	3056.1	3047.5	3036.5	3034.1
8.5°	3071.0	3084.4	3090.6	3092.0	3087.2	3079.1	3065.2	3051.3	3041.8	3030.8	3027.9
9°	3066.7	3081.5	3088.2	3089.6	3083.9	3075.3	3061.4	3046.6	3036.5	3024.6	3020.7
9.5°	3062.8	3078.1	3084.8	3086.7	3080.5	3071.9	3056.6	3041.3	3030.8	3017.9	3014.0
10°	3058.5	3074.8	3082.0	3083.4	3077.2	3068.1	3051.8	3036.0	3024.6	3010.7	3007.3
10.5°	3053.7	3070.5	3078.1	3080.0	3072.9	3063.3	3047.0	3029.8	3018.3	3003.5	2999.7
11°	3048.5	3066.7	3074.3	3076.2	3069.0	3059.0	3041.8	3024.1	3011.2	2996.3	2991.6
11.5°	3043.2	3061.9	3070.0	3072.4	3064.3	3053.7	3036.0	3017.4	3004.0	2988.2	2983.4
12°	3037.0	3057.1	3065.7	3067.6	3060.0	3048.0	3029.8	3010.7	2996.3	2979.6	2974.8
12.5°	3030.8	3051.3	3060.9	3062.8	3054.7	3042.7	3023.6	3003.5	2988.7	2971.0	2965.7
13°	3024.6	3046.1	3056.1	3058.0	3049.0	3036.5	3016.9	2995.9	2980.1	2961.9	2956.6
13.5°	3017.9	3040.3	3050.4	3052.3	3043.2	3030.3	3009.7	2988.2	2971.5	2952.3	2946.6
14°	3010.7	3034.6	3044.6	3046.6	3037.5	3023.6	3002.6	2979.6	2962.9	2942.3	2936.1
14.5°	3003.0	3027.4	3038.4	3040.8	3030.8	3016.4	2994.4	2971.0	2953.3	2932.2	2925.5
15°	2994.9	3020.7	3031.7	3034.6	3024.1	3009.3	2986.3	2961.9	2943.7	2921.7	2914.5
15.5°	2986.8	3013.1	3024.6	3027.9	3016.4	3001.6	2978.2	2953.3	2933.2	2910.2	2903.1
16°	2977.7	3005.4	3017.4	3020.3	3008.8	2993.5	2969.5	2943.2	2923.2	2898.8	2891.1
16.5°	2968.6	2997.3	3009.7	3012.6	3001.1	2984.9	2960.5	2933.2	2912.1	2887.3	2879.1
17°	2958.5	2989.2	3002.1	3004.9	2992.5	2976.2	2950.9	2922.7	2900.7	2874.8	2866.7
17.5°	2949.0	2980.1	2993.5	2996.3	2983.9	2966.7	2940.8	2912.1	2889.2	2861.9	2853.3
18°	2938.5	2970.5	2984.4	2987.7	2974.3	2957.1	2930.3	2900.7	2877.2	2849.0	2839.9
18.5°	2927.5	2960.9	2975.3	2978.2	2964.8	2947.1	2919.3	2889.2	2865.3	2835.6	2826.0
19°	2916.5	2950.4	2965.2	2968.6	2954.7	2936.5	2908.3	2877.2	2852.4	2822.2	2811.7
19.5°	2905.0	2939.9	2955.2	2958.5	2944.7	2925.5	2896.8	2865.3	2839.4	2807.9	2796.9
20°	2893.0	2928.9	2944.7	2948.5	2933.7	2914.1	2884.9	2852.4	2826.0	2793.5	2782.0
20.5°	2880.6	2917.4	2933.2	2937.5	2922.7	2902.6	2872.4	2839.4	2812.2	2777.7	2766.7
21°	2867.2	2905.5	2922.2	2926.0	2910.7	2890.1	2859.5	2826.0	2797.8	2762.9	2750.5



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CATALOG NUMBER: HCDJBL54050CSD-HCD6TRMW-5000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	2825.6	2866.7	2884.4	2889.7	2873.4	2851.4	2818.9	2783.0	2753.3	2713.6	2700.2
23°	2810.3	2852.8	2871.5	2876.3	2859.5	2837.0	2804.0	2768.2	2737.1	2696.4	2682.5
23.5°	2794.5	2838.5	2857.1	2862.4	2845.7	2822.2	2788.7	2752.9	2721.3	2679.2	2664.4
24°	2778.7	2823.7	2843.3	2848.5	2831.3	2807.4	2773.4	2736.6	2704.5	2661.5	2645.7
24.5°	2762.4	2807.9	2827.5	2833.7	2816.5	2792.6	2758.1	2720.3	2687.3	2643.3	2627.1
25°	2745.7	2792.1	2812.7	2818.9	2801.2	2776.8	2741.9	2703.6	2670.1	2624.7	2607.9
25.5°	2728.0	2776.3	2796.4	2802.6	2785.4	2760.5	2725.1	2686.8	2652.4	2605.1	2587.8
26°	2710.3	2759.6	2780.1	2786.8	2769.1	2744.3	2708.4	2669.2	2633.8	2584.5	2566.3
26.5°	2691.6	2741.9	2761.9	2770.1	2752.4	2726.6	2690.2	2651.0	2614.6	2562.0	2543.3
27°	2673.0	2723.2	2744.7	2752.4	2734.7	2708.9	2671.5	2631.4	2594.5	2538.6	2519.0
27.5°	2651.9	2704.5	2725.6	2734.2	2716.5	2690.7	2651.9	2610.8	2573.5	2514.6	2493.1
28°	2632.3	2684.5	2705.5	2715.1	2697.9	2671.5	2631.4	2589.3	2550.5	2489.3	2465.9
28.5°	2609.8	2663.4	2683.5	2695.0	2679.7	2651.9	2610.3	2567.3	2526.6	2463.0	2437.6
29°	2588.3	2641.4	2662.5	2673.9	2659.1	2631.8	2587.8	2543.3	2501.7	2433.8	2407.0
29.5°	2564.9	2618.9	2639.5	2651.9	2638.5	2610.3	2564.9	2519.0	2474.9	2404.6	2375.9
30°	2541.4	2595.5	2616.1	2629.4	2617.0	2588.8	2540.0	2492.6	2446.2	2374.5	2343.9
30.5°	2515.1	2570.6	2590.7	2606.0	2595.5	2564.9	2514.6	2464.9	2417.1	2342.9	2311.4
31°	2489.8	2544.8	2565.8	2581.6	2572.0	2541.0	2488.8	2436.7	2385.5	2309.4	2276.9
31.5°	2461.5	2518.5	2539.0	2555.3	2547.7	2516.1	2461.1	2407.0	2353.0	2275.0	2243.9
32°	2432.4	2490.3	2510.8	2529.5	2522.8	2489.3	2433.3	2375.0	2319.0	2240.1	2209.0
32.5°	2401.3	2461.1	2482.6	2501.3	2496.0	2462.5	2403.7	2342.4	2283.1	2203.2	2174.1
33°	2370.2	2430.9	2453.4	2473.0	2468.2	2434.3	2373.5	2308.5	2246.8	2165.9	2137.2
33.5°	2335.7	2400.8	2423.8	2443.4	2439.1	2404.1	2342.9	2274.0	2209.0	2127.2	2101.4
34°	2298.9	2368.8	2394.1	2412.8	2408.9	2374.5	2311.4	2237.7	2170.7	2086.5	2061.7
34.5°	2259.7	2337.2	2363.0	2382.1	2375.9	2340.5	2278.8	2199.4	2132.0	2046.3	2023.9
35°	2220.0	2302.3	2331.0	2349.1	2341.5	2307.5	2244.4	2161.6	2091.8	2005.2	1982.7
35.5°	2178.4	2267.8	2298.4	2316.1	2306.1	2272.6	2209.9	2124.8	2053.0	1963.1	1940.6
36°	2133.4	2231.5	2265.9	2282.2	2268.3	2237.7	2173.6	2084.6	2012.9	1920.1	1895.7
36.5°	2087.0	2195.1	2230.5	2247.7	2228.1	2198.9	2135.3	2046.3	1972.7	1876.1	1850.7
37°	2040.1	2155.4	2195.1	2211.4	2186.0	2159.2	2094.7	2005.7	1930.6	1831.6	1802.4
37.5°	1991.3	2114.8	2156.4	2172.6	2141.5	2116.7	2053.0	1966.9	1889.0	1787.6	1753.1
38°	1941.6	2071.2	2118.1	2133.4	2094.7	2074.6	2010.0	1924.4	1846.4	1738.8	1703.4
38.5°	1890.9	2027.2	2076.5	2091.3	2047.3	2027.2	1965.5	1883.7	1802.9	1689.5	1652.2
39°	1840.2	1980.3	2033.0	2048.3	1999.5	1979.4	1919.1	1838.7	1757.4	1638.8	1597.2
39.5°	1788.0	1930.1	1987.0	2002.3	1949.2	1928.7	1870.8	1794.3	1708.6	1589.1	1542.2
40°	1734.9	1877.0	1940.2	1953.6	1897.6	1875.6	1820.6	1744.5	1657.9	1533.6	1485.3
40.5°	1681.4	1822.5	1889.9	1901.9	1847.4	1819.6	1768.0	1694.8	1604.8	1479.5	1427.4
41°	1626.4	1766.5	1836.8	1847.8	1795.2	1763.6	1713.9	1641.2	1550.3	1426.4	1370.5
41.5°	1570.4	1710.1	1784.2	1791.9	1743.1	1707.2	1657.0	1588.1	1496.3	1373.3	1312.6
42°	1513.0	1652.7	1728.3	1734.0	1688.5	1649.3	1597.7	1530.2	1440.8	1317.8	1258.5
42.5°	1455.1	1597.2	1671.8	1676.6	1635.0	1590.0	1540.3	1474.3	1388.6	1265.7	1205.9
43°	1397.7	1541.2	1612.0	1620.1	1580.0	1534.0	1482.4	1416.4	1336.5	1212.1	1154.2
43.5°	1341.8	1485.7	1554.1	1562.7	1521.6	1474.7	1425.0	1359.4	1284.8	1160.9	1103.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	1179.1	1316.9	1374.8	1391.0	1350.4	1300.6	1249.9	1194.4	1130.3	1008.8	959.6
45.5°	1127.0	1260.4	1313.5	1334.6	1293.4	1244.2	1193.0	1140.4	1079.1	961.5	915.1
46°	1073.9	1204.9	1252.8	1278.6	1240.3	1188.2	1135.1	1086.8	1028.9	915.1	872.0
46.5°	1020.8	1149.9	1194.9	1223.1	1186.8	1134.6	1080.1	1033.2	978.7	871.1	829.4
47°	968.2	1093.5	1136.5	1166.2	1133.7	1082.0	1024.6	978.7	929.4	826.1	789.7
47.5°	918.4	1039.9	1080.1	1110.2	1079.6	1030.8	972.5	927.0	882.1	785.4	751.5
48°	869.1	986.3	1024.6	1056.2	1027.0	981.6	921.3	876.8	835.7	745.3	715.1
48.5°	820.8	934.2	972.5	1002.6	975.8	934.2	873.5	828.0	790.7	707.0	678.8
49°	774.9	883.0	920.8	949.5	925.6	886.4	826.1	780.7	744.8	669.7	645.3
49.5°	731.4	832.3	871.1	899.3	875.8	839.5	781.6	735.7	701.7	634.3	612.8
50°	687.9	783.5	820.8	848.6	827.5	794.5	737.6	693.6	661.1	600.8	581.7
50.5°	646.7	736.2	774.4	799.3	780.2	750.5	697.4	653.4	620.9	569.2	552.0
51°	607.0	690.2	729.0	750.5	736.2	708.4	658.7	615.6	583.6	539.6	523.8
51.5°	569.2	646.2	685.5	706.0	692.6	668.2	622.8	580.7	549.1	510.9	496.5
52°	533.4	605.1	643.4	662.5	652.0	628.1	587.9	547.2	518.0	483.6	471.2
52.5°	499.4	566.8	603.7	620.4	610.8	590.3	555.4	516.6	488.9	458.3	447.3
53°	467.3	531.0	565.9	580.2	572.6	555.8	524.3	488.9	464.0	435.3	426.7
53.5°	438.6	497.5	530.0	543.9	536.2	522.8	495.6	463.0	441.0	415.2	405.6
54°	411.9	465.9	497.0	509.4	501.8	491.7	469.3	439.6	422.4	394.6	385.1
54.5°	388.4	437.7	464.5	477.4	469.7	463.0	444.4	420.5	403.7	374.5	364.5
55°	366.9	411.9	434.8	447.7	445.3	439.6	423.3	401.8	385.5	354.5	343.4
55.5°	346.8	388.4	408.0	420.9	421.4	416.6	402.8	382.7	366.9	337.2	326.7
56°	329.1	365.9	383.2	396.1	397.0	393.7	381.7	363.5	348.2	321.4	311.4
56.5°	313.3	345.4	361.1	373.1	372.6	370.7	360.7	344.4	332.4	306.6	298.0
57°	299.9	327.2	341.1	352.1	348.7	347.8	340.1	328.6	317.6	294.7	286.0
57.5°	287.0	311.4	322.9	332.9	331.0	330.5	323.4	313.3	303.7	282.2	274.1
58°	274.6	298.0	308.1	316.2	314.7	314.3	308.5	300.4	291.8	270.3	262.1
58.5°	262.1	285.1	295.1	302.3	301.8	301.4	296.1	288.4	279.4	258.3	249.7
59°	249.2	272.7	282.7	289.9	288.9	288.9	283.7	276.0	267.4	246.3	238.2
59.5°	237.3	259.7	269.8	277.4	276.5	276.5	271.7	263.6	255.0	234.9	227.2
60°	225.3	247.3	256.9	264.5	264.0	263.6	258.8	252.1	243.5	223.9	216.7
60.5°	213.3	234.9	244.4	252.1	251.1	251.1	246.8	240.1	232.5	213.3	206.2
61°	202.3	223.4	232.5	239.6	239.2	239.2	235.3	229.1	221.5	203.3	196.1
61.5°	191.8	211.9	221.0	227.7	226.7	227.7	223.9	218.1	210.5	193.7	187.0
62°	181.8	201.4	209.5	216.2	215.7	216.2	213.3	207.6	199.9	184.2	177.9
62.5°	171.7	191.3	199.0	205.2	204.7	205.7	202.8	197.6	189.9	175.1	169.3
63°	163.1	181.3	188.9	194.7	194.7	195.2	192.8	188.0	180.3	166.0	160.7
63.5°	155.0	170.8	179.4	185.1	184.6	185.6	183.2	178.9	170.8	157.4	153.1
64°	146.4	162.6	171.2	175.6	175.6	176.0	174.1	170.3	161.7	149.2	145.4
64.5°	138.2	154.5	162.6	167.4	166.9	167.4	165.5	161.2	153.1	141.6	138.2
65°	130.1	146.4	154.5	159.3	158.3	159.3	157.4	153.1	144.9	134.4	131.1
65.5°	122.5	138.2	146.4	151.2	150.2	151.2	149.2	145.4	137.3	127.2	124.8
66°	115.8	130.6	138.2	143.5	142.5	143.5	142.1	137.8	129.6	120.1	118.2





TEST NUMBER: P776718

CATALOG NUMBER: HCDJBL54050CSD-HCD6TRMW-5000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	97.1	110.5	117.7	121.5	121.5	122.5	121.5	117.2	109.5	101.9	100.9
68°	91.8	104.8	111.5	115.3	115.3	116.2	115.3	111.0	103.3	96.1	95.7
68.5°	86.1	98.5	105.2	109.1	109.1	110.0	109.1	105.2	97.6	90.9	90.4
69°	81.3	93.3	100.0	103.3	103.3	104.3	103.8	99.5	92.3	85.6	85.6
69.5°	76.5	88.0	94.2	97.6	98.1	98.5	98.1	93.8	87.1	80.8	80.8
70°	72.2	82.8	89.5	92.8	92.8	93.8	92.8	89.0	81.8	76.5	76.5
70.5°	67.9	78.4	84.2	87.5	87.5	88.5	88.0	83.7	77.0	71.8	72.2
71°	63.6	73.7	79.9	82.8	83.2	83.7	83.2	79.4	72.7	67.9	68.4
71.5°	59.8	69.4	75.6	78.4	78.4	79.4	78.9	74.6	68.4	63.6	64.6
72°	56.0	65.5	71.3	74.1	74.1	75.1	74.6	70.3	64.6	59.8	60.7
72.5°	52.6	61.7	67.0	69.8	69.8	70.8	70.3	66.5	60.7	56.4	57.4
73°	49.3	57.9	63.1	66.0	66.0	67.0	66.5	62.2	56.9	53.1	54.1
73.5°	46.4	54.1	59.8	62.2	62.7	63.1	62.7	58.8	53.6	49.7	50.7
74°	43.5	50.7	56.0	58.8	58.8	59.8	58.8	55.0	50.2	46.4	47.8
74.5°	40.7	47.8	52.6	55.5	55.5	56.0	55.5	51.7	46.9	43.5	44.5
75°	37.8	45.0	49.7	52.1	52.1	53.1	52.1	48.8	44.0	41.1	41.6
75.5°	35.4	42.1	46.4	48.8	49.3	49.7	49.3	45.4	41.1	38.3	39.2
76°	33.0	39.2	43.5	45.9	46.4	46.9	45.9	42.6	38.7	35.9	36.8
76.5°	30.6	36.4	41.1	43.1	43.5	44.0	43.1	40.2	36.4	33.0	34.4
77°	28.2	34.0	38.3	40.7	40.7	41.1	40.7	37.8	33.5	30.6	32.0
77.5°	26.3	31.6	35.9	37.8	38.3	38.7	38.3	34.9	31.1	28.2	29.7
78°	24.4	29.2	33.5	35.4	35.9	36.4	35.9	32.5	28.7	26.3	27.3
78.5°	22.5	27.3	31.1	33.0	33.5	34.0	33.0	30.1	26.8	24.4	25.4
79°	20.6	25.4	28.7	31.1	31.1	31.6	30.6	27.7	24.9	22.5	23.4
79.5°	18.7	23.4	26.8	28.7	28.7	29.2	28.7	25.8	23.0	20.6	21.5
80°	17.2	21.5	24.9	26.8	26.8	27.3	26.3	23.4	21.0	18.7	19.6
80.5°	15.8	19.6	23.0	24.9	24.9	25.4	24.4	21.5	19.1	17.2	18.2
81°	14.4	17.7	21.0	23.0	23.0	23.4	22.5	20.1	17.7	15.3	16.3
81.5°	12.4	16.3	19.1	21.0	21.0	21.5	21.0	18.2	15.8	13.9	14.8
82°	11.5	14.8	17.7	19.6	19.6	19.6	19.1	16.3	14.4	12.4	13.4
82.5°	10.0	12.9	16.3	17.7	17.7	18.2	17.7	14.8	12.9	11.0	12.0
83°	8.6	11.5	14.8	16.3	16.3	16.7	15.8	13.4	11.5	9.6	10.5
83.5°	7.7	10.0	13.4	14.8	14.8	15.3	14.4	12.0	10.0	8.1	9.1
84°	6.2	9.1	11.5	13.4	13.4	13.9	12.9	10.5	8.6	6.7	8.1
84.5°	5.3	7.7	10.5	12.0	12.0	12.4	11.5	9.1	7.7	5.7	7.2
85°	3.8	6.2	9.1	10.5	10.5	11.0	10.0	7.7	6.2	4.3	5.7
85.5°	2.9	5.3	8.1	9.6	9.6	9.6	9.1	6.7	5.3	3.8	4.8
86°	2.4	4.3	6.7	8.1	8.1	8.6	7.7	5.7	3.8	2.9	3.8
86.5°	1.9	3.3	5.7	7.2	7.2	7.2	6.7	4.8	3.3	2.4	2.9
87°	1.4	2.9	4.8	5.7	5.7	6.2	5.7	3.8	2.4	1.9	1.9
87.5°	1.0	2.4	3.8	4.8	4.8	4.8	4.8	3.3	1.9	1.4	1.4
88°	0.5	1.4	2.9	3.8	3.8	3.8	3.3	2.4	1.4	0.5	0.5
88.5°	0.0	1.0	1.9	2.9	2.9	2.9	2.4	1.9	1.0	0.0	0.0



TEST NUMBER: P776718  
CATALOG NUMBER: HCDJBL54050CSD-HCD6TRMW-5000lm-4000K

**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: P776718

CATALOG NUMBER: HCDJBL54050CSD-HCD6TRMW-5000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	3095.4	3095.4	3095.4	3095.4	3095.4	3095.4
0.5°	3094.9	3096.3	3096.8	3093.9	3092.5	3093.9
1°	3093.0	3094.4	3095.4	3093.4	3092.5	3094.9
1.5°	3090.6	3092.0	3093.9	3092.5	3092.0	3094.9
2°	3087.7	3090.1	3091.5	3091.0	3091.0	3094.4
2.5°	3084.8	3087.2	3089.6	3089.6	3090.1	3093.9
3°	3081.5	3084.4	3087.2	3087.7	3089.1	3093.4
3.5°	3078.1	3081.5	3084.4	3085.8	3087.7	3093.0
4°	3074.8	3077.7	3081.5	3083.4	3086.3	3092.0
4.5°	3070.5	3074.3	3078.1	3080.5	3084.4	3090.6
5°	3066.2	3070.5	3074.3	3077.7	3082.0	3089.1
5.5°	3061.4	3065.7	3070.5	3074.8	3079.6	3087.7
6°	3056.6	3061.4	3066.2	3071.0	3076.7	3085.3
6.5°	3051.8	3056.6	3061.9	3067.6	3073.8	3082.9
7°	3045.6	3050.9	3057.1	3063.3	3070.0	3080.5
7.5°	3040.3	3045.6	3052.3	3059.0	3066.7	3077.7
8°	3034.1	3039.4	3047.0	3054.2	3062.8	3074.3
8.5°	3027.9	3033.6	3041.3	3049.4	3059.0	3071.0
9°	3021.2	3027.0	3035.1	3044.2	3054.2	3066.7
9.5°	3014.0	3020.3	3028.9	3038.4	3049.4	3062.8
10°	3006.9	3013.1	3022.2	3032.7	3044.2	3058.5
10.5°	2999.2	3005.9	3015.5	3026.0	3038.9	3053.7
11°	2990.6	2997.8	3007.8	3019.3	3033.2	3048.5
11.5°	2982.5	2989.6	3000.2	3012.1	3027.0	3043.2
12°	2973.4	2981.0	2991.6	3004.9	3020.3	3037.0
12.5°	2964.8	2971.9	2983.4	2997.3	3013.6	3030.8
13°	2954.7	2962.9	2974.3	2989.2	3006.4	3024.6
13.5°	2944.7	2953.3	2965.2	2980.6	2998.7	3017.9
14°	2934.2	2943.2	2955.7	2971.5	2990.6	3010.7
14.5°	2923.6	2932.2	2945.6	2962.4	2982.5	3003.0
15°	2912.6	2921.7	2935.6	2952.8	2973.9	2994.9
15.5°	2901.1	2910.7	2924.6	2942.8	2964.3	2986.8
16°	2889.2	2898.8	2913.1	2932.2	2955.2	2977.7
16.5°	2877.2	2887.3	2901.6	2921.7	2945.2	2968.6
17°	2864.3	2874.8	2890.1	2910.2	2934.6	2958.5
17.5°	2851.9	2861.9	2877.7	2898.8	2923.6	2949.0
18°	2837.5	2849.0	2865.3	2887.3	2912.6	2938.5
18.5°	2824.1	2835.6	2852.4	2874.4	2900.7	2927.5
19°	2809.8	2821.7	2839.0	2861.4	2888.7	2916.5
19.5°	2795.0	2807.9	2825.1	2848.5	2876.8	2905.0
20°	2779.6	2793.5	2811.2	2835.1	2863.8	2893.0
20.5°	2764.3	2778.7	2796.9	2821.3	2850.4	2880.6
21°	2748.6	2763.4	2781.6	2806.4	2836.6	2867.2

TEST NUMBER: P776718

CATALOG NUMBER: HCDJBL54050CSD-HCD6TRMW-5000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2698.3	2715.1	2734.2	2760.5	2792.6	2825.6
23°	2680.6	2697.9	2717.5	2744.3	2776.3	2810.3
23.5°	2662.5	2679.7	2700.7	2727.5	2760.0	2794.5
24°	2644.3	2662.0	2682.5	2709.8	2743.3	2778.7
24.5°	2625.6	2643.8	2664.8	2692.1	2726.1	2762.4
25°	2606.5	2625.1	2646.2	2673.9	2708.4	2745.7
25.5°	2586.4	2605.5	2627.5	2655.3	2690.2	2728.0
26°	2564.4	2585.4	2606.5	2635.2	2671.5	2710.3
26.5°	2541.9	2563.4	2585.0	2613.7	2652.4	2691.6
27°	2517.5	2541.0	2561.5	2591.7	2632.3	2673.0
27.5°	2491.7	2515.6	2537.6	2568.7	2610.8	2651.9
28°	2464.9	2490.3	2512.3	2543.3	2589.3	2632.3
28.5°	2437.2	2461.5	2485.5	2518.5	2565.8	2609.8
29°	2407.5	2432.8	2457.7	2492.6	2541.9	2588.3
29.5°	2377.4	2401.8	2428.5	2465.4	2517.0	2564.9
30°	2344.8	2370.2	2397.9	2436.2	2490.7	2541.4
30.5°	2311.4	2334.3	2365.9	2408.0	2463.9	2515.1
31°	2276.4	2300.3	2331.4	2377.4	2434.8	2489.8
31.5°	2241.5	2263.0	2297.0	2346.7	2405.1	2461.5
32°	2203.7	2224.3	2261.1	2313.7	2374.5	2432.4
32.5°	2165.5	2183.6	2224.3	2282.2	2342.4	2401.3
33°	2125.8	2146.8	2186.5	2248.7	2308.5	2370.2
33.5°	2084.6	2107.1	2147.3	2213.3	2274.5	2335.7
34°	2044.0	2066.9	2108.5	2175.0	2239.1	2298.9
34.5°	2002.3	2025.3	2068.4	2137.7	2201.3	2259.7
35°	1959.3	1986.1	2028.6	2098.0	2162.1	2220.0
35.5°	1916.2	1945.9	1988.9	2056.9	2121.9	2178.4
36°	1871.8	1904.8	1946.9	2011.0	2078.9	2133.4
36.5°	1827.3	1861.2	1905.2	1967.9	2033.9	2087.0
37°	1780.9	1816.7	1861.2	1921.0	1985.1	2040.1
37.5°	1733.5	1771.3	1814.8	1873.2	1936.3	1991.3
38°	1684.7	1723.0	1767.0	1822.5	1882.3	1941.6
38.5°	1633.1	1671.8	1717.2	1769.9	1829.7	1890.9
39°	1580.4	1618.2	1666.1	1714.4	1770.8	1840.2
39.5°	1526.9	1562.7	1610.6	1657.9	1713.9	1788.0
40°	1472.3	1507.3	1555.6	1599.6	1654.1	1734.9
40.5°	1418.8	1452.7	1497.7	1541.2	1596.2	1681.4
41°	1364.2	1399.2	1440.8	1481.9	1537.9	1626.4
41.5°	1309.7	1347.0	1383.8	1423.5	1479.0	1570.4
42°	1256.6	1295.4	1327.4	1365.2	1419.7	1513.0
42.5°	1203.5	1243.7	1271.0	1306.8	1363.3	1455.1
43°	1150.9	1193.0	1216.4	1247.5	1305.9	1397.7
43.5°	1098.3	1139.4	1161.9	1191.1	1249.4	1341.8

TEST NUMBER: P776718

CATALOG NUMBER: HCDJBL54050CSD-HCD6TRMW-5000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	951.4	985.9	1000.7	1025.6	1087.8	1179.1
45.5°	905.5	935.6	949.0	973.9	1038.0	1127.0
46°	861.0	887.8	897.8	924.2	989.2	1073.9
46.5°	815.6	840.9	848.1	876.8	940.9	1020.8
47°	774.0	795.0	800.7	829.0	893.5	968.2
47.5°	734.3	749.1	755.8	785.4	847.1	918.4
48°	696.9	705.6	712.3	742.9	801.7	869.1
48.5°	658.7	663.9	671.6	702.2	759.1	820.8
49°	624.2	624.7	632.8	663.9	716.1	774.9
49.5°	591.2	587.4	596.5	627.6	675.4	731.4
50°	560.1	553.0	562.5	592.2	635.2	687.9
50.5°	529.5	520.4	530.5	558.7	598.4	646.7
51°	502.7	492.2	500.8	528.1	562.5	607.0
51.5°	476.4	466.9	474.5	499.4	529.5	569.2
52°	451.6	443.9	450.1	472.1	498.9	533.4
52.5°	431.0	422.9	427.2	446.3	469.7	499.4
53°	410.9	403.2	406.6	422.4	442.5	467.3
53.5°	390.8	384.6	386.5	399.9	416.6	438.6
54°	370.2	367.4	368.3	378.8	393.2	411.9
54.5°	350.1	350.6	351.1	359.2	371.7	388.4
55°	332.9	334.4	334.4	341.1	352.1	366.9
55.5°	317.6	319.1	319.1	323.8	333.4	346.8
56°	303.7	305.2	305.2	309.0	316.7	329.1
56.5°	291.3	293.2	292.7	296.1	302.8	313.3
57°	279.4	280.8	280.8	283.7	290.4	299.9
57.5°	267.4	268.8	268.4	271.2	277.9	287.0
58°	255.4	256.9	256.4	258.8	265.5	274.6
58.5°	243.5	244.9	244.0	246.8	252.6	262.1
59°	232.5	233.4	233.0	234.9	240.1	249.2
59.5°	221.5	222.9	222.0	223.4	228.6	237.3
60°	210.5	211.9	210.9	212.9	217.6	225.3
60.5°	200.9	201.9	200.9	202.3	206.6	213.3
61°	191.3	192.3	190.9	192.3	196.1	202.3
61.5°	181.8	182.7	181.8	183.2	186.6	191.8
62°	173.2	174.1	172.7	174.1	177.5	181.8
62.5°	164.5	166.5	164.5	166.0	168.9	171.7
63°	156.4	158.8	156.9	158.3	160.7	163.1
63.5°	148.8	150.7	149.2	150.2	152.6	155.0
64°	141.6	143.0	141.6	142.5	144.5	146.4
64.5°	134.4	134.9	133.9	134.4	136.3	138.2
65°	127.7	128.2	127.2	127.7	129.2	130.1
65.5°	121.0	121.5	120.5	121.0	122.0	122.5
66°	114.8	115.3	114.3	114.8	115.3	115.8



TEST NUMBER: P776718

CATALOG NUMBER: HCDJBL54050CSD-HCD6TRMW-5000lm-4000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	98.1	98.5	97.6	97.6	97.6	97.1
68°	92.8	93.3	92.3	92.8	91.8	91.8
68.5°	88.0	88.5	87.5	87.5	87.1	86.1
69°	83.2	83.7	82.8	83.2	81.8	81.3
69.5°	78.9	79.4	78.4	78.4	77.5	76.5
70°	74.6	75.1	74.1	74.1	72.7	72.2
70.5°	70.3	70.8	69.8	69.8	68.4	67.9
71°	66.5	67.0	66.0	66.0	64.6	63.6
71.5°	62.7	63.1	62.2	62.2	60.7	59.8
72°	59.3	59.3	58.8	58.8	56.9	56.0
72.5°	56.0	56.0	55.5	55.5	53.6	52.6
73°	52.6	52.6	52.1	52.1	50.2	49.3
73.5°	49.3	49.7	48.8	48.8	46.9	46.4
74°	46.4	46.4	45.9	45.9	44.0	43.5
74.5°	43.5	43.5	43.1	43.1	41.1	40.7
75°	41.1	41.1	40.7	40.2	38.7	37.8
75.5°	38.7	38.3	37.8	37.8	35.9	35.4
76°	36.4	35.9	35.4	34.9	33.5	33.0
76.5°	34.0	33.5	33.0	33.0	31.1	30.6
77°	31.6	31.6	31.1	30.6	28.7	28.2
77.5°	29.2	29.2	28.7	28.2	26.8	26.3
78°	26.8	27.3	26.8	26.3	24.4	24.4
78.5°	24.9	25.4	24.9	24.4	22.5	22.5
79°	23.0	23.4	23.0	22.5	21.0	20.6
79.5°	21.5	21.5	21.0	20.6	19.1	18.7
80°	19.6	19.6	19.6	18.7	17.2	17.2
80.5°	17.7	18.2	17.7	17.2	15.8	15.8
81°	16.3	16.7	16.3	15.8	14.4	14.4
81.5°	14.8	15.3	14.8	14.4	12.4	12.4
82°	13.4	13.9	13.4	12.9	11.0	11.5
82.5°	12.0	12.0	12.0	11.5	9.6	10.0
83°	10.5	11.0	10.5	10.0	8.1	8.6
83.5°	9.6	9.6	9.1	8.6	7.2	7.7
84°	8.1	8.1	8.1	7.7	6.2	6.2
84.5°	7.2	7.2	6.7	6.7	4.8	5.3
85°	5.7	5.7	5.7	5.7	4.3	3.8
85.5°	4.8	4.8	4.8	4.3	3.3	2.9
86°	3.8	3.8	3.8	3.3	2.9	2.4
86.5°	2.9	2.9	2.4	2.4	1.9	1.9
87°	1.4	1.9	1.4	1.4	1.4	1.4
87.5°	0.5	1.0	0.5	1.0	1.0	1.0
88°	0.0	0.0	0.0	0.0	0.5	0.5
88.5°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P776718

CATALOG NUMBER: HCDJBL54050CSD-HCD6TRMW-5000lm-4000K

**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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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°	2853.8	2893.0	2909.8	2914.5	2898.8	2877.7	2846.6	2812.2	2783.5	2746.6	2734.2
22°	2839.9	2880.1	2897.8	2902.1	2886.3	2864.8	2832.7	2797.8	2768.6	2730.4	2717.5



44°	1286.7	1429.8	1493.9	1505.8	1463.7	1416.9	1365.7	1303.0	1233.6	1107.8	1054.3
44.5°	1232.7	1372.4	1434.5	1448.4	1405.8	1359.0	1305.9	1249.0	1181.5	1058.6	1006.9



66.5°	109.1	123.9	130.6	135.4	134.9	135.8	134.9	130.6	122.5	113.8	112.4
67°	102.8	116.7	123.9	128.2	128.2	129.2	127.7	123.9	115.8	107.6	106.7



89°	0.0	0.5	1.0	1.9	1.9	1.9	1.4	1.0	0.5	0.0	0.0
89.5°	0.0	0.0	0.5	1.0	1.0	1.0	1.0	0.5	0.0	0.0	0.0



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21.5°	2732.3	2747.6	2766.3	2791.6	2822.2	2853.8
22°	2715.5	2731.3	2750.0	2776.3	2807.9	2839.9



44°	1048.5	1087.3	1107.8	1135.6	1193.9	1286.7
44.5°	999.7	1036.6	1053.3	1080.6	1140.4	1232.7



66.5°	109.1	109.5	108.6	109.1	109.1	109.1
67°	103.3	103.8	102.8	103.3	103.3	102.8

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Scaled Data Report



89°	0.0	0.0	0.0	0.0	0.0	0.0
89.5°	0.0	0.0	0.0	0.0	0.0	0.0

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(END OF REPORT)