

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: P775976

Luminaire Tested: HCDJBL51525CSD-HCD4TRC-2500lm-3000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P775976
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: HCDJBL51525CSD-HCD4TRC-2500lm-3000K
Description: 4 INCH ROUND MEDIUM SPECULAR CLEAR TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3000K CCT
Ballast/Driver: -

Summary

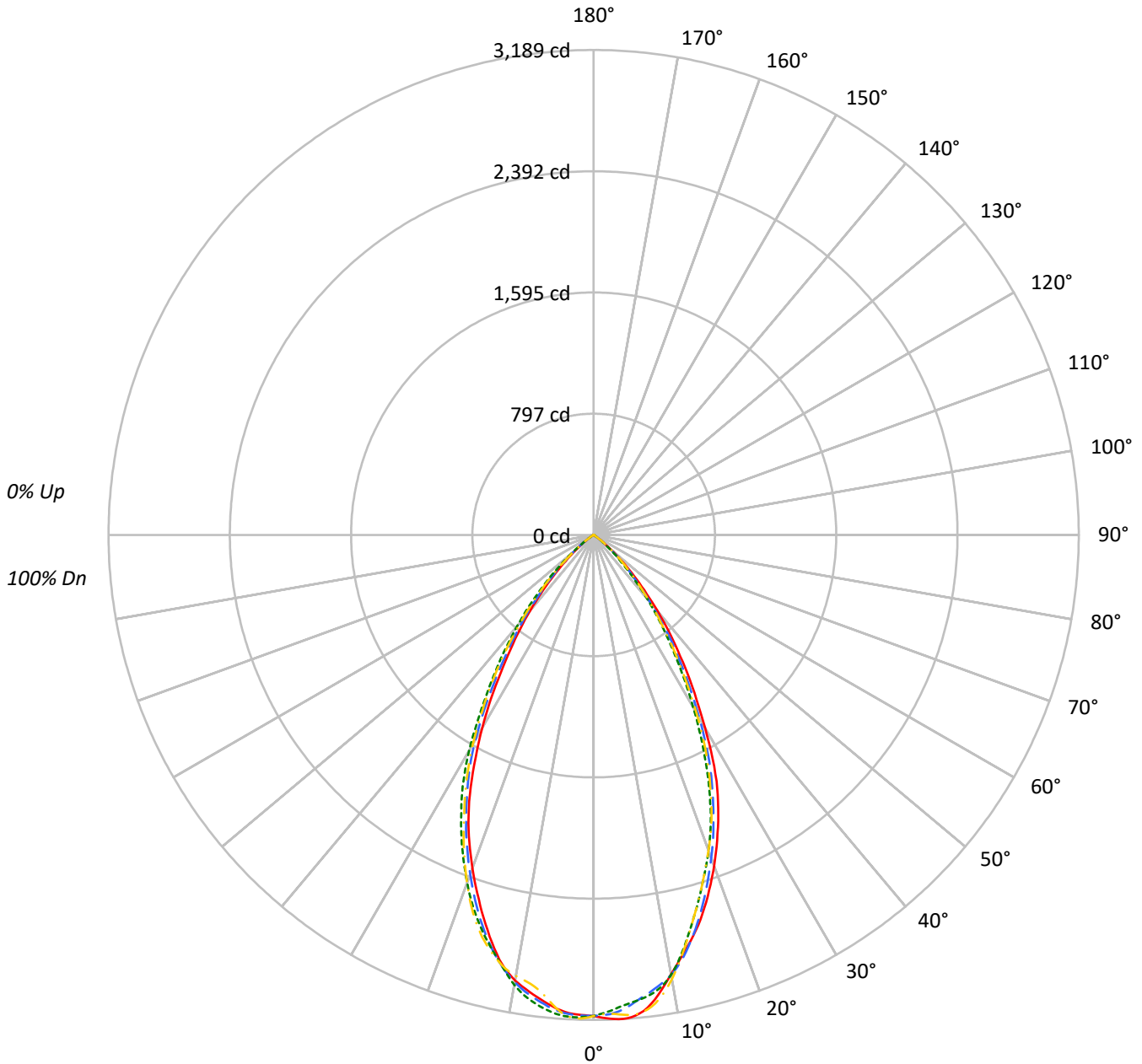
Lumens per Lamp: N/A
Luminaire Lumens: 2878.1 lumens
Efficiency: N/A
Efficacy: 115.1 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.87 / 0.88
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 25
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	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93																			
2	108	103	98	95	105	101	97	94	98	95	92	95	92	90	92	90	88	86																			
3	102	95	90	86	100	94	89	86	91	87	84	89	86	83	87	84	82	80																			
4	97	89	83	79	95	88	82	78	85	81	77	83	80	76	82	78	76	74																			
5	91	83	77	72	90	82	76	72	80	75	71	78	74	71	77	73	70	69																			
6	87	78	71	67	85	77	71	67	75	70	66	74	69	66	72	68	65	64																			
7	82	73	66	62	81	72	66	62	71	65	62	69	65	61	68	64	61	60																			
8	78	68	62	58	77	68	62	58	67	61	57	66	61	57	65	60	57	56																			
9	74	64	58	54	73	64	58	54	63	58	54	62	57	54	61	57	53	52																			
10	71	61	55	51	70	60	54	51	59	54	50	59	54	50	58	53	50	49																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	398164	398164	398164	398164
5°	400859	389098	393128	398030
10°	374876	375067	380141	383872
15°	346087	335430	350817	357253
20°	309946	295683	312129	325696
25°	268527	247879	268777	286343
30°	212558	190324	212514	237800
35°	156922	135936	155017	179399
40°	107163	89618	106227	128060
45°	63022	48944	62043	80073
50°	26803	21772	28879	38844
55°	5419	5310	9171	11431
60°	881	1057	1007	1359
65°	506	596	506	804
70°	258	368	368	442
75°	97	243	243	340
80°	0	145	145	145
85°	0	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 270°
 Vertical Angle: 45°
 Luminance: 80073 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	292.9	10.2
10°-20°	744.6	25.9
20°-30°	873.4	30.3
30°-40°	639.4	22.2
40°-50°	282.1	9.8
50°-60°	43.1	1.5
60°-70°	2.2	0.1
70°-80°	0.5	0.0
80°-90°	0.0	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°	1910.9	66.4
0°-40°	2550.3	88.6
0°-60°	2875.4	99.9
0°-90°	2878.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2878.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3164	3164	3164	3164	3164	
5°	3173	3080	3112	3151	3173	295
15°	2656	2574	2693	2742	2656	740
25°	1934	1785	1936	2062	1934	876
35°	1021	885	1009	1168	1021	639
45°	354	275	349	450	354	278
55°	25	24	42	52	25	35
65°	2	2	2	3	2	2
75°	0	0	0	1	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P775976

CATALOG NUMBER: HCDJBL5125CSD-HCD4TRC-2500lm-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	3163.8	3163.8	3163.8	3163.8	3163.8	3163.8	3163.8	3163.8	3163.8	3163.8	3163.8
0.5°	3169.7	3165.5	3161.3	3160.5	3155.8	3155.8	3158.3	3160.0	3161.8	3162.5	3163.0
1°	3174.9	3167.0	3159.3	3155.4	3149.2	3149.7	3153.9	3156.8	3159.3	3161.0	3162.8
1.5°	3179.6	3168.7	3156.6	3148.7	3140.8	3144.7	3150.9	3155.4	3157.6	3159.1	3161.8
2°	3183.8	3169.7	3152.6	3140.3	3131.4	3139.8	3150.9	3156.3	3155.8	3156.6	3159.8
2.5°	3187.0	3169.2	3146.5	3128.9	3121.7	3135.6	3153.1	3158.6	3152.6	3152.1	3157.3
3°	3188.7	3166.5	3138.6	3116.6	3111.9	3133.1	3156.8	3160.8	3148.2	3145.5	3153.6
3.5°	3188.5	3161.5	3127.9	3103.2	3103.0	3131.4	3161.5	3162.8	3141.0	3136.6	3149.4
4°	3186.0	3153.9	3115.3	3088.9	3094.6	3130.2	3165.0	3163.0	3132.6	3125.7	3143.5
4.5°	3181.0	3143.2	3100.7	3075.5	3087.2	3128.7	3166.5	3161.5	3123.0	3112.6	3135.6
5°	3173.1	3130.4	3085.9	3062.9	3080.0	3126.0	3165.0	3156.8	3111.9	3098.0	3126.2
5.5°	3161.5	3115.6	3071.3	3051.1	3072.8	3121.3	3160.3	3150.2	3099.8	3082.0	3115.3
6°	3147.0	3098.5	3057.0	3041.0	3065.4	3113.8	3151.9	3140.3	3087.4	3066.7	3103.7
6.5°	3128.2	3080.5	3043.2	3031.3	3057.0	3104.7	3140.3	3128.4	3074.3	3051.1	3091.6
7°	3105.9	3060.7	3030.3	3021.9	3046.9	3091.9	3125.2	3113.3	3061.5	3037.7	3079.0
7.5°	3081.2	3039.5	3016.3	3012.5	3035.3	3075.1	3107.2	3096.5	3047.9	3024.2	3065.9
8°	3054.3	3017.0	3002.4	3002.4	3021.4	3055.3	3083.9	3076.8	3033.8	3012.1	3052.1
8.5°	3025.9	2991.8	2987.8	2990.8	3004.9	3032.8	3058.3	3055.3	3020.0	3001.7	3038.0
9°	2994.8	2966.8	2972.3	2977.2	2984.6	3005.6	3029.6	3031.6	3005.4	2992.3	3021.9
9.5°	2963.6	2941.4	2955.2	2961.4	2961.6	2976.0	2999.2	3005.1	2991.0	2982.6	3005.1
10°	2933.5	2915.7	2936.4	2943.1	2935.0	2943.9	2964.9	2977.0	2974.7	2972.3	2986.4
10.5°	2904.3	2889.5	2915.4	2921.1	2905.8	2908.3	2929.8	2946.3	2956.7	2961.2	2967.3
11°	2876.2	2863.3	2892.2	2893.9	2874.7	2871.2	2891.7	2914.2	2936.0	2948.8	2946.1
11.5°	2848.7	2835.9	2865.5	2867.0	2838.6	2834.4	2853.4	2879.6	2913.5	2933.2	2923.8
12°	2821.3	2808.0	2836.6	2835.1	2801.8	2790.9	2811.2	2843.3	2888.3	2915.4	2900.1
12.5°	2794.4	2779.3	2807.0	2799.6	2764.5	2750.9	2772.1	2805.7	2860.6	2893.7	2873.9
13°	2768.2	2750.9	2774.9	2763.5	2726.9	2714.8	2731.6	2768.2	2828.7	2868.5	2847.0
13.5°	2742.0	2720.0	2742.7	2729.4	2688.6	2671.8	2691.8	2730.1	2796.6	2841.8	2819.1
14°	2714.3	2688.4	2709.4	2691.4	2649.8	2634.0	2652.1	2691.6	2763.7	2811.2	2790.2
14.5°	2685.4	2656.0	2675.5	2653.8	2611.5	2597.2	2614.5	2654.5	2728.9	2779.3	2760.0
15°	2656.3	2623.2	2640.0	2616.0	2574.5	2558.4	2574.5	2617.5	2692.6	2746.4	2728.2
15.5°	2625.6	2588.6	2604.1	2577.7	2537.2	2520.4	2537.7	2580.4	2657.3	2713.1	2696.0
16°	2594.3	2554.5	2567.1	2539.4	2500.1	2484.1	2498.6	2544.3	2620.9	2677.5	2663.4
16.5°	2560.2	2518.4	2530.0	2501.8	2462.6	2448.0	2461.6	2509.8	2585.6	2641.9	2630.1
17°	2527.5	2482.8	2491.7	2463.6	2427.0	2410.9	2424.5	2472.7	2550.0	2606.1	2595.7
17.5°	2492.7	2445.8	2453.9	2425.5	2390.2	2375.3	2389.2	2437.4	2512.2	2569.3	2559.9
18°	2457.9	2409.2	2415.1	2387.7	2353.1	2338.5	2350.4	2402.5	2476.4	2532.2	2524.1
18.5°	2422.3	2371.4	2376.6	2349.7	2316.3	2302.7	2313.8	2367.2	2441.3	2493.4	2487.0
19°	2387.0	2334.6	2336.6	2310.9	2280.5	2266.9	2277.8	2330.9	2404.5	2456.4	2450.0
19.5°	2350.6	2296.8	2299.0	2272.8	2244.2	2232.5	2243.4	2296.5	2367.9	2417.3	2412.2
20°	2314.3	2260.5	2259.5	2235.3	2207.8	2197.0	2206.6	2261.4	2330.6	2378.8	2374.4
20.5°	2277.5	2222.9	2220.9	2197.2	2171.8	2161.9	2170.8	2225.4	2293.8	2339.8	2336.1
21°	2240.7	2184.4	2181.9	2158.7	2133.2	2125.3	2135.2	2190.3	2256.3	2301.5	2297.3



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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°	2128.5	2067.0	2058.4	2034.9	2011.9	2009.9	2023.8	2081.3	2143.6	2185.6	2182.1
23°	2090.7	2026.0	2016.1	1992.1	1968.4	1967.7	1982.5	2042.0	2106.0	2147.3	2144.3
23.5°	2051.9	1985.7	1973.6	1947.9	1922.7	1927.4	1941.7	2002.3	2064.8	2106.8	2104.1
24°	2012.6	1944.5	1931.6	1902.9	1876.8	1883.9	1898.7	1959.3	2022.5	2066.0	2062.3
24.5°	1974.1	1903.7	1888.9	1856.2	1830.8	1840.4	1855.5	1915.5	1978.3	2024.0	2021.5
25°	1933.8	1861.2	1846.4	1810.5	1785.1	1797.0	1812.5	1871.8	1935.6	1981.5	1982.5
25.5°	1894.1	1819.9	1803.9	1763.6	1739.1	1753.2	1769.3	1828.3	1889.1	1938.5	1939.5
26°	1853.0	1778.2	1761.1	1716.2	1691.0	1705.0	1726.0	1784.6	1842.4	1895.3	1899.0
26.5°	1809.8	1734.9	1717.6	1668.7	1642.3	1659.8	1682.3	1740.9	1796.0	1852.3	1858.5
27°	1762.9	1689.7	1673.7	1621.8	1594.4	1610.7	1636.1	1693.7	1749.3	1809.1	1818.0
27.5°	1715.2	1645.2	1626.5	1575.6	1546.4	1562.5	1592.9	1644.8	1699.9	1766.1	1777.4
28°	1666.3	1598.1	1579.0	1529.4	1497.7	1514.5	1544.4	1594.8	1650.4	1723.1	1736.7
28.5°	1615.6	1549.4	1532.1	1482.7	1450.1	1466.1	1497.0	1545.9	1603.2	1676.4	1692.4
29°	1564.0	1501.0	1484.2	1437.2	1402.9	1417.7	1449.3	1496.3	1556.3	1629.7	1647.0
29.5°	1512.1	1451.1	1435.7	1391.8	1356.2	1369.3	1400.2	1449.6	1509.6	1582.5	1600.0
30°	1462.7	1401.4	1388.8	1346.5	1309.7	1320.6	1350.0	1400.2	1462.4	1534.6	1552.4
30.5°	1414.2	1351.2	1342.1	1301.6	1263.0	1273.4	1302.6	1351.7	1415.5	1486.4	1504.2
31°	1366.8	1299.8	1295.4	1254.9	1218.1	1225.7	1254.1	1305.8	1368.0	1439.9	1455.5
31.5°	1320.8	1251.4	1250.2	1209.9	1173.1	1179.8	1206.9	1260.6	1320.8	1394.0	1407.8
32°	1274.9	1205.0	1205.5	1165.2	1128.9	1137.5	1160.2	1214.6	1275.4	1348.0	1359.9
32.5°	1232.1	1159.0	1161.5	1119.7	1085.9	1093.5	1116.8	1171.1	1228.7	1303.1	1312.2
33°	1190.6	1114.3	1118.5	1074.8	1043.1	1051.3	1072.0	1127.4	1182.7	1257.8	1265.5
33.5°	1148.4	1070.1	1076.0	1033.5	1001.4	1012.0	1029.5	1084.6	1137.5	1214.6	1216.8
34°	1105.6	1027.8	1033.7	992.2	961.6	968.8	987.8	1043.1	1093.5	1171.6	1170.1
34.5°	1062.7	987.1	993.0	951.2	922.6	929.5	946.5	1001.9	1050.3	1128.9	1125.2
35°	1021.4	946.8	951.5	912.4	884.8	893.9	906.8	961.6	1009.0	1086.6	1081.7
35.5°	981.1	908.0	910.2	881.3	847.5	854.9	868.2	923.1	969.3	1043.9	1037.5
36°	939.9	885.3	883.0	843.5	811.9	814.8	831.1	883.8	932.0	1001.9	995.2
36.5°	901.3	845.0	841.8	805.9	776.8	780.5	795.1	847.2	894.4	960.1	953.9
37°	865.0	804.5	800.3	768.1	742.0	744.2	759.3	809.7	857.6	919.1	915.2
37.5°	828.9	763.9	758.5	730.6	708.1	708.8	725.6	772.3	822.5	879.6	875.6
38°	792.9	723.7	717.0	695.8	674.3	675.2	692.5	738.7	785.9	839.8	838.3
38.5°	756.5	689.3	679.2	661.4	640.7	642.1	659.9	705.1	751.6	802.7	801.3
39°	720.5	656.5	645.8	626.6	608.3	611.3	628.3	669.1	716.0	765.4	764.9
39.5°	685.9	623.9	612.0	593.0	576.2	580.4	596.4	636.7	681.4	729.4	728.4
40°	652.3	591.0	579.6	559.9	545.5	550.2	566.0	605.1	646.6	693.0	693.8
40.5°	618.9	559.6	546.0	526.8	513.7	521.3	536.9	573.0	614.7	658.4	659.7
41°	585.6	529.7	516.4	495.4	484.8	492.7	508.5	542.3	581.1	624.1	626.3
41.5°	553.9	499.8	486.5	465.2	455.1	465.2	481.3	512.4	549.0	590.7	593.0
42°	522.3	470.9	457.6	435.8	426.9	438.8	454.6	483.8	518.4	557.6	561.6
42.5°	492.2	442.8	428.4	407.4	399.3	412.9	429.2	455.8	488.7	526.3	530.2
43°	462.8	414.3	402.5	380.7	372.6	387.9	405.2	428.2	460.0	494.9	500.1
43.5°	434.6	387.4	376.5	354.5	347.1	363.4	381.0	402.2	431.1	464.7	470.7



TEST NUMBER: P775976

CATALOG NUMBER: HCDJBL5125CSD-HCD4TRC-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	354.1	312.3	304.1	281.7	275.0	296.5	313.8	329.3	348.6	381.2	389.6
45.5°	328.9	288.6	281.9	259.9	253.7	276.2	292.8	306.4	322.9	355.8	364.2
46°	304.1	266.6	260.9	238.9	235.7	256.2	272.5	284.6	298.5	331.1	339.0
46.5°	279.7	245.3	240.9	219.4	217.7	238.4	253.0	264.1	274.0	307.6	315.3
47°	256.0	224.8	221.6	201.1	199.4	220.6	235.7	244.1	251.8	284.6	293.3
47.5°	233.2	205.3	203.1	183.8	181.4	202.8	218.7	226.3	233.7	262.9	271.3
48°	212.5	186.5	185.6	168.0	163.6	185.1	201.4	208.5	215.7	244.4	249.8
48.5°	191.7	168.7	169.0	153.2	149.2	167.5	184.1	190.7	197.7	225.8	230.8
49°	172.2	152.2	153.2	138.9	135.9	152.4	166.8	173.0	179.4	207.0	211.7
49.5°	154.2	136.4	138.4	126.0	123.3	137.9	151.0	157.4	161.6	188.5	192.7
50°	136.9	121.3	123.8	113.9	111.2	124.0	136.6	142.3	147.5	170.0	173.9
50.5°	121.3	107.0	110.4	102.3	99.8	110.9	122.5	128.7	134.4	154.2	157.6
51°	106.5	93.6	97.8	90.9	89.2	98.3	109.5	116.1	121.8	139.3	142.3
51.5°	92.4	83.0	85.5	81.5	79.1	86.7	96.6	103.8	109.9	125.8	127.0
52°	81.5	72.4	75.4	72.1	69.2	75.9	85.2	92.2	98.8	112.9	112.9
52.5°	70.9	61.8	65.5	62.8	59.5	65.5	73.6	81.0	88.2	100.6	99.3
53°	60.3	51.1	55.6	53.1	50.6	55.6	63.3	70.7	78.3	88.9	87.0
53.5°	49.7	40.5	45.7	44.0	42.2	46.7	53.6	60.5	67.9	78.1	75.1
54°	39.0	32.9	37.6	36.1	35.1	38.5	44.5	51.4	58.3	67.7	64.2
54.5°	31.4	26.2	30.4	29.2	29.6	32.6	36.6	42.7	49.4	57.6	54.4
55°	24.7	19.5	23.7	22.5	24.2	26.7	30.6	35.3	41.8	48.7	45.0
55.5°	18.0	13.6	17.3	16.3	18.8	20.8	25.0	29.6	35.8	40.5	36.8
56°	12.4	9.1	11.9	11.4	13.3	14.8	19.3	24.0	30.1	34.1	31.1
56.5°	8.2	7.9	8.2	8.2	8.2	9.1	13.6	18.3	24.2	27.9	25.2
57°	7.2	6.9	7.4	7.4	6.9	6.9	7.9	12.8	18.3	21.7	19.5
57.5°	6.2	5.7	6.4	6.7	6.2	6.2	6.2	7.2	12.6	15.6	13.8
58°	5.2	4.7	5.7	5.9	5.7	5.4	5.4	5.7	6.7	9.4	8.2
58.5°	4.4	4.2	4.9	5.2	5.2	5.2	4.9	4.9	5.4	6.7	6.2
59°	4.0	4.0	4.4	4.7	4.7	4.7	4.4	4.4	4.7	5.4	5.4
59.5°	3.7	3.7	4.2	4.4	4.4	4.4	4.2	4.2	4.2	4.7	4.9
60°	3.5	3.2	3.7	4.0	4.2	4.0	4.0	3.7	4.0	4.2	4.4
60.5°	3.2	3.0	3.5	3.7	4.0	3.7	3.5	3.5	3.7	4.0	4.2
61°	3.0	3.0	3.2	3.5	3.5	3.5	3.2	3.2	3.2	3.7	3.7
61.5°	2.7	2.7	3.0	3.2	3.5	3.2	3.0	3.0	3.0	3.2	3.5
62°	2.5	2.5	2.7	3.0	3.2	3.0	3.0	2.7	2.7	3.0	3.2
62.5°	2.2	2.2	2.7	3.0	3.0	2.7	2.7	2.7	2.7	3.0	3.0
63°	2.2	2.2	2.5	2.7	2.7	2.7	2.5	2.5	2.5	2.7	2.7
63.5°	2.0	2.0	2.2	2.5	2.5	2.5	2.2	2.2	2.2	2.5	2.7
64°	2.0	2.0	2.2	2.2	2.5	2.2	2.2	2.2	2.2	2.2	2.5
64.5°	1.7	1.7	2.0	2.2	2.2	2.2	2.0	2.0	2.0	2.2	2.2
65°	1.7	1.7	2.0	2.0	2.0	2.0	2.0	1.7	1.7	2.0	2.2
65.5°	1.5	1.5	1.7	2.0	2.0	2.0	1.7	1.7	1.7	2.0	2.0
66°	1.5	1.5	1.7	1.7	1.7	1.7	1.7	1.5	1.5	1.7	1.7



TEST NUMBER: P775976
 CATALOG NUMBER: HCDJBL1525CSD-HCD4TRC-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	1.2	1.2	1.2	1.5	1.5	1.5	1.5	1.2	1.2	1.5	1.5
68°	1.0	1.0	1.2	1.5	1.5	1.2	1.2	1.2	1.2	1.2	1.5
68.5°	1.0	1.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
69°	1.0	1.0	1.0	1.2	1.2	1.2	1.0	1.0	1.0	1.2	1.2
69.5°	0.7	0.7	1.0	1.2	1.2	1.0	1.0	1.0	1.0	1.0	1.2
70°	0.7	0.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
70.5°	0.7	0.7	1.0	1.0	1.0	1.0	1.0	0.7	0.7	1.0	1.0
71°	0.7	0.7	0.7	1.0	1.0	1.0	0.7	0.7	0.7	1.0	1.0
71.5°	0.5	0.5	0.7	0.7	1.0	0.7	0.7	0.7	0.7	0.7	1.0
72°	0.5	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
72.5°	0.5	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
73°	0.5	0.5	0.5	0.7	0.7	0.7	0.5	0.5	0.5	0.7	0.7
73.5°	0.5	0.5	0.5	0.7	0.7	0.7	0.5	0.5	0.5	0.5	0.7
74°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
74.5°	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
75°	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
75.5°	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
76°	0.2	0.2	0.2	0.5	0.5	0.5	0.5	0.2	0.2	0.5	0.5
76.5°	0.2	0.2	0.2	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.5
77°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
77.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
78°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
78.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
79°	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
79.5°	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
80°	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
80.5°	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2
81°	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.2	0.2
81.5°	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.2
82°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P775976
CATALOG NUMBER: HCDJBL51525CSD-HCD4TRC-2500lm-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: P775976

CATALOG NUMBER: HCDJBLS1525CSD-HCD4TRC-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	3163.8	3163.8	3163.8	3163.8	3163.8	3163.8
0.5°	3166.7	3166.5	3168.7	3171.2	3171.4	3169.7
1°	3168.4	3170.2	3173.9	3177.3	3177.8	3174.9
1.5°	3169.4	3172.9	3177.1	3181.0	3183.0	3179.6
2°	3170.2	3174.4	3177.3	3182.3	3186.7	3183.8
2.5°	3170.7	3174.1	3174.6	3179.8	3188.0	3187.0
3°	3170.4	3172.4	3167.5	3172.2	3186.5	3188.7
3.5°	3170.2	3169.4	3156.3	3160.5	3181.5	3188.5
4°	3169.9	3164.7	3142.0	3143.0	3173.4	3186.0
4.5°	3168.7	3158.6	3124.0	3122.2	3161.8	3181.0
5°	3166.7	3150.7	3102.5	3099.0	3146.5	3173.1
5.5°	3164.5	3141.3	3080.7	3074.1	3128.7	3161.5
6°	3161.0	3130.6	3058.7	3050.6	3111.4	3147.0
6.5°	3155.1	3119.5	3037.5	3028.9	3093.3	3128.2
7°	3146.5	3107.4	3019.2	3010.1	3071.8	3105.9
7.5°	3135.1	3094.6	3004.4	2994.3	3051.8	3081.2
8°	3119.0	3080.0	2991.8	2981.2	3030.6	3054.3
8.5°	3099.8	3064.4	2981.2	2971.3	3008.6	3025.9
9°	3078.0	3046.4	2971.5	2961.6	2985.9	2994.8
9.5°	3052.8	3026.1	2964.1	2952.8	2963.9	2963.6
10°	3023.9	3003.9	2954.5	2943.6	2940.9	2933.5
10.5°	2995.7	2979.2	2944.1	2934.0	2918.2	2904.3
11°	2965.6	2953.5	2932.5	2922.6	2894.7	2876.2
11.5°	2934.2	2926.6	2918.9	2909.5	2872.0	2848.7
12°	2904.8	2899.9	2902.1	2893.7	2849.0	2821.3
12.5°	2876.4	2872.9	2884.3	2875.4	2826.0	2794.4
13°	2847.3	2846.0	2865.3	2856.9	2804.0	2768.2
13.5°	2818.3	2820.1	2844.3	2836.1	2780.0	2742.0
14°	2790.4	2793.9	2822.3	2814.4	2755.3	2714.3
14.5°	2762.3	2768.7	2799.8	2791.9	2729.6	2685.4
15°	2733.6	2742.0	2774.6	2767.7	2703.0	2656.3
15.5°	2705.2	2716.1	2748.7	2743.0	2674.1	2625.6
16°	2674.6	2688.4	2721.2	2715.6	2644.7	2594.3
16.5°	2644.4	2660.2	2693.3	2685.9	2614.5	2560.2
17°	2611.1	2630.3	2663.7	2655.3	2582.6	2527.5
17.5°	2578.7	2600.2	2631.6	2622.2	2549.8	2492.7
18°	2544.1	2568.3	2597.2	2587.3	2515.9	2457.9
18.5°	2509.8	2535.4	2562.9	2550.5	2479.6	2422.3
19°	2473.4	2500.9	2526.3	2512.0	2444.5	2387.0
19.5°	2437.6	2467.8	2489.5	2472.7	2408.5	2350.6
20°	2400.3	2431.9	2452.7	2434.1	2371.6	2314.3
20.5°	2364.2	2397.6	2412.7	2394.1	2334.3	2277.5
21°	2326.9	2360.8	2374.9	2353.6	2297.0	2240.7

TEST NUMBER: P775976

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRC-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2217.0	2252.6	2258.2	2229.6	2181.6	2128.5
23°	2178.7	2215.7	2217.5	2188.1	2142.6	2090.7
23.5°	2140.4	2177.4	2176.0	2145.3	2101.1	2051.9
24°	2103.3	2139.6	2135.2	2100.9	2061.1	2012.6
24.5°	2065.5	2101.1	2092.9	2057.4	2019.1	1974.1
25°	2026.2	2062.1	2049.2	2014.4	1979.3	1933.8
25.5°	1988.2	2023.0	2007.7	1971.9	1935.8	1894.1
26°	1950.1	1983.5	1966.7	1930.6	1895.5	1853.0
26.5°	1909.9	1944.2	1924.9	1888.4	1853.5	1809.8
27°	1869.3	1904.2	1883.9	1847.4	1811.0	1762.9
27.5°	1829.1	1863.2	1841.7	1805.6	1764.8	1715.2
28°	1788.6	1820.2	1798.9	1763.1	1723.1	1666.3
28.5°	1748.3	1775.5	1756.4	1719.6	1677.4	1615.6
29°	1703.1	1730.7	1713.2	1676.9	1630.2	1564.0
29.5°	1656.4	1684.3	1670.5	1632.2	1583.5	1512.1
30°	1607.2	1636.4	1625.5	1586.7	1535.3	1462.7
30.5°	1557.0	1587.4	1578.5	1540.0	1484.9	1414.2
31°	1510.6	1537.0	1532.3	1493.3	1436.5	1366.8
31.5°	1459.0	1486.1	1485.1	1446.9	1386.6	1320.8
32°	1405.3	1437.2	1438.7	1401.9	1339.1	1274.9
32.5°	1358.4	1389.0	1391.0	1356.4	1292.2	1232.1
33°	1309.7	1342.6	1346.3	1312.9	1245.7	1190.6
33.5°	1261.1	1295.1	1297.9	1269.2	1202.0	1148.4
34°	1215.1	1252.7	1253.4	1225.0	1159.8	1105.6
34.5°	1171.4	1209.9	1210.7	1181.7	1118.5	1062.7
35°	1129.1	1167.7	1166.2	1139.5	1077.5	1021.4
35.5°	1087.6	1126.2	1123.4	1096.8	1038.2	981.1
36°	1046.6	1085.4	1082.4	1055.0	998.7	939.9
36.5°	1005.6	1045.4	1041.2	1012.3	960.6	901.3
37°	965.3	1005.1	999.4	970.3	922.6	865.0
37.5°	925.5	965.3	961.1	930.7	882.0	828.9
38°	886.2	925.0	920.6	892.2	845.5	792.9
38.5°	847.5	886.5	878.1	854.6	809.4	756.5
39°	809.2	850.9	842.5	816.8	773.1	720.5
39.5°	772.6	815.1	806.9	779.3	736.8	685.9
40°	737.0	779.5	771.6	741.5	700.7	652.3
40.5°	702.2	743.9	736.0	703.9	666.6	618.9
41°	670.6	708.4	700.4	668.6	633.0	585.6
41.5°	636.5	674.5	665.1	634.0	600.1	553.9
42°	604.6	641.4	630.3	600.4	567.8	522.3
42.5°	573.2	607.8	596.7	568.3	536.4	492.2
43°	544.3	574.9	563.1	536.4	505.0	462.8
43.5°	513.2	542.6	530.5	504.3	473.9	434.6



TEST NUMBER: P775976

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRC-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	428.9	449.9	438.8	415.6	384.9	354.1
45.5°	400.5	420.8	409.4	387.7	357.3	328.9
46°	374.6	392.6	381.2	360.2	330.8	304.1
46.5°	348.4	365.2	354.5	334.0	304.9	279.7
47°	323.7	338.5	327.9	308.6	280.2	256.0
47.5°	298.7	312.5	302.4	283.9	256.0	233.2
48°	275.5	287.8	277.2	259.9	233.7	212.5
48.5°	252.8	263.9	254.0	237.9	212.7	191.7
49°	232.2	241.4	231.8	215.7	192.2	172.2
49.5°	212.0	219.6	210.5	194.9	173.0	154.2
50°	191.5	198.4	188.8	174.7	155.4	136.9
50.5°	171.2	178.6	170.0	155.9	137.9	121.3
51°	153.7	160.1	151.7	138.6	121.8	106.5
51.5°	137.1	142.6	135.1	122.1	107.2	92.4
52°	121.1	126.3	118.6	106.2	92.9	81.5
52.5°	106.5	111.2	104.0	92.4	82.0	70.9
53°	93.1	96.6	89.9	81.5	70.9	60.3
53.5°	80.3	84.0	79.3	70.4	60.0	49.7
54°	68.2	73.4	68.7	59.5	48.9	39.0
54.5°	57.8	62.8	58.1	48.7	38.0	31.4
55°	47.9	52.1	47.4	37.8	30.9	24.7
55.5°	39.0	41.3	36.8	30.4	24.0	18.0
56°	33.1	33.6	29.6	24.0	17.5	12.4
56.5°	27.2	26.9	23.5	17.3	11.6	8.2
57°	21.2	20.3	16.8	11.9	7.9	7.2
57.5°	15.3	14.6	11.6	8.2	7.2	6.2
58°	9.4	10.1	8.4	7.2	6.2	5.2
58.5°	7.2	8.9	7.7	6.4	5.2	4.4
59°	6.2	7.9	6.7	5.4	4.4	4.0
59.5°	5.7	6.7	5.9	4.7	4.0	3.7
60°	5.2	5.4	4.9	4.2	3.7	3.5
60.5°	4.7	4.9	4.7	4.0	3.5	3.2
61°	4.4	4.7	4.2	3.7	3.2	3.0
61.5°	4.0	4.2	4.0	3.5	3.0	2.7
62°	3.7	4.0	3.7	3.2	2.7	2.5
62.5°	3.5	3.7	3.5	3.0	2.5	2.2
63°	3.2	3.5	3.2	2.7	2.5	2.2
63.5°	3.0	3.2	3.0	2.5	2.2	2.0
64°	2.7	3.0	2.7	2.2	2.0	2.0
64.5°	2.7	2.7	2.5	2.2	2.0	1.7
65°	2.5	2.7	2.5	2.0	1.7	1.7
65.5°	2.2	2.5	2.2	2.0	1.7	1.5
66°	2.2	2.2	2.0	1.7	1.5	1.5



TEST NUMBER: P775976

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRC-2500lm-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	1.7	2.0	1.7	1.5	1.2	1.2
68°	1.7	1.7	1.5	1.2	1.2	1.0
68.5°	1.5	1.7	1.5	1.2	1.0	1.0
69°	1.5	1.5	1.5	1.2	1.0	1.0
69.5°	1.2	1.5	1.2	1.0	1.0	0.7
70°	1.2	1.2	1.2	1.0	0.7	0.7
70.5°	1.2	1.2	1.2	1.0	0.7	0.7
71°	1.0	1.2	1.0	1.0	0.7	0.7
71.5°	1.0	1.0	1.0	0.7	0.7	0.5
72°	1.0	1.0	1.0	0.7	0.7	0.5
72.5°	1.0	1.0	0.7	0.7	0.5	0.5
73°	0.7	0.7	0.7	0.7	0.5	0.5
73.5°	0.7	0.7	0.7	0.5	0.5	0.5
74°	0.7	0.7	0.7	0.5	0.5	0.5
74.5°	0.7	0.7	0.7	0.5	0.5	0.2
75°	0.5	0.7	0.5	0.5	0.5	0.2
75.5°	0.5	0.5	0.5	0.5	0.2	0.2
76°	0.5	0.5	0.5	0.5	0.2	0.2
76.5°	0.5	0.5	0.5	0.2	0.2	0.2
77°	0.5	0.5	0.5	0.2	0.2	0.2
77.5°	0.5	0.5	0.5	0.2	0.2	0.2
78°	0.5	0.5	0.2	0.2	0.2	0.2
78.5°	0.2	0.2	0.2	0.2	0.2	0.2
79°	0.2	0.2	0.2	0.2	0.2	0.2
79.5°	0.2	0.2	0.2	0.2	0.2	0.0
80°	0.2	0.2	0.2	0.2	0.0	0.0
80.5°	0.2	0.2	0.2	0.2	0.0	0.0
81°	0.2	0.2	0.2	0.2	0.0	0.0
81.5°	0.2	0.2	0.2	0.0	0.0	0.0
82°	0.2	0.2	0.2	0.0	0.0	0.0
82.5°	0.2	0.2	0.2	0.0	0.0	0.0
83°	0.2	0.2	0.0	0.0	0.0	0.0
83.5°	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	0.0
84.5°	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0
85.5°	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0
86.5°	0.0	0.0	0.0	0.0	0.0	0.0
87°	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0
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: P775976
CATALOG NUMBER: HCDJBL51525CSD-HCD4TRC-2500lm-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

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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



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Scaled Data Report





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

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21.5°	2203.9	2146.1	2141.6	2117.9	2094.2	2088.7	2101.1	2155.0	2218.5	2261.9	2259.2
22°	2166.8	2106.5	2101.1	2076.4	2053.7	2050.0	2063.3	2119.1	2181.1	2224.1	2220.7



44°	406.9	361.5	351.3	328.9	322.7	340.5	357.8	377.0	402.5	435.8	443.0
44.5°	379.7	336.5	327.4	304.6	298.2	318.0	335.3	352.6	375.3	408.2	415.6



66.5°	1.2	1.2	1.5	1.7	1.7	1.7	1.5	1.5	1.5	1.7	1.7
67°	1.2	1.2	1.5	1.5	1.7	1.5	1.5	1.5	1.5	1.5	1.7



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°	2290.1	2325.2	2336.3	2312.8	2259.0	2203.9
22°	2252.8	2288.4	2296.8	2272.1	2221.4	2166.8



44°	484.3	511.2	498.8	473.9	443.0	406.9
44.5°	455.8	480.3	468.9	444.5	414.3	379.7

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66.5°	2.0	2.2	2.0	1.7	1.5	1.2
67°	2.0	2.0	1.7	1.5	1.2	1.2

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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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Scaled Data Report



(END OF REPORT)