

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: P776361

Luminaire Tested: HCDJBL3040CSD-HCD62TRC-4000lm-3000K

Issue Date: 2/13/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P776361  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2312156B055-HCD62TRC)  
Test Lab:  
Issue Date: 2/13/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCDJBS3040CSD-HCD62TRC-4000lm-3000K  
Description: 6 INCH ROUND NARROW SPECULAR CLEAR TRIM  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

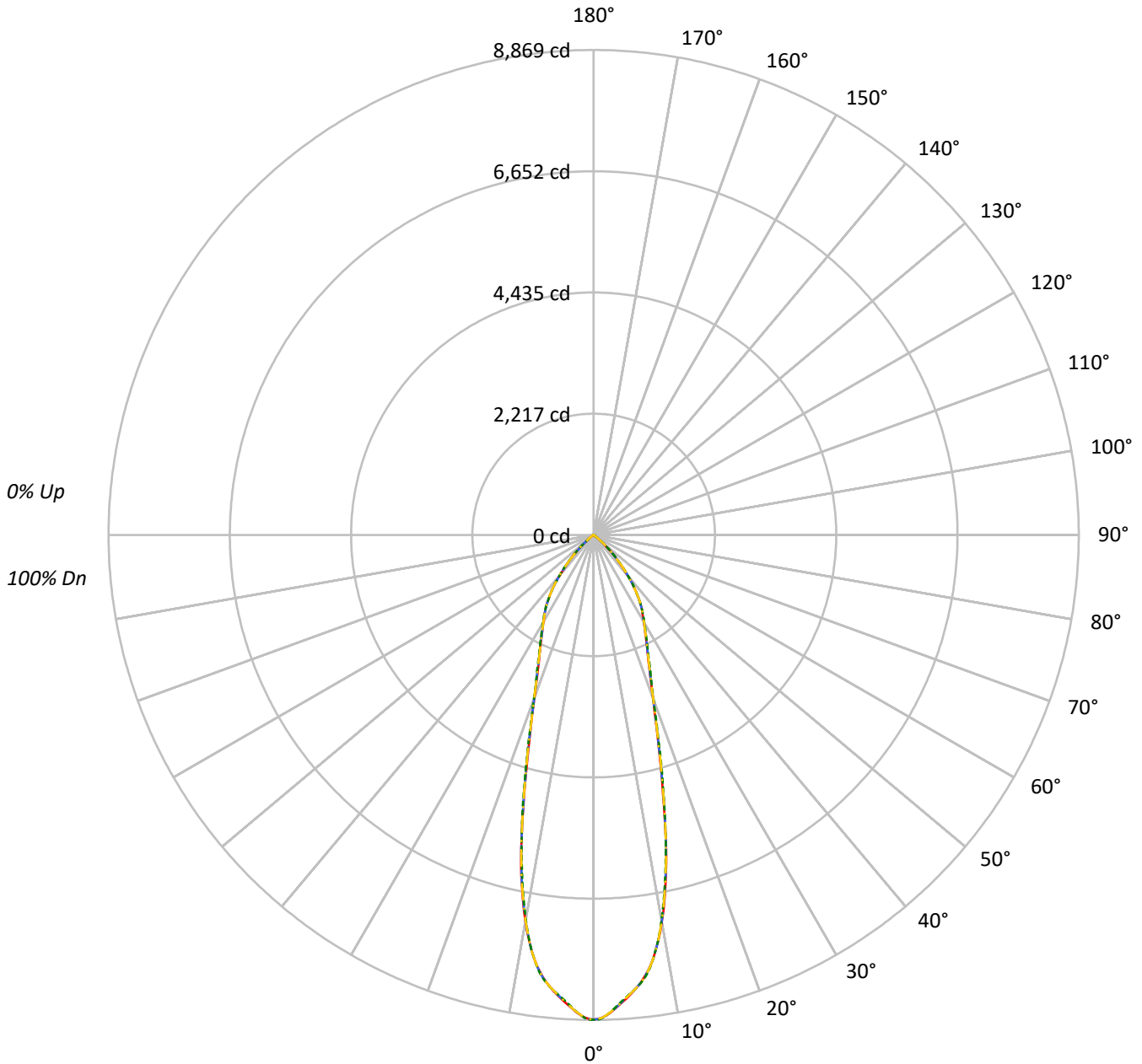
Lumens per Lamp: N/A  
Luminaire Lumens: 4537.7 lumens  
Efficiency: N/A  
Efficacy: 117.9 lumens/watt  
Spacing Criteria (0/90/45): 0.53 / 0.54 / 0.57  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 38.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20										
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100		
	1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94	94	94	94	94	94		
	2	108	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88	88	88	88	88	88		
	3	103	97	92	89	101	96	91	88	93	90	87	91	88	85	89	86	84	82	82	82	82	82	82		
	4	98	91	86	82	97	90	85	81	88	84	80	86	82	79	84	81	79	77	77	77	77	77	77		
	5	94	86	80	76	92	85	80	76	83	79	75	81	77	74	80	77	74	72	72	72	72	72	72		
	6	89	81	75	71	88	80	75	71	79	74	70	77	73	70	76	72	69	68	68	68	68	68	68		
	7	85	76	71	67	84	76	70	67	75	70	66	73	69	66	72	68	65	64	64	64	64	64	64		
	8	81	72	67	63	80	72	66	63	71	66	62	70	65	62	69	65	62	61	61	61	61	61	61		
	9	78	69	63	59	77	68	63	59	67	63	59	67	62	59	66	62	59	57	57	57	57	57	57		
	10	75	65	60	56	74	65	60	56	64	59	56	63	59	56	63	59	56	55	55	55	55	55	55		

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

	0°	90°	180°	270°
0°	485964	485964	485964	485964
5°	460928	460410	460928	460410
10°	399775	397482	399775	397482
15°	278066	281335	278066	281335
20°	184536	186502	184536	186502
25°	140270	142260	140270	142260
30°	115980	117391	115980	117391
35°	97065	97146	97065	97146
40°	69130	70224	69130	70224
45°	38771	40679	38771	40679
50°	13194	15692	13194	15692
55°	937	2017	937	2017
60°	175	175	175	175
65°	104	104	104	104
70°	64	64	64	64
75°	85	85	85	85
80°	0	0	0	0
85°	0	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 40679 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	764.4	16.8
10°-20°	1360.5	30.0
20°-30°	1086.4	23.9
30°-40°	889.3	19.6
40°-50°	401.6	8.9
50°-60°	34.4	0.8
60°-70°	0.8	0.0
70°-80°	0.2	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°	3211.3	70.8
0°-40°	4100.6	90.4
0°-60°	4536.6	100.0
0°-90°	4537.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4537.7	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	8865	8865	8865	8865	8865	
5°	8376	8367	8376	8367	8376	765
15°	4900	4957	4900	4957	4900	1358
25°	2319	2352	2319	2352	2319	1080
35°	1450	1452	1450	1452	1450	887
45°	500	525	500	525	500	394
55°	10	21	10	21	10	31
65°	1	1	1	1	1	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
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°	8864.7	8864.7	8864.7	8864.7	8864.7	8864.7	8864.7	8864.7	8864.7	8864.7	8864.7
0.5°	8854.1	8854.1	8854.1	8855.7	8869.4	8855.7	8854.1	8854.1	8854.1	8854.1	8854.1
1°	8830.6	8830.6	8829.4	8829.8	8839.2	8829.8	8829.4	8830.6	8830.6	8830.6	8829.4
1.5°	8792.2	8791.8	8788.7	8786.8	8792.6	8786.8	8788.7	8791.8	8792.2	8791.8	8788.7
2°	8743.7	8741.3	8737.0	8732.3	8733.1	8732.3	8737.0	8741.3	8743.7	8741.3	8737.0
2.5°	8685.7	8684.2	8677.9	8670.1	8667.7	8670.1	8677.9	8684.2	8685.7	8684.2	8677.9
3°	8624.6	8622.7	8615.6	8605.1	8600.8	8605.1	8615.6	8622.7	8624.6	8622.7	8615.6
3.5°	8563.6	8560.8	8552.6	8542.0	8536.5	8542.0	8552.6	8560.8	8563.6	8560.8	8552.6
4°	8502.9	8498.5	8490.7	8482.5	8477.0	8482.5	8490.7	8498.5	8502.9	8498.5	8490.7
4.5°	8440.2	8436.3	8430.4	8424.9	8420.6	8424.9	8430.4	8436.3	8440.2	8436.3	8430.4
5°	8376.0	8373.2	8369.7	8367.4	8366.6	8367.4	8369.7	8373.2	8376.0	8373.2	8369.7
5.5°	8306.7	8305.1	8305.1	8306.7	8309.8	8306.7	8305.1	8305.1	8306.7	8305.1	8305.1
6°	8231.5	8231.5	8233.8	8240.1	8243.6	8240.1	8233.8	8231.5	8231.5	8231.5	8233.8
6.5°	8147.7	8149.6	8154.3	8161.0	8165.7	8161.0	8154.3	8149.6	8147.7	8149.6	8154.3
7°	8052.5	8056.4	8060.8	8067.8	8073.3	8067.8	8060.8	8056.4	8052.5	8056.4	8060.8
7.5°	7944.8	7946.4	7951.9	7957.0	7960.1	7957.0	7951.9	7946.4	7944.8	7946.4	7951.9
8°	7821.9	7822.7	7825.8	7828.9	7830.5	7828.9	7825.8	7822.7	7821.9	7822.7	7825.8
8.5°	7681.3	7681.3	7681.7	7680.9	7678.2	7680.9	7681.7	7681.3	7681.3	7681.3	7681.7
9°	7527.4	7527.0	7523.5	7518.0	7515.7	7518.0	7523.5	7527.0	7527.4	7527.0	7523.5
9.5°	7359.8	7358.6	7349.6	7341.8	7335.5	7341.8	7349.6	7358.6	7359.8	7358.6	7349.6
10°	7181.7	7177.7	7164.8	7150.3	7140.5	7150.3	7164.8	7177.7	7181.7	7177.7	7164.8
10.5°	6992.1	6983.9	6969.4	6951.8	6937.7	6951.8	6969.4	6983.9	6992.1	6983.9	6969.4
11°	6789.7	6782.6	6763.8	6749.3	6736.4	6749.3	6763.8	6782.6	6789.7	6782.6	6763.8
11.5°	6579.8	6573.5	6557.5	6536.3	6526.1	6536.3	6557.5	6573.5	6579.8	6573.5	6557.5
12°	6362.5	6357.4	6337.8	6318.2	6304.9	6318.2	6337.8	6357.4	6362.5	6357.4	6337.8
12.5°	6134.2	6125.5	6109.9	6091.1	6079.3	6091.1	6109.9	6125.5	6134.2	6125.5	6109.9
13°	5895.3	5891.0	5876.5	5865.5	5858.5	5865.5	5876.5	5891.0	5895.3	5891.0	5876.5
13.5°	5639.2	5642.3	5638.8	5634.9	5631.4	5634.9	5638.8	5642.3	5639.2	5642.3	5638.8
14°	5386.2	5391.7	5396.0	5401.5	5405.8	5401.5	5396.0	5391.7	5386.2	5391.7	5396.0
14.5°	5135.6	5144.2	5158.7	5172.8	5183.0	5172.8	5158.7	5144.2	5135.6	5144.2	5158.7
15°	4899.5	4906.5	4926.1	4944.5	4957.1	4944.5	4926.1	4906.5	4899.5	4906.5	4926.1
15.5°	4676.3	4685.7	4702.9	4723.3	4738.6	4723.3	4702.9	4685.7	4676.3	4685.7	4702.9
16°	4469.1	4475.0	4490.3	4514.6	4532.2	4514.6	4490.3	4475.0	4469.1	4475.0	4490.3
16.5°	4270.6	4275.3	4293.7	4315.6	4332.5	4315.6	4293.7	4275.3	4270.6	4275.3	4293.7
17°	4080.7	4085.8	4102.2	4124.2	4141.8	4124.2	4102.2	4085.8	4080.7	4085.8	4102.2
17.5°	3900.6	3905.7	3921.7	3939.7	3955.4	3939.7	3921.7	3905.7	3900.6	3905.7	3921.7
18°	3732.6	3736.9	3747.9	3765.1	3780.7	3765.1	3747.9	3736.9	3732.6	3736.9	3747.9
18.5°	3575.2	3576.3	3587.3	3608.4	3613.1	3608.4	3587.3	3576.3	3575.2	3576.3	3587.3
19°	3424.0	3427.1	3443.2	3463.2	3464.0	3463.2	3443.2	3427.1	3424.0	3427.1	3443.2
19.5°	3284.2	3292.8	3307.3	3324.5	3326.1	3324.5	3307.3	3292.8	3284.2	3292.8	3307.3
20°	3163.2	3165.2	3177.3	3194.9	3196.9	3194.9	3177.3	3165.2	3163.2	3165.2	3177.3
20.5°	3047.3	3050.4	3056.7	3072.4	3076.3	3072.4	3056.7	3050.4	3047.3	3050.4	3056.7
21°	2935.3	2940.4	2954.5	2963.9	2969.4	2963.9	2954.5	2940.4	2935.3	2940.4	2954.5

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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°	2658.9	2662.0	2679.2	2694.9	2709.8	2694.9	2679.2	2662.0	2658.9	2662.0	2679.2
23°	2582.5	2585.6	2596.6	2615.4	2632.2	2615.4	2596.6	2585.6	2582.5	2585.6	2596.6
23.5°	2510.4	2512.8	2523.4	2537.5	2556.3	2537.5	2523.4	2512.8	2510.4	2512.8	2523.4
24°	2442.3	2444.7	2454.1	2468.9	2481.5	2468.9	2454.1	2444.7	2442.3	2444.7	2454.1
24.5°	2379.3	2380.4	2387.9	2403.9	2414.1	2403.9	2387.9	2380.4	2379.3	2380.4	2387.9
25°	2319.0	2320.1	2326.0	2342.5	2351.9	2342.5	2326.0	2320.1	2319.0	2320.1	2326.0
25.5°	2261.0	2261.8	2268.1	2283.7	2292.3	2283.7	2268.1	2261.8	2261.0	2261.8	2268.1
26°	2205.4	2206.2	2212.1	2227.7	2236.3	2227.7	2212.1	2206.2	2205.4	2206.2	2212.1
26.5°	2151.0	2152.1	2157.6	2172.5	2181.1	2172.5	2157.6	2152.1	2151.0	2152.1	2157.6
27°	2100.1	2101.2	2105.9	2120.4	2130.2	2120.4	2105.9	2101.2	2100.1	2101.2	2105.9
27.5°	2051.9	2052.7	2057.0	2070.3	2079.7	2070.3	2057.0	2052.7	2051.9	2052.7	2057.0
28°	2005.3	2005.7	2010.4	2022.5	2031.1	2022.5	2010.4	2005.7	2005.3	2005.7	2010.4
28.5°	1960.3	1960.3	1965.0	1975.9	1984.9	1975.9	1965.0	1960.3	1960.3	1960.3	1965.0
29°	1916.8	1916.4	1920.3	1931.3	1939.5	1931.3	1920.3	1916.4	1916.8	1916.4	1920.3
29.5°	1873.3	1873.3	1878.0	1887.4	1895.7	1887.4	1878.0	1873.3	1873.3	1873.3	1878.0
30°	1832.2	1832.2	1836.9	1845.9	1854.5	1845.9	1836.9	1832.2	1832.2	1832.2	1836.9
30.5°	1792.7	1792.7	1797.0	1805.6	1813.8	1805.6	1797.0	1792.7	1792.7	1792.7	1797.0
31°	1755.1	1754.7	1759.8	1767.6	1775.8	1767.6	1759.8	1754.7	1755.1	1754.7	1759.8
31.5°	1719.1	1718.3	1722.6	1729.6	1737.8	1729.6	1722.6	1718.3	1719.1	1718.3	1722.6
32°	1684.6	1683.8	1687.7	1693.6	1699.5	1693.6	1687.7	1683.8	1684.6	1683.8	1687.7
32.5°	1650.1	1649.7	1651.3	1656.0	1659.9	1656.0	1651.3	1649.7	1650.1	1649.7	1651.3
33°	1614.5	1613.3	1613.3	1616.9	1620.4	1616.9	1613.3	1613.3	1614.5	1613.3	1613.3
33.5°	1576.5	1574.6	1575.0	1576.5	1581.6	1576.5	1575.0	1574.6	1576.5	1574.6	1575.0
34°	1536.2	1534.2	1534.2	1533.1	1538.5	1533.1	1534.2	1534.2	1536.2	1534.2	1534.2
34.5°	1494.3	1491.9	1492.7	1491.2	1495.9	1491.2	1492.7	1491.9	1494.3	1491.9	1492.7
35°	1450.4	1449.6	1449.3	1449.3	1451.6	1449.3	1449.3	1449.6	1450.4	1449.6	1449.3
35.5°	1405.8	1404.6	1404.2	1406.6	1406.6	1406.6	1404.2	1404.6	1405.8	1404.6	1404.2
36°	1360.0	1359.6	1359.6	1362.3	1360.4	1362.3	1359.6	1359.6	1360.0	1359.6	1359.6
36.5°	1312.2	1313.8	1313.8	1317.7	1314.5	1317.7	1313.8	1313.8	1312.2	1313.8	1313.8
37°	1264.0	1266.4	1267.9	1271.5	1267.6	1271.5	1267.9	1266.4	1264.0	1266.4	1267.9
37.5°	1216.7	1218.2	1223.3	1224.1	1221.0	1224.1	1223.3	1218.2	1216.7	1218.2	1223.3
38°	1168.9	1169.3	1175.5	1174.8	1174.4	1174.8	1175.5	1169.3	1168.9	1169.3	1175.5
38.5°	1120.3	1119.5	1127.0	1125.0	1126.6	1125.0	1127.0	1119.5	1120.3	1119.5	1127.0
39°	1069.4	1070.2	1078.4	1074.9	1079.2	1074.9	1078.4	1070.2	1069.4	1070.2	1078.4
39.5°	1017.7	1020.1	1029.5	1025.6	1030.3	1025.6	1029.5	1020.1	1017.7	1020.1	1029.5
40°	966.0	970.3	980.1	976.6	981.3	976.6	980.1	970.3	966.0	970.3	980.1
40.5°	916.7	921.0	930.0	929.2	932.4	929.2	930.0	921.0	916.7	921.0	930.0
41°	868.1	872.1	879.9	881.5	883.4	881.5	879.9	872.1	868.1	872.1	879.9
41.5°	820.4	823.9	829.8	834.9	835.6	834.9	829.8	823.9	820.4	823.9	829.8
42°	773.0	775.7	780.4	787.9	788.7	787.9	780.4	775.7	773.0	775.7	780.4
42.5°	726.8	728.7	731.9	741.7	743.6	741.7	731.9	728.7	726.8	728.7	731.9
43°	680.2	681.7	684.1	695.1	698.6	695.1	684.1	681.7	680.2	681.7	684.1
43.5°	634.4	634.8	637.9	648.9	653.9	648.9	637.9	634.8	634.4	634.8	637.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	500.1	501.2	506.7	518.5	524.7	518.5	506.7	501.2	500.1	501.2	506.7
45.5°	458.5	460.1	465.6	477.7	483.2	477.7	465.6	460.1	458.5	460.1	465.6
46°	419.4	419.8	425.7	437.0	443.3	437.0	425.7	419.8	419.4	419.8	425.7
46.5°	380.6	381.4	386.5	397.1	404.9	397.1	386.5	381.4	380.6	381.4	386.5
47°	343.0	343.8	349.7	359.9	367.7	359.9	349.7	343.8	343.0	343.8	349.7
47.5°	305.8	308.2	315.2	323.8	333.2	323.8	315.2	308.2	305.8	308.2	315.2
48°	272.2	273.7	281.9	290.6	298.8	290.6	281.9	273.7	272.2	273.7	281.9
48.5°	239.6	241.2	250.2	259.2	267.8	259.2	250.2	241.2	239.6	241.2	250.2
49°	209.5	211.1	220.5	229.5	239.6	229.5	220.5	211.1	209.5	211.1	220.5
49.5°	180.9	184.0	192.7	201.7	211.8	201.7	192.7	184.0	180.9	184.0	192.7
50°	154.7	158.2	167.2	175.4	184.0	175.4	167.2	158.2	154.7	158.2	167.2
50.5°	130.4	135.9	143.7	150.8	156.2	150.8	143.7	135.9	130.4	135.9	143.7
51°	109.3	114.7	121.8	127.7	130.8	127.7	121.8	114.7	109.3	114.7	121.8
51.5°	92.0	95.9	101.0	107.3	109.6	107.3	101.0	95.9	92.0	95.9	101.0
52°	76.4	79.9	83.8	89.3	90.5	89.3	83.8	79.9	76.4	79.9	83.8
52.5°	62.7	64.2	68.9	73.6	72.8	73.6	68.9	64.2	62.7	64.2	68.9
53°	48.9	51.7	54.8	58.7	58.0	58.7	54.8	51.7	48.9	51.7	54.8
53.5°	35.2	39.2	42.3	45.0	44.6	45.0	42.3	39.2	35.2	39.2	42.3
54°	25.5	27.0	30.5	34.1	36.8	34.1	30.5	27.0	25.5	27.0	30.5
54.5°	16.1	18.0	21.9	24.3	29.0	24.3	21.9	18.0	16.1	18.0	21.9
55°	9.8	11.4	14.9	16.8	21.1	16.8	14.9	11.4	9.8	11.4	14.9
55.5°	7.0	7.0	8.6	10.6	13.7	10.6	8.6	7.0	7.0	7.0	8.6
56°	5.1	4.7	5.5	6.7	7.0	6.7	5.5	4.7	5.1	4.7	5.5
56.5°	3.5	3.1	3.9	5.1	3.9	5.1	3.9	3.1	3.5	3.1	3.9
57°	2.0	2.7	2.7	3.5	2.3	3.5	2.7	2.7	2.0	2.7	2.7
57.5°	2.0	2.0	2.0	2.7	2.0	2.7	2.0	2.0	2.0	2.0	2.0
58°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
58.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
59°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
59.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
60°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
60.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
61°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
61.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
62°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
62.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
63°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
63.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
64°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
64.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
65°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
65.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
66°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8





TEST NUMBER: P776361

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRC-4000lm-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	0.8	0.8	0.8	0.8	0.4	0.8	0.8	0.8	0.8	0.8	0.8
68°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
68.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
69°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
69.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
70°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
70.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
71°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
71.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
72°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
72.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
73°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
73.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
74°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
74.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
75°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
75.5°	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4
76°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P776361

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRC-4000lm-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: P776361

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRC-4000lm-3000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	8864.7	8864.7	8864.7	8864.7	8864.7	8864.7
0.5°	8855.7	8869.4	8855.7	8854.1	8854.1	8854.1
1°	8829.8	8839.2	8829.8	8829.4	8830.6	8830.6
1.5°	8786.8	8792.6	8786.8	8788.7	8791.8	8792.2
2°	8732.3	8733.1	8732.3	8737.0	8741.3	8743.7
2.5°	8670.1	8667.7	8670.1	8677.9	8684.2	8685.7
3°	8605.1	8600.8	8605.1	8615.6	8622.7	8624.6
3.5°	8542.0	8536.5	8542.0	8552.6	8560.8	8563.6
4°	8482.5	8477.0	8482.5	8490.7	8498.5	8502.9
4.5°	8424.9	8420.6	8424.9	8430.4	8436.3	8440.2
5°	8367.4	8366.6	8367.4	8369.7	8373.2	8376.0
5.5°	8306.7	8309.8	8306.7	8305.1	8305.1	8306.7
6°	8240.1	8243.6	8240.1	8233.8	8231.5	8231.5
6.5°	8161.0	8165.7	8161.0	8154.3	8149.6	8147.7
7°	8067.8	8073.3	8067.8	8060.8	8056.4	8052.5
7.5°	7957.0	7960.1	7957.0	7951.9	7946.4	7944.8
8°	7828.9	7830.5	7828.9	7825.8	7822.7	7821.9
8.5°	7680.9	7678.2	7680.9	7681.7	7681.3	7681.3
9°	7518.0	7515.7	7518.0	7523.5	7527.0	7527.4
9.5°	7341.8	7335.5	7341.8	7349.6	7358.6	7359.8
10°	7150.3	7140.5	7150.3	7164.8	7177.7	7181.7
10.5°	6951.8	6937.7	6951.8	6969.4	6983.9	6992.1
11°	6749.3	6736.4	6749.3	6763.8	6782.6	6789.7
11.5°	6536.3	6526.1	6536.3	6557.5	6573.5	6579.8
12°	6318.2	6304.9	6318.2	6337.8	6357.4	6362.5
12.5°	6091.1	6079.3	6091.1	6109.9	6125.5	6134.2
13°	5865.5	5858.5	5865.5	5876.5	5891.0	5895.3
13.5°	5634.9	5631.4	5634.9	5638.8	5642.3	5639.2
14°	5401.5	5405.8	5401.5	5396.0	5391.7	5386.2
14.5°	5172.8	5183.0	5172.8	5158.7	5144.2	5135.6
15°	4944.5	4957.1	4944.5	4926.1	4906.5	4899.5
15.5°	4723.3	4738.6	4723.3	4702.9	4685.7	4676.3
16°	4514.6	4532.2	4514.6	4490.3	4475.0	4469.1
16.5°	4315.6	4332.5	4315.6	4293.7	4275.3	4270.6
17°	4124.2	4141.8	4124.2	4102.2	4085.8	4080.7
17.5°	3939.7	3955.4	3939.7	3921.7	3905.7	3900.6
18°	3765.1	3780.7	3765.1	3747.9	3736.9	3732.6
18.5°	3608.4	3613.1	3608.4	3587.3	3576.3	3575.2
19°	3463.2	3464.0	3463.2	3443.2	3427.1	3424.0
19.5°	3324.5	3326.1	3324.5	3307.3	3292.8	3284.2
20°	3194.9	3196.9	3194.9	3177.3	3165.2	3163.2
20.5°	3072.4	3076.3	3072.4	3056.7	3050.4	3047.3
21°	2963.9	2969.4	2963.9	2954.5	2940.4	2935.3



TEST NUMBER: P776361

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRC-4000lm-3000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2694.9	2709.8	2694.9	2679.2	2662.0	2658.9
23°	2615.4	2632.2	2615.4	2596.6	2585.6	2582.5
23.5°	2537.5	2556.3	2537.5	2523.4	2512.8	2510.4
24°	2468.9	2481.5	2468.9	2454.1	2444.7	2442.3
24.5°	2403.9	2414.1	2403.9	2387.9	2380.4	2379.3
25°	2342.5	2351.9	2342.5	2326.0	2320.1	2319.0
25.5°	2283.7	2292.3	2283.7	2268.1	2261.8	2261.0
26°	2227.7	2236.3	2227.7	2212.1	2206.2	2205.4
26.5°	2172.5	2181.1	2172.5	2157.6	2152.1	2151.0
27°	2120.4	2130.2	2120.4	2105.9	2101.2	2100.1
27.5°	2070.3	2079.7	2070.3	2057.0	2052.7	2051.9
28°	2022.5	2031.1	2022.5	2010.4	2005.7	2005.3
28.5°	1975.9	1984.9	1975.9	1965.0	1960.3	1960.3
29°	1931.3	1939.5	1931.3	1920.3	1916.4	1916.8
29.5°	1887.4	1895.7	1887.4	1878.0	1873.3	1873.3
30°	1845.9	1854.5	1845.9	1836.9	1832.2	1832.2
30.5°	1805.6	1813.8	1805.6	1797.0	1792.7	1792.7
31°	1767.6	1775.8	1767.6	1759.8	1754.7	1755.1
31.5°	1729.6	1737.8	1729.6	1722.6	1718.3	1719.1
32°	1693.6	1699.5	1693.6	1687.7	1683.8	1684.6
32.5°	1656.0	1659.9	1656.0	1651.3	1649.7	1650.1
33°	1616.9	1620.4	1616.9	1613.3	1613.3	1614.5
33.5°	1576.5	1581.6	1576.5	1575.0	1574.6	1576.5
34°	1533.1	1538.5	1533.1	1534.2	1534.2	1536.2
34.5°	1491.2	1495.9	1491.2	1492.7	1491.9	1494.3
35°	1449.3	1451.6	1449.3	1449.3	1449.6	1450.4
35.5°	1406.6	1406.6	1406.6	1404.2	1404.6	1405.8
36°	1362.3	1360.4	1362.3	1359.6	1359.6	1360.0
36.5°	1317.7	1314.5	1317.7	1313.8	1313.8	1312.2
37°	1271.5	1267.6	1271.5	1267.9	1266.4	1264.0
37.5°	1224.1	1221.0	1224.1	1223.3	1218.2	1216.7
38°	1174.8	1174.4	1174.8	1175.5	1169.3	1168.9
38.5°	1125.0	1126.6	1125.0	1127.0	1119.5	1120.3
39°	1074.9	1079.2	1074.9	1078.4	1070.2	1069.4
39.5°	1025.6	1030.3	1025.6	1029.5	1020.1	1017.7
40°	976.6	981.3	976.6	980.1	970.3	966.0
40.5°	929.2	932.4	929.2	930.0	921.0	916.7
41°	881.5	883.4	881.5	879.9	872.1	868.1
41.5°	834.9	835.6	834.9	829.8	823.9	820.4
42°	787.9	788.7	787.9	780.4	775.7	773.0
42.5°	741.7	743.6	741.7	731.9	728.7	726.8
43°	695.1	698.6	695.1	684.1	681.7	680.2
43.5°	648.9	653.9	648.9	637.9	634.8	634.4



TEST NUMBER: P776361

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRC-4000lm-3000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	518.5	524.7	518.5	506.7	501.2	500.1
45.5°	477.7	483.2	477.7	465.6	460.1	458.5
46°	437.0	443.3	437.0	425.7	419.8	419.4
46.5°	397.1	404.9	397.1	386.5	381.4	380.6
47°	359.9	367.7	359.9	349.7	343.8	343.0
47.5°	323.8	333.2	323.8	315.2	308.2	305.8
48°	290.6	298.8	290.6	281.9	273.7	272.2
48.5°	259.2	267.8	259.2	250.2	241.2	239.6
49°	229.5	239.6	229.5	220.5	211.1	209.5
49.5°	201.7	211.8	201.7	192.7	184.0	180.9
50°	175.4	184.0	175.4	167.2	158.2	154.7
50.5°	150.8	156.2	150.8	143.7	135.9	130.4
51°	127.7	130.8	127.7	121.8	114.7	109.3
51.5°	107.3	109.6	107.3	101.0	95.9	92.0
52°	89.3	90.5	89.3	83.8	79.9	76.4
52.5°	73.6	72.8	73.6	68.9	64.2	62.7
53°	58.7	58.0	58.7	54.8	51.7	48.9
53.5°	45.0	44.6	45.0	42.3	39.2	35.2
54°	34.1	36.8	34.1	30.5	27.0	25.5
54.5°	24.3	29.0	24.3	21.9	18.0	16.1
55°	16.8	21.1	16.8	14.9	11.4	9.8
55.5°	10.6	13.7	10.6	8.6	7.0	7.0
56°	6.7	7.0	6.7	5.5	4.7	5.1
56.5°	5.1	3.9	5.1	3.9	3.1	3.5
57°	3.5	2.3	3.5	2.7	2.7	2.0
57.5°	2.7	2.0	2.7	2.0	2.0	2.0
58°	2.0	2.0	2.0	2.0	2.0	2.0
58.5°	1.6	1.6	1.6	1.6	1.6	1.6
59°	1.6	1.6	1.6	1.6	1.6	1.6
59.5°	1.6	1.6	1.6	1.6	1.6	1.6
60°	1.6	1.6	1.6	1.6	1.6	1.6
60.5°	1.2	1.2	1.2	1.2	1.2	1.2
61°	1.2	1.2	1.2	1.2	1.2	1.2
61.5°	1.2	1.2	1.2	1.2	1.2	1.2
62°	1.2	1.2	1.2	1.2	1.2	1.2
62.5°	1.2	1.2	1.2	1.2	1.2	1.2
63°	1.2	1.2	1.2	1.2	1.2	1.2
63.5°	0.8	0.8	0.8	0.8	0.8	0.8
64°	0.8	0.8	0.8	0.8	0.8	0.8
64.5°	0.8	0.8	0.8	0.8	0.8	0.8
65°	0.8	0.8	0.8	0.8	0.8	0.8
65.5°	0.8	0.8	0.8	0.8	0.8	0.8
66°	0.8	0.8	0.8	0.8	0.8	0.8



TEST NUMBER: P776361  
 CATALOG NUMBER: HCDJBL3040CSD-HCD62TRC-4000lm-3000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	0.8	0.4	0.8	0.8	0.8	0.8
68°	0.4	0.4	0.4	0.4	0.4	0.4
68.5°	0.4	0.4	0.4	0.4	0.4	0.4
69°	0.4	0.4	0.4	0.4	0.4	0.4
69.5°	0.4	0.4	0.4	0.4	0.4	0.4
70°	0.4	0.4	0.4	0.4	0.4	0.4
70.5°	0.4	0.4	0.4	0.4	0.4	0.4
71°	0.4	0.4	0.4	0.4	0.4	0.4
71.5°	0.4	0.4	0.4	0.4	0.4	0.4
72°	0.4	0.4	0.4	0.4	0.4	0.4
72.5°	0.4	0.4	0.4	0.4	0.4	0.4
73°	0.4	0.4	0.4	0.4	0.4	0.4
73.5°	0.4	0.4	0.4	0.4	0.4	0.4
74°	0.4	0.4	0.4	0.4	0.4	0.4
74.5°	0.4	0.4	0.4	0.4	0.4	0.4
75°	0.4	0.4	0.4	0.4	0.4	0.4
75.5°	0.4	0.4	0.4	0.4	0.4	0.0
76°	0.0	0.0	0.0	0.0	0.0	0.0
76.5°	0.0	0.0	0.0	0.0	0.0	0.0
77°	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0
78°	0.0	0.0	0.0	0.0	0.0	0.0
78.5°	0.0	0.0	0.0	0.0	0.0	0.0
79°	0.0	0.0	0.0	0.0	0.0	0.0
79.5°	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0
80.5°	0.0	0.0	0.0	0.0	0.0	0.0
81°	0.0	0.0	0.0	0.0	0.0	0.0
81.5°	0.0	0.0	0.0	0.0	0.0	0.0
82°	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
83°	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
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: P776361

CATALOG NUMBER: HCDJBL3040CSD-HCD62TRC-4000lm-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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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°	2829.6	2840.9	2857.8	2868.0	2871.1	2868.0	2857.8	2840.9	2829.6	2840.9	2857.8
22°	2742.7	2748.9	2765.8	2779.5	2788.9	2779.5	2765.8	2748.9	2742.7	2748.9	2765.8



44°	587.8	588.9	592.5	603.4	610.1	603.4	592.5	588.9	587.8	588.9	592.5
44.5°	543.5	544.7	548.2	560.7	567.0	560.7	548.2	544.7	543.5	544.7	548.2



66.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
67°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8



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°	2868.0	2871.1	2868.0	2857.8	2840.9	2829.6
22°	2779.5	2788.9	2779.5	2765.8	2748.9	2742.7



44°	603.4	610.1	603.4	592.5	588.9	587.8
44.5°	560.7	567.0	560.7	548.2	544.7	543.5

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66.5°	0.8	0.8	0.8	0.8	0.8	0.8
67°	0.8	0.8	0.8	0.8	0.8	0.8

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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)