

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: P776157

Luminaire Tested: HCDJBL51525CSD-HCD82TRH-2500lm-3500K

Issue Date: 2/13/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P776157  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2312156B063-HCD82TRH)  
Test Lab:  
Issue Date: 2/13/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCDJBL51525CSD-HCD82TRH-2500lm-3500K  
Description: 8 INCH ROUND NARROW HAZE TRIM  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

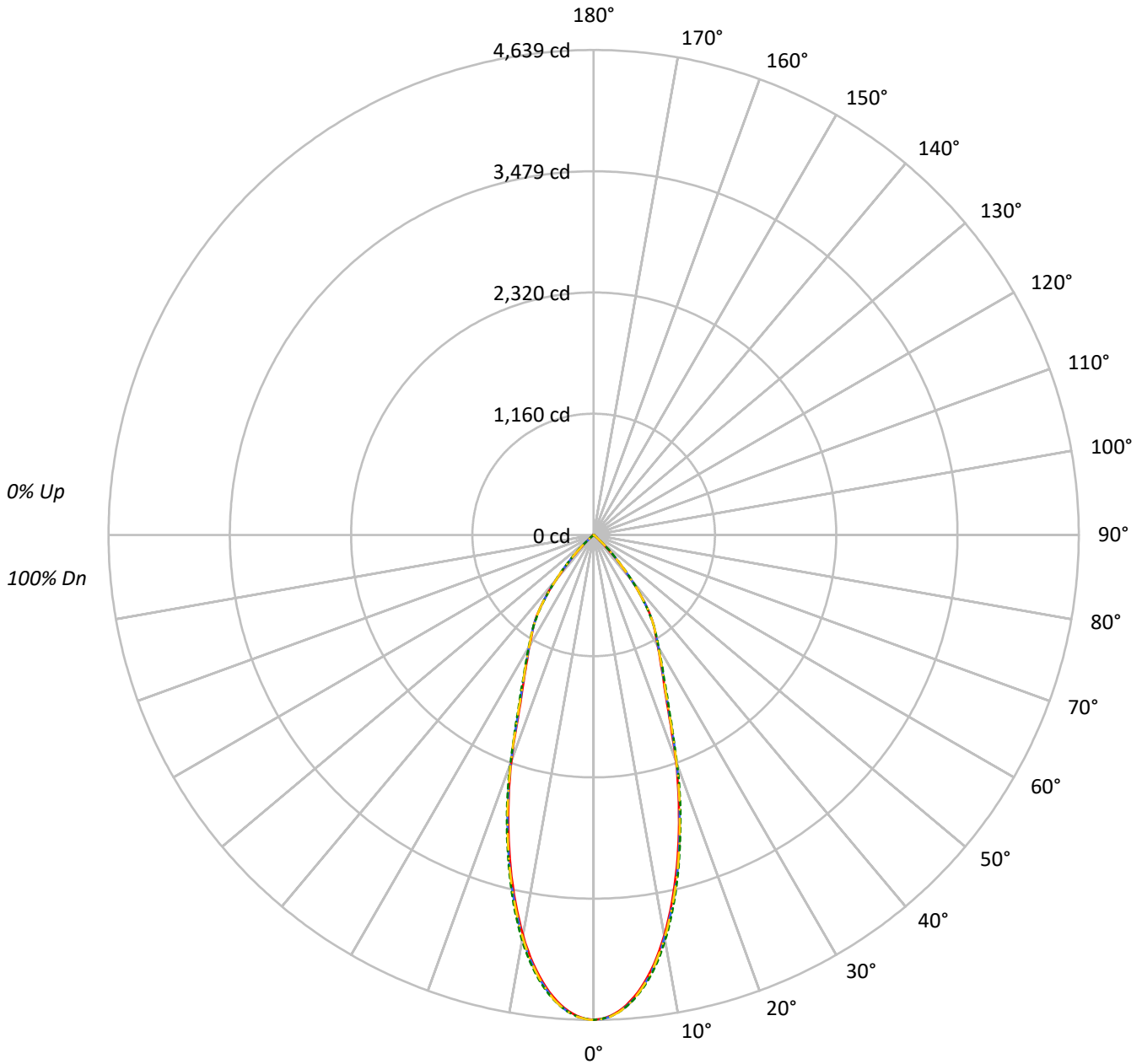
Lumens per Lamp: N/A  
Luminaire Lumens: 2794.3 lumens  
Efficiency: N/A  
Efficacy: 111.8 lumens/watt  
Spacing Criteria (0/90/45): 0.64 / 0.65 / 0.67  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

Input Watts (W): 25  
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



TEST NUMBER: P776157  
CATALOG NUMBER: HCDJBLS1525CSD-HCD82TRH-2500lm-3500K

### 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	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94								
2	108	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88								
3	103	97	93	89	101	96	92	88	93	90	87	91	88	85	89	86	84	82								
4	98	91	86	82	97	90	85	82	88	84	81	86	82	80	84	81	79	77								
5	94	86	80	76	92	85	80	76	83	79	75	82	78	75	80	77	74	72								
6	89	81	75	71	88	80	75	71	79	74	70	77	73	70	76	72	69	68								
7	85	76	71	67	84	76	70	67	75	70	66	73	69	66	72	68	65	64								
8	81	72	67	63	80	72	66	63	71	66	62	70	65	62	69	65	62	61								
9	78	69	63	59	77	68	63	59	67	62	59	66	62	59	66	62	59	57								
10	74	65	60	56	73	65	60	56	64	59	56	63	59	56	63	58	56	54								

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

	0°	90°	180°	270°
0°	141633	141633	141633	141633
5°	135956	136578	135956	136578
10°	120555	122061	120555	122061
15°	98526	100119	98526	100119
20°	74746	75681	74746	75681
25°	53895	55354	53895	55354
30°	43235	43897	43235	43897
35°	35388	35090	35388	35090
40°	22199	22669	22199	22669
45°	8458	9810	8458	9810
50°	1263	1776	1263	1776
55°	266	282	266	282
60°	171	171	171	171
65°	108	108	108	108
70°	71	89	71	89
75°	59	59	59	59
80°	53	53	53	53
85°	0	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 9810 cd/sqm



TEST NUMBER: P776157

CATALOG NUMBER: HCDJBL51525CSD-HCD82TRH-2500lm-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	407.4	14.6
10°-20°	864.5	30.9
20°-30°	759.2	27.2
30°-40°	573.3	20.5
40°-50°	180.7	6.5
50°-60°	6.9	0.2
60°-70°	1.7	0.1
70°-80°	0.6	0.0
80°-90°	0.1	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°	2031.1	72.7
0°-40°	2604.4	93.2
0°-60°	2791.9	99.9
0°-90°	2794.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2794.3	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	4639	4639	4639	4639	4639	
5°	4436	4456	4436	4456	4436	406
15°	3117	3168	3117	3168	3117	857
25°	1600	1643	1600	1643	1600	752
35°	950	942	950	942	950	572
45°	196	227	196	227	196	171
55°	5	5	5	5	5	6
65°	2	2	2	2	2	2
75°	0	0	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P776157

CATALOG NUMBER: HCDJBL51525CSD-HCD82TRH-2500lm-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	4639.1	4639.1	4639.1	4639.1	4639.1	4639.1	4639.1	4639.1	4639.1	4639.1	4639.1
0.5°	4634.8	4635.8	4638.3	4639.3	4634.8	4639.3	4638.3	4635.8	4634.8	4635.8	4638.3
1°	4628.5	4629.8	4632.3	4634.1	4629.5	4634.1	4632.3	4629.8	4628.5	4629.8	4632.3
1.5°	4618.0	4619.5	4622.8	4624.8	4620.3	4624.8	4622.8	4619.5	4618.0	4619.5	4622.8
2°	4604.0	4605.2	4609.5	4612.0	4607.7	4612.0	4609.5	4605.2	4604.0	4605.2	4609.5
2.5°	4584.6	4587.2	4592.2	4595.2	4591.2	4595.2	4592.2	4587.2	4584.6	4587.2	4592.2
3°	4562.8	4565.3	4571.4	4575.1	4571.4	4575.1	4571.4	4565.3	4562.8	4565.3	4571.4
3.5°	4536.7	4539.8	4546.5	4551.3	4548.5	4551.3	4546.5	4539.8	4536.7	4539.8	4546.5
4°	4506.4	4510.2	4518.2	4524.0	4521.4	4524.0	4518.2	4510.2	4506.4	4510.2	4518.2
4.5°	4473.0	4476.5	4486.1	4493.1	4490.6	4493.1	4486.1	4476.5	4473.0	4476.5	4486.1
5°	4436.2	4439.9	4450.5	4458.7	4456.5	4458.7	4450.5	4439.9	4436.2	4439.9	4450.5
5.5°	4395.5	4399.6	4410.6	4420.1	4419.1	4420.1	4410.6	4399.6	4395.5	4399.6	4410.6
6°	4351.1	4355.4	4367.5	4378.5	4378.7	4378.5	4367.5	4355.4	4351.1	4355.4	4367.5
6.5°	4304.8	4308.3	4321.6	4333.8	4334.6	4333.8	4321.6	4308.3	4304.8	4308.3	4321.6
7°	4254.1	4258.1	4271.9	4285.7	4288.4	4285.7	4271.9	4258.1	4254.1	4258.1	4271.9
7.5°	4200.9	4204.2	4218.5	4233.0	4237.0	4233.0	4218.5	4204.2	4200.9	4204.2	4218.5
8°	4143.7	4147.5	4162.5	4178.3	4183.4	4178.3	4162.5	4147.5	4143.7	4147.5	4162.5
8.5°	4084.5	4087.8	4102.9	4120.7	4126.4	4120.7	4102.9	4087.8	4084.5	4087.8	4102.9
9°	4021.1	4025.4	4041.2	4060.2	4066.7	4060.2	4041.2	4025.4	4021.1	4025.4	4041.2
9.5°	3956.4	3960.9	3976.0	3996.0	4003.5	3996.0	3976.0	3960.9	3956.4	3960.9	3976.0
10°	3888.7	3893.7	3909.2	3931.1	3937.3	3931.1	3909.2	3893.7	3888.7	3893.7	3909.2
10.5°	3818.7	3823.7	3839.8	3862.8	3868.9	3862.8	3839.8	3823.7	3818.7	3823.7	3839.8
11°	3744.0	3752.0	3768.3	3792.4	3797.6	3792.4	3768.3	3752.0	3744.0	3752.0	3768.3
11.5°	3672.0	3678.5	3694.8	3718.1	3724.4	3718.1	3694.8	3678.5	3672.0	3678.5	3694.8
12°	3595.5	3603.3	3620.1	3643.6	3649.4	3643.6	3620.1	3603.3	3595.5	3603.3	3620.1
12.5°	3518.7	3526.8	3543.8	3566.1	3571.2	3566.1	3543.8	3526.8	3518.7	3526.8	3543.8
13°	3440.0	3449.0	3467.3	3489.6	3493.7	3489.6	3467.3	3449.0	3440.0	3449.0	3467.3
13.5°	3361.2	3370.3	3389.3	3408.9	3414.7	3408.9	3389.3	3370.3	3361.2	3370.3	3389.3
14°	3280.5	3290.3	3309.6	3327.4	3333.6	3327.4	3309.6	3290.3	3280.5	3290.3	3309.6
14.5°	3199.0	3209.0	3228.6	3245.4	3250.6	3245.4	3228.6	3209.0	3199.0	3209.0	3228.6
15°	3117.2	3127.5	3146.8	3163.9	3167.6	3163.9	3146.8	3127.5	3117.2	3127.5	3146.8
15.5°	3035.2	3045.2	3064.5	3080.8	3086.6	3080.8	3064.5	3045.2	3035.2	3045.2	3064.5
16°	2953.7	2962.5	2981.8	2998.1	3004.8	2998.1	2981.8	2962.5	2953.7	2962.5	2981.8
16.5°	2873.2	2880.7	2900.0	2915.8	2923.1	2915.8	2900.0	2880.7	2873.2	2880.7	2900.0
17°	2790.4	2798.7	2816.2	2834.8	2840.3	2834.8	2816.2	2798.7	2790.4	2798.7	2816.2
17.5°	2707.9	2716.2	2733.7	2752.5	2759.1	2752.5	2733.7	2716.2	2707.9	2716.2	2733.7
18°	2626.9	2633.2	2652.0	2670.3	2676.8	2670.3	2652.0	2633.2	2626.9	2633.2	2652.0
18.5°	2545.9	2552.2	2569.0	2586.8	2593.8	2586.8	2569.0	2552.2	2545.9	2552.2	2569.0
19°	2464.6	2470.6	2487.2	2502.2	2510.3	2502.2	2487.2	2470.6	2464.6	2470.6	2487.2
19.5°	2383.4	2389.9	2403.4	2416.2	2422.5	2416.2	2403.4	2389.9	2383.4	2389.9	2403.4
20°	2300.6	2306.1	2316.9	2329.2	2329.4	2329.2	2316.9	2306.1	2300.6	2306.1	2316.9
20.5°	2216.8	2220.3	2231.9	2243.4	2241.9	2243.4	2231.9	2220.3	2216.8	2220.3	2231.9
21°	2131.3	2137.1	2148.1	2159.4	2159.1	2159.4	2148.1	2137.1	2131.3	2137.1	2148.1



TEST NUMBER: P776157

CATALOG NUMBER: HCDJBL51525CSD-HCD82TRH-2500lm-3500K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	1893.5	1900.6	1910.6	1928.9	1936.9	1928.9	1910.6	1900.6	1893.5	1900.6	1910.6
23°	1825.1	1830.3	1842.4	1857.9	1867.0	1857.9	1842.4	1830.3	1825.1	1830.3	1842.4
23.5°	1757.4	1770.4	1779.9	1792.7	1801.5	1792.7	1779.9	1770.4	1757.4	1770.4	1779.9
24°	1704.2	1709.2	1722.5	1736.3	1747.8	1736.3	1722.5	1709.2	1704.2	1709.2	1722.5
24.5°	1649.3	1655.3	1668.3	1682.1	1695.9	1682.1	1668.3	1655.3	1649.3	1655.3	1668.3
25°	1599.9	1606.1	1618.4	1630.2	1643.2	1630.2	1618.4	1606.1	1599.9	1606.1	1618.4
25.5°	1557.5	1560.2	1570.3	1580.3	1591.6	1580.3	1570.3	1560.2	1557.5	1560.2	1570.3
26°	1515.6	1518.1	1524.6	1534.2	1540.9	1534.2	1524.6	1518.1	1515.6	1518.1	1524.6
26.5°	1472.2	1476.0	1483.7	1492.0	1496.3	1492.0	1483.7	1476.0	1472.2	1476.0	1483.7
27°	1430.3	1434.8	1444.9	1453.9	1458.2	1453.9	1444.9	1434.8	1430.3	1434.8	1444.9
27.5°	1391.9	1396.2	1406.0	1415.5	1421.5	1415.5	1406.0	1396.2	1391.9	1396.2	1406.0
28°	1356.6	1360.1	1368.1	1376.9	1381.9	1376.9	1368.1	1360.1	1356.6	1360.1	1368.1
28.5°	1323.0	1326.0	1332.8	1340.0	1345.5	1340.0	1332.8	1326.0	1323.0	1326.0	1332.8
29°	1290.4	1292.9	1299.4	1306.4	1309.9	1306.4	1299.4	1292.9	1290.4	1292.9	1299.4
29.5°	1257.8	1260.5	1267.0	1273.6	1276.8	1273.6	1267.0	1260.5	1257.8	1260.5	1267.0
30°	1226.4	1228.9	1235.2	1241.5	1245.2	1241.5	1235.2	1228.9	1226.4	1228.9	1235.2
30.5°	1196.1	1198.1	1204.6	1210.9	1214.6	1210.9	1204.6	1198.1	1196.1	1198.1	1204.6
31°	1166.2	1169.5	1175.3	1181.8	1185.0	1181.8	1175.3	1169.5	1166.2	1169.5	1175.3
31.5°	1138.9	1140.9	1147.2	1153.2	1157.2	1153.2	1147.2	1140.9	1138.9	1140.9	1147.2
32°	1111.8	1114.3	1120.1	1125.8	1129.4	1125.8	1120.1	1114.3	1111.8	1114.3	1120.1
32.5°	1086.7	1089.2	1094.5	1098.5	1100.5	1098.5	1094.5	1089.2	1086.7	1089.2	1094.5
33°	1063.4	1064.7	1067.9	1069.9	1069.7	1069.9	1067.9	1064.7	1063.4	1064.7	1067.9
33.5°	1039.3	1039.1	1039.3	1039.3	1038.8	1039.3	1039.3	1039.1	1039.3	1039.1	1039.3
34°	1012.5	1010.7	1008.7	1011.5	1006.0	1011.5	1008.7	1010.7	1012.5	1010.7	1008.7
34.5°	981.6	981.1	980.6	978.6	973.6	978.6	980.6	981.1	981.6	981.1	980.6
35°	949.5	947.3	947.3	945.3	941.5	945.3	947.3	947.3	949.5	947.3	947.3
35.5°	916.4	913.7	913.7	910.2	907.9	910.2	913.7	913.7	916.4	913.7	913.7
36°	880.1	878.6	879.3	873.5	873.0	873.5	879.3	878.6	880.1	878.6	879.3
36.5°	842.4	842.2	842.2	836.7	835.7	836.7	842.2	842.2	842.4	842.2	842.2
37°	803.6	803.6	803.8	799.6	797.8	799.6	803.8	803.6	803.6	803.6	803.8
37.5°	764.7	763.9	767.2	761.9	760.7	761.9	767.2	763.9	764.7	763.9	767.2
38°	725.1	723.3	724.3	722.8	723.1	722.8	724.3	723.3	725.1	723.3	724.3
38.5°	683.7	682.2	681.7	683.9	684.7	683.9	681.7	682.2	683.7	682.2	681.7
39°	641.8	641.0	639.8	644.8	645.1	644.8	639.8	641.0	641.8	641.0	639.8
39.5°	599.2	599.2	599.2	605.4	606.9	605.4	599.2	599.2	599.2	599.2	599.2
40°	557.0	558.3	560.8	566.3	568.8	566.3	560.8	558.3	557.0	558.3	560.8
40.5°	515.6	517.2	522.7	526.9	531.4	526.9	522.7	517.2	515.6	517.2	522.7
41°	474.8	477.0	484.3	488.8	493.6	488.8	484.3	477.0	474.8	477.0	484.3
41.5°	433.9	437.6	446.2	451.2	456.7	451.2	446.2	437.6	433.9	437.6	446.2
42°	394.8	399.0	409.1	414.8	420.1	414.8	409.1	399.0	394.8	399.0	409.1
42.5°	356.9	361.7	372.9	380.5	385.2	380.5	372.9	361.7	356.9	361.7	372.9
43°	320.0	326.8	338.3	346.9	350.9	346.9	338.3	326.8	320.0	326.8	338.3
43.5°	285.4	293.4	304.7	314.0	317.5	314.0	304.7	293.4	285.4	293.4	304.7



TEST NUMBER: P776157

CATALOG NUMBER: HCDJBLS1525CSD-HCD82TRH-2500lm-3500K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	195.9	200.1	210.4	222.7	227.2	222.7	210.4	200.1	195.9	200.1	210.4
45.5°	168.8	173.1	183.3	195.6	200.6	195.6	183.3	173.1	168.8	173.1	183.3
46°	142.7	148.0	158.5	171.0	179.1	171.0	158.5	148.0	142.7	148.0	158.5
46.5°	120.6	124.6	136.7	148.5	157.5	148.5	136.7	124.6	120.6	124.6	136.7
47°	101.1	105.6	116.1	126.9	135.9	126.9	116.1	105.6	101.1	105.6	116.1
47.5°	83.8	87.5	96.6	105.8	114.4	105.8	96.6	87.5	83.8	87.5	96.6
48°	69.5	71.7	79.3	86.8	92.8	86.8	79.3	71.7	69.5	71.7	79.3
48.5°	56.2	58.9	64.0	70.7	76.0	70.7	64.0	58.9	56.2	58.9	64.0
49°	43.9	46.9	52.2	56.4	60.9	56.4	52.2	46.9	43.9	46.9	52.2
49.5°	34.4	36.6	41.1	45.1	48.4	45.1	41.1	36.6	34.4	36.6	41.1
50°	26.6	28.1	31.4	34.9	37.4	34.9	31.4	28.1	26.6	28.1	31.4
50.5°	19.8	20.1	23.8	27.3	29.1	27.3	23.8	20.1	19.8	20.1	23.8
51°	13.8	14.8	17.8	21.6	24.6	21.6	17.8	14.8	13.8	14.8	17.8
51.5°	9.0	11.0	13.8	16.3	20.3	16.3	13.8	11.0	9.0	11.0	13.8
52°	7.8	8.3	10.3	12.5	15.8	12.5	10.3	8.3	7.8	8.3	10.3
52.5°	7.0	7.3	7.5	9.5	11.5	9.5	7.5	7.3	7.0	7.3	7.5
53°	6.5	6.8	6.8	7.3	7.3	7.3	6.8	6.8	6.5	6.8	6.8
53.5°	6.0	6.3	6.5	6.5	6.3	6.5	6.5	6.3	6.0	6.3	6.5
54°	5.8	5.8	6.0	6.0	5.8	6.0	6.0	5.8	5.8	5.8	6.0
54.5°	5.3	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.3	5.5	5.5
55°	5.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.0	5.3	5.3
55.5°	4.8	4.8	5.0	5.0	5.0	5.0	5.0	4.8	4.8	4.8	5.0
56°	4.5	4.5	4.8	4.8	4.8	4.8	4.8	4.5	4.5	4.5	4.8
56.5°	4.3	4.3	4.5	4.5	4.3	4.5	4.5	4.3	4.3	4.3	4.5
57°	4.0	4.0	4.3	4.3	4.0	4.3	4.3	4.0	4.0	4.0	4.3
57.5°	3.8	3.8	4.0	4.0	4.0	4.0	4.0	3.8	3.8	3.8	4.0
58°	3.5	3.5	3.8	3.8	3.8	3.8	3.8	3.5	3.5	3.5	3.8
58.5°	3.3	3.3	3.5	3.5	3.5	3.5	3.5	3.3	3.3	3.3	3.5
59°	3.0	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.0	3.3	3.3
59.5°	2.8	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.8	3.0	3.0
60°	2.8	2.8	3.0	3.0	2.8	3.0	3.0	2.8	2.8	2.8	3.0
60.5°	2.5	2.5	2.8	2.8	2.8	2.8	2.8	2.5	2.5	2.5	2.8
61°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
61.5°	2.3	2.3	2.5	2.5	2.5	2.5	2.5	2.3	2.3	2.3	2.5
62°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
62.5°	2.0	2.0	2.3	2.3	2.3	2.3	2.3	2.0	2.0	2.0	2.3
63°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
63.5°	1.8	1.8	2.0	2.0	2.0	2.0	2.0	1.8	1.8	1.8	2.0
64°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
64.5°	1.5	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.5	1.8	1.8
65°	1.5	1.5	1.8	1.8	1.5	1.8	1.8	1.5	1.5	1.5	1.8
65.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
66°	1.3	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.3	1.5	1.5





TEST NUMBER: P776157

CATALOG NUMBER: HCDJBLS1525CSD-HCD82TRH-2500lm-3500K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
68°	1.0	1.0	1.3	1.3	1.3	1.3	1.3	1.0	1.0	1.0	1.3
68.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
69°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
69.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
70°	0.8	0.8	1.0	1.0	1.0	1.0	1.0	0.8	0.8	0.8	1.0
70.5°	0.8	0.8	0.8	1.0	0.8	1.0	0.8	0.8	0.8	0.8	0.8
71°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
71.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
72°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
72.5°	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.5	0.8	0.8
73°	0.5	0.5	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.8
73.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
75°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
75.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
76°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
76.5°	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.5
77°	0.3	0.3	0.3	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3
77.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
78°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
78.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
79°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
79.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
80°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
80.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
81°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
81.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
82°	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3
82.5°	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.3
83°	0.0	0.0	0.0	0.3	0.3	0.3	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: P776157

CATALOG NUMBER: HCDJBL51525CSD-HCD82TRH-2500lm-3500K

**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: P776157

CATALOG NUMBER: HCDJBLS1525CSD-HCD82TRH-2500lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	4639.1	4639.1	4639.1	4639.1	4639.1	4639.1
0.5°	4639.3	4634.8	4639.3	4638.3	4635.8	4634.8
1°	4634.1	4629.5	4634.1	4632.3	4629.8	4628.5
1.5°	4624.8	4620.3	4624.8	4622.8	4619.5	4618.0
2°	4612.0	4607.7	4612.0	4609.5	4605.2	4604.0
2.5°	4595.2	4591.2	4595.2	4592.2	4587.2	4584.6
3°	4575.1	4571.4	4575.1	4571.4	4565.3	4562.8
3.5°	4551.3	4548.5	4551.3	4546.5	4539.8	4536.7
4°	4524.0	4521.4	4524.0	4518.2	4510.2	4506.4
4.5°	4493.1	4490.6	4493.1	4486.1	4476.5	4473.0
5°	4458.7	4456.5	4458.7	4450.5	4439.9	4436.2
5.5°	4420.1	4419.1	4420.1	4410.6	4399.6	4395.5
6°	4378.5	4378.7	4378.5	4367.5	4355.4	4351.1
6.5°	4333.8	4334.6	4333.8	4321.6	4308.3	4304.8
7°	4285.7	4288.4	4285.7	4271.9	4258.1	4254.1
7.5°	4233.0	4237.0	4233.0	4218.5	4204.2	4200.9
8°	4178.3	4183.4	4178.3	4162.5	4147.5	4143.7
8.5°	4120.7	4126.4	4120.7	4102.9	4087.8	4084.5
9°	4060.2	4066.7	4060.2	4041.2	4025.4	4021.1
9.5°	3996.0	4003.5	3996.0	3976.0	3960.9	3956.4
10°	3931.1	3937.3	3931.1	3909.2	3893.7	3888.7
10.5°	3862.8	3868.9	3862.8	3839.8	3823.7	3818.7
11°	3792.4	3797.6	3792.4	3768.3	3752.0	3744.0
11.5°	3718.1	3724.4	3718.1	3694.8	3678.5	3672.0
12°	3643.6	3649.4	3643.6	3620.1	3603.3	3595.5
12.5°	3566.1	3571.2	3566.1	3543.8	3526.8	3518.7
13°	3489.6	3493.7	3489.6	3467.3	3449.0	3440.0
13.5°	3408.9	3414.7	3408.9	3389.3	3370.3	3361.2
14°	3327.4	3333.6	3327.4	3309.6	3290.3	3280.5
14.5°	3245.4	3250.6	3245.4	3228.6	3209.0	3199.0
15°	3163.9	3167.6	3163.9	3146.8	3127.5	3117.2
15.5°	3080.8	3086.6	3080.8	3064.5	3045.2	3035.2
16°	2998.1	3004.8	2998.1	2981.8	2962.5	2953.7
16.5°	2915.8	2923.1	2915.8	2900.0	2880.7	2873.2
17°	2834.8	2840.3	2834.8	2816.2	2798.7	2790.4
17.5°	2752.5	2759.1	2752.5	2733.7	2716.2	2707.9
18°	2670.3	2676.8	2670.3	2652.0	2633.2	2626.9
18.5°	2586.8	2593.8	2586.8	2569.0	2552.2	2545.9
19°	2502.2	2510.3	2502.2	2487.2	2470.6	2464.6
19.5°	2416.2	2422.5	2416.2	2403.4	2389.9	2383.4
20°	2329.2	2329.4	2329.2	2316.9	2306.1	2300.6
20.5°	2243.4	2241.9	2243.4	2231.9	2220.3	2216.8
21°	2159.4	2159.1	2159.4	2148.1	2137.1	2131.3

TEST NUMBER: P776157

CATALOG NUMBER: HCDJBLS1525CSD-HCD82TRH-2500lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1928.9	1936.9	1928.9	1910.6	1900.6	1893.5
23°	1857.9	1867.0	1857.9	1842.4	1830.3	1825.1
23.5°	1792.7	1801.5	1792.7	1779.9	1770.4	1757.4
24°	1736.3	1747.8	1736.3	1722.5	1709.2	1704.2
24.5°	1682.1	1695.9	1682.1	1668.3	1655.3	1649.3
25°	1630.2	1643.2	1630.2	1618.4	1606.1	1599.9
25.5°	1580.3	1591.6	1580.3	1570.3	1560.2	1557.5
26°	1534.2	1540.9	1534.2	1524.6	1518.1	1515.6
26.5°	1492.0	1496.3	1492.0	1483.7	1476.0	1472.2
27°	1453.9	1458.2	1453.9	1444.9	1434.8	1430.3
27.5°	1415.5	1421.5	1415.5	1406.0	1396.2	1391.9
28°	1376.9	1381.9	1376.9	1368.1	1360.1	1356.6
28.5°	1340.0	1345.5	1340.0	1332.8	1326.0	1323.0
29°	1306.4	1309.9	1306.4	1299.4	1292.9	1290.4
29.5°	1273.6	1276.8	1273.6	1267.0	1260.5	1257.8
30°	1241.5	1245.2	1241.5	1235.2	1228.9	1226.4
30.5°	1210.9	1214.6	1210.9	1204.6	1198.1	1196.1
31°	1181.8	1185.0	1181.8	1175.3	1169.5	1166.2
31.5°	1153.2	1157.2	1153.2	1147.2	1140.9	1138.9
32°	1125.8	1129.4	1125.8	1120.1	1114.3	1111.8
32.5°	1098.5	1100.5	1098.5	1094.5	1089.2	1086.7
33°	1069.9	1069.7	1069.9	1067.9	1064.7	1063.4
33.5°	1039.3	1038.8	1039.3	1039.3	1039.1	1039.3
34°	1011.5	1006.0	1011.5	1008.7	1010.7	1012.5
34.5°	978.6	973.6	978.6	980.6	981.1	981.6
35°	945.3	941.5	945.3	947.3	947.3	949.5
35.5°	910.2	907.9	910.2	913.7	913.7	916.4
36°	873.5	873.0	873.5	879.3	878.6	880.1
36.5°	836.7	835.7	836.7	842.2	842.2	842.4
37°	799.6	797.8	799.6	803.8	803.6	803.6
37.5°	761.9	760.7	761.9	767.2	763.9	764.7
38°	722.8	723.1	722.8	724.3	723.3	725.1
38.5°	683.9	684.7	683.9	681.7	682.2	683.7
39°	644.8	645.1	644.8	639.8	641.0	641.8
39.5°	605.4	606.9	605.4	599.2	599.2	599.2
40°	566.3	568.8	566.3	560.8	558.3	557.0
40.5°	526.9	531.4	526.9	522.7	517.2	515.6
41°	488.8	493.6	488.8	484.3	477.0	474.8
41.5°	451.2	456.7	451.2	446.2	437.6	433.9
42°	414.8	420.1	414.8	409.1	399.0	394.8
42.5°	380.5	385.2	380.5	372.9	361.7	356.9
43°	346.9	350.9	346.9	338.3	326.8	320.0
43.5°	314.0	317.5	314.0	304.7	293.4	285.4



TEST NUMBER: P776157

CATALOG NUMBER: HCDJBL51525CSD-HCD82TRH-2500lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	222.7	227.2	222.7	210.4	200.1	195.9
45.5°	195.6	200.6	195.6	183.3	173.1	168.8
46°	171.0	179.1	171.0	158.5	148.0	142.7
46.5°	148.5	157.5	148.5	136.7	124.6	120.6
47°	126.9	135.9	126.9	116.1	105.6	101.1
47.5°	105.8	114.4	105.8	96.6	87.5	83.8
48°	86.8	92.8	86.8	79.3	71.7	69.5
48.5°	70.7	76.0	70.7	64.0	58.9	56.2
49°	56.4	60.9	56.4	52.2	46.9	43.9
49.5°	45.1	48.4	45.1	41.1	36.6	34.4
50°	34.9	37.4	34.9	31.4	28.1	26.6
50.5°	27.3	29.1	27.3	23.8	20.1	19.8
51°	21.6	24.6	21.6	17.8	14.8	13.8
51.5°	16.3	20.3	16.3	13.8	11.0	9.0
52°	12.5	15.8	12.5	10.3	8.3	7.8
52.5°	9.5	11.5	9.5	7.5	7.3	7.0
53°	7.3	7.3	7.3	6.8	6.8	6.5
53.5°	6.5	6.3	6.5	6.5	6.3	6.0
54°	6.0	5.8	6.0	6.0	5.8	5.8
54.5°	5.5	5.5	5.5	5.5	5.5	5.3
55°	5.3	5.3	5.3	5.3	5.3	5.0
55.5°	5.0	5.0	5.0	5.0	4.8	4.8
56°	4.8	4.8	4.8	4.8	4.5	4.5
56.5°	4.5	4.3	4.5	4.5	4.3	4.3
57°	4.3	4.0	4.3	4.3	4.0	4.0
57.5°	4.0	4.0	4.0	4.0	3.8	3.8
58°	3.8	3.8	3.8	3.8	3.5	3.5
58.5°	3.5	3.5	3.5	3.5	3.3	3.3
59°	3.3	3.3	3.3	3.3	3.3	3.0
59.5°	3.0	3.0	3.0	3.0	3.0	2.8
60°	3.0	2.8	3.0	3.0	2.8	2.8
60.5°	2.8	2.8	2.8	2.8	2.5	2.5
61°	2.5	2.5	2.5	2.5	2.5	2.5
61.5°	2.5	2.5	2.5	2.5	2.3	2.3
62°	2.3	2.3	2.3	2.3	2.3	2.3
62.5°	2.3	2.3	2.3	2.3	2.0	2.0
63°	2.0	2.0	2.0	2.0	2.0	2.0
63.5°	2.0	2.0	2.0	2.0	1.8	1.8
64°	1.8	1.8	1.8	1.8	1.8	1.8
64.5°	1.8	1.8	1.8	1.8	1.8	1.5
65°	1.8	1.5	1.8	1.8	1.5	1.5
65.5°	1.5	1.5	1.5	1.5	1.5	1.5
66°	1.5	1.5	1.5	1.5	1.5	1.3



TEST NUMBER: P776157

CATALOG NUMBER: HCDJBLS1525CSD-HCD82TRH-2500lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	1.3	1.3	1.3	1.3	1.3	1.3
68°	1.3	1.3	1.3	1.3	1.0	1.0
68.5°	1.0	1.0	1.0	1.0	1.0	1.0
69°	1.0	1.0	1.0	1.0	1.0	1.0
69.5°	1.0	1.0	1.0	1.0	1.0	1.0
70°	1.0	1.0	1.0	1.0	0.8	0.8
70.5°	1.0	0.8	1.0	0.8	0.8	0.8
71°	0.8	0.8	0.8	0.8	0.8	0.8
71.5°	0.8	0.8	0.8	0.8	0.8	0.8
72°	0.8	0.8	0.8	0.8	0.8	0.8
72.5°	0.8	0.8	0.8	0.8	0.8	0.5
73°	0.8	0.8	0.8	0.8	0.5	0.5
73.5°	0.5	0.5	0.5	0.5	0.5	0.5
74°	0.5	0.5	0.5	0.5	0.5	0.5
74.5°	0.5	0.5	0.5	0.5	0.5	0.5
75°	0.5	0.5	0.5	0.5	0.5	0.5
75.5°	0.5	0.5	0.5	0.5	0.5	0.5
76°	0.5	0.5	0.5	0.5	0.5	0.5
76.5°	0.5	0.5	0.5	0.5	0.3	0.3
77°	0.5	0.5	0.5	0.3	0.3	0.3
77.5°	0.3	0.3	0.3	0.3	0.3	0.3
78°	0.3	0.3	0.3	0.3	0.3	0.3
78.5°	0.3	0.3	0.3	0.3	0.3	0.3
79°	0.3	0.3	0.3	0.3	0.3	0.3
79.5°	0.3	0.3	0.3	0.3	0.3	0.3
80°	0.3	0.3	0.3	0.3	0.3	0.3
80.5°	0.3	0.3	0.3	0.3	0.3	0.3
81°	0.3	0.3	0.3	0.3	0.3	0.3
81.5°	0.3	0.3	0.3	0.3	0.3	0.3
82°	0.3	0.3	0.3	0.3	0.3	0.0
82.5°	0.3	0.3	0.3	0.3	0.0	0.0
83°	0.3	0.3	0.3	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: P776157

CATALOG NUMBER: HCDJBL51525CSD-HCD82TRH-2500lm-3500K

**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



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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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Scaled Data Report





21.5°	2042.8	2055.1	2067.4	2078.9	2081.9	2078.9	2067.4	2055.1	2042.8	2055.1	2067.4
22°	1965.8	1973.8	1988.1	1999.9	2005.9	1999.9	1988.1	1973.8	1965.8	1973.8	1988.1



44°	254.1	261.1	272.4	281.9	285.7	281.9	272.4	261.1	254.1	261.1	272.4
44.5°	224.5	230.0	240.5	250.8	255.3	250.8	240.5	230.0	224.5	230.0	240.5



66.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
67°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3



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°	2078.9	2081.9	2078.9	2067.4	2055.1	2042.8
22°	1999.9	2005.9	1999.9	1988.1	1973.8	1965.8



44°	281.9	285.7	281.9	272.4	261.1	254.1
44.5°	250.8	255.3	250.8	240.5	230.0	224.5



66.5°	1.3	1.3	1.3	1.3	1.3	1.3
67°	1.3	1.3	1.3	1.3	1.3	1.3

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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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Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)