

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: P776154

Luminaire Tested: HCDJBS1525CSD-HCD82TRC-2500lm-5000K

Issue Date: 2/13/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P776154  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2312156B062-HCD82TRC)  
Test Lab:  
Issue Date: 2/13/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCDJBL51525CSD-HCD82TRC-2500lm-5000K  
Description: 8 INCH ROUND NARROW SPECULAR CLEAR TRIM  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

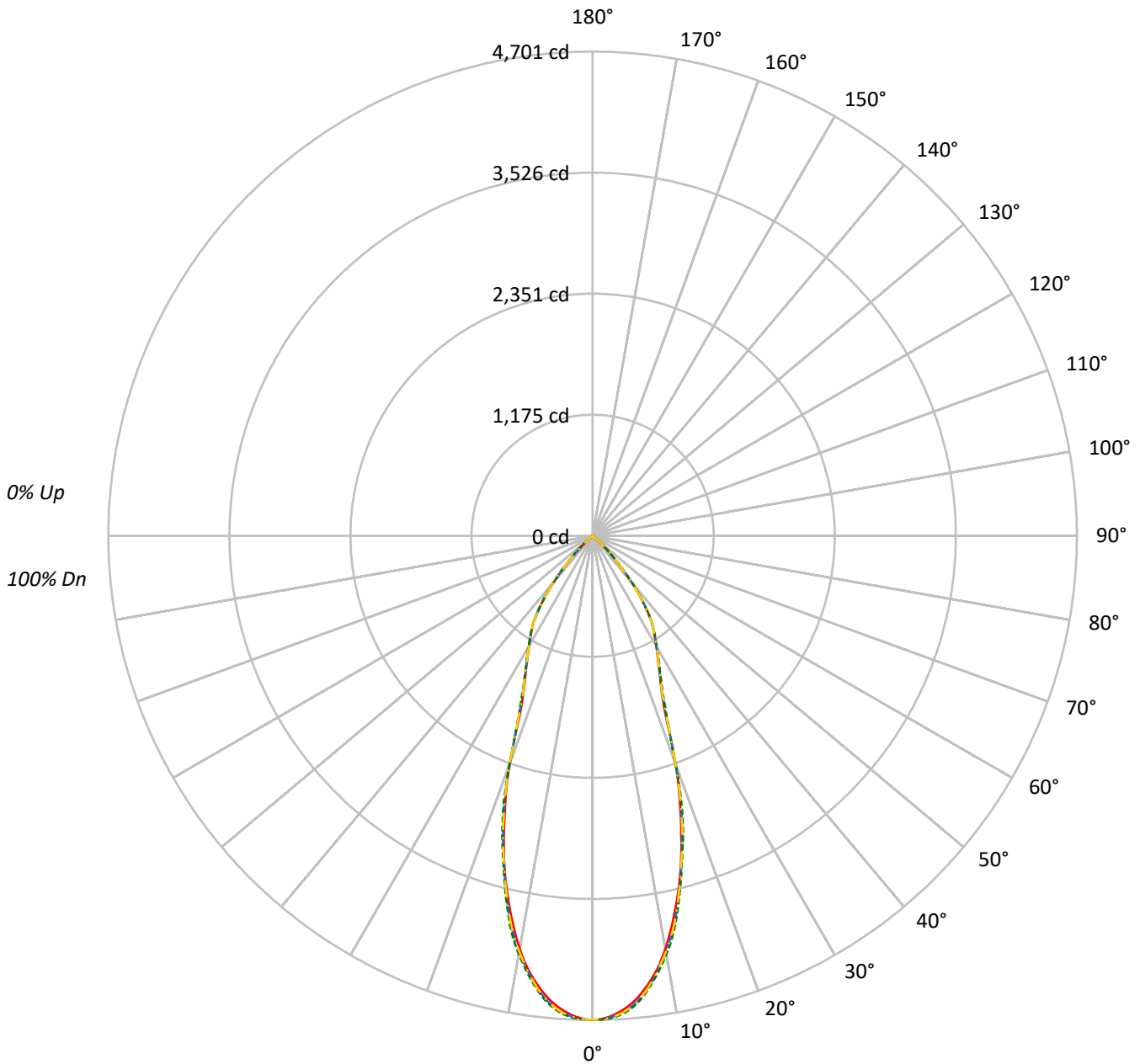
Lumens per Lamp: N/A  
Luminaire Lumens: 2870.2 lumens  
Efficiency: N/A  
Efficacy: 114.8 lumens/watt  
Spacing Criteria (0/90/45): 0.65 / 0.66 / 0.66  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

Input Watts (W): 25  
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



TEST NUMBER: P776154  
CATALOG NUMBER: HCDJBLS1525CSD-HCD82TRC-2500lm-5000K

### 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	80	84	81	79	77	77	77	77	77	77		
	5	94	86	80	76	92	85	80	76	83	79	75	81	78	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	62	59	66	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	54	54	54	54	54	54		

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

	0°	90°	180°	270°
0°	143471	143471	143471	143471
5°	139186	140593	139186	140593
10°	126200	127896	126200	127896
15°	104642	105546	104642	105546
20°	76201	76520	76201	76520
25°	52497	53228	52497	53228
30°	43492	43947	43492	43947
35°	36305	36130	36305	36130
40°	23239	23558	23239	23558
45°	9404	10332	9404	10332
50°	1767	1962	1767	1962
55°	538	522	538	522
60°	348	348	348	348
65°	246	246	246	246
70°	161	187	161	187
75°	118	118	118	118
80°	88	88	88	88
85°	0	105	0	105

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 10332 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	421.2	14.7
10°-20°	908.4	31.6
20°-30°	745.1	26.0
30°-40°	586.5	20.4
40°-50°	192.9	6.7
50°-60°	11.3	0.4
60°-70°	3.5	0.1
70°-80°	1.2	0.0
80°-90°	0.2	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°	2074.6	72.3
0°-40°	2661.1	92.7
0°-60°	2865.3	99.8
0°-90°	2870.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2870.2	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	4699	4699	4699	4699	4699	
5°	4542	4588	4542	4588	4542	419
15°	3311	3339	3311	3339	3311	901
25°	1558	1580	1558	1580	1558	740
35°	974	969	974	969	974	586
45°	218	239	218	239	218	186
55°	10	10	10	10	10	11
65°	3	3	3	3	3	3
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P776154

CATALOG NUMBER: HCDJBL5125CSD-HCD82TRC-2500lm-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	4699.3	4699.3	4699.3	4699.3	4699.3	4699.3	4699.3	4699.3	4699.3	4699.3	4699.3
0.5°	4697.2	4697.7	4700.1	4695.4	4700.6	4695.4	4700.1	4697.7	4697.2	4697.7	4700.1
1°	4692.3	4693.4	4697.0	4692.6	4698.0	4692.6	4697.0	4693.4	4692.3	4693.4	4697.0
1.5°	4683.5	4685.9	4691.3	4687.9	4693.6	4687.9	4691.3	4685.9	4683.5	4685.9	4691.3
2°	4671.9	4675.0	4683.3	4681.0	4689.0	4681.0	4683.3	4675.0	4671.9	4675.0	4683.3
2.5°	4657.0	4661.9	4672.2	4671.7	4680.5	4671.7	4672.2	4661.9	4657.0	4661.9	4672.2
3°	4639.7	4646.1	4658.8	4659.0	4669.1	4659.0	4658.8	4646.1	4639.7	4646.1	4658.8
3.5°	4619.5	4628.1	4642.3	4643.0	4654.4	4643.0	4642.3	4628.1	4619.5	4628.1	4642.3
4°	4597.1	4608.4	4622.6	4623.7	4636.1	4623.7	4622.6	4608.4	4597.1	4608.4	4622.6
4.5°	4571.0	4585.2	4599.1	4601.5	4613.9	4601.5	4599.1	4585.2	4571.0	4585.2	4599.1
5°	4541.6	4559.4	4572.3	4575.7	4587.5	4575.7	4572.3	4559.4	4541.6	4559.4	4572.3
5.5°	4508.8	4530.0	4540.3	4546.8	4557.1	4546.8	4540.3	4530.0	4508.8	4530.0	4540.3
6°	4472.9	4496.7	4504.9	4514.7	4521.2	4514.7	4504.9	4496.7	4472.9	4496.7	4504.9
6.5°	4433.7	4459.3	4464.7	4478.9	4481.2	4478.9	4464.7	4459.3	4433.7	4459.3	4464.7
7°	4392.4	4417.4	4421.1	4440.4	4436.8	4440.4	4421.1	4417.4	4392.4	4417.4	4421.1
7.5°	4348.5	4371.5	4373.0	4398.3	4390.3	4398.3	4373.0	4371.5	4348.5	4371.5	4373.0
8°	4301.6	4321.9	4323.0	4352.7	4340.3	4352.7	4323.0	4321.9	4301.6	4321.9	4323.0
8.5°	4250.2	4267.0	4269.5	4302.6	4289.2	4302.6	4269.5	4267.0	4250.2	4267.0	4269.5
9°	4195.5	4208.4	4214.3	4247.9	4235.0	4247.9	4214.3	4208.4	4195.5	4208.4	4214.3
9.5°	4135.1	4144.4	4158.0	4188.5	4181.5	4188.5	4158.0	4144.4	4135.1	4144.4	4158.0
10°	4070.8	4077.8	4099.2	4123.5	4125.5	4123.5	4099.2	4077.8	4070.8	4077.8	4099.2
10.5°	4002.7	4007.1	4038.5	4054.5	4068.0	4054.5	4038.5	4007.1	4002.7	4007.1	4038.5
11°	3933.2	3935.0	3975.6	3982.5	4005.0	3982.5	3975.6	3935.0	3933.2	3935.0	3975.6
11.5°	3860.7	3862.0	3907.7	3908.2	3935.8	3908.2	3907.7	3862.0	3860.7	3862.0	3907.7
12°	3787.7	3788.7	3833.1	3834.4	3861.5	3834.4	3833.1	3788.7	3787.7	3788.7	3833.1
12.5°	3710.8	3717.0	3752.3	3759.3	3778.6	3759.3	3752.3	3717.0	3710.8	3717.0	3752.3
13°	3635.1	3644.2	3668.9	3682.9	3695.5	3682.9	3668.9	3644.2	3635.1	3644.2	3668.9
13.5°	3556.7	3569.1	3582.0	3601.8	3606.5	3601.8	3582.0	3569.1	3556.7	3569.1	3582.0
14°	3477.7	3490.1	3495.2	3517.2	3516.9	3517.2	3495.2	3490.1	3477.7	3490.1	3495.2
14.5°	3395.6	3405.4	3409.3	3431.5	3428.4	3431.5	3409.3	3405.4	3395.6	3405.4	3409.3
15°	3310.7	3316.9	3323.1	3343.2	3339.3	3343.2	3323.1	3316.9	3310.7	3316.9	3323.1
15.5°	3219.8	3223.5	3237.1	3255.2	3256.0	3255.2	3237.1	3223.5	3219.8	3223.5	3237.1
16°	3127.4	3129.8	3150.4	3166.4	3170.3	3166.4	3150.4	3129.8	3127.4	3129.8	3150.4
16.5°	3030.1	3037.1	3061.6	3078.4	3087.7	3078.4	3061.6	3037.1	3030.1	3037.1	3061.6
17°	2935.9	2944.2	2971.3	2991.2	3003.0	2991.2	2971.3	2944.2	2935.9	2944.2	2971.3
17.5°	2840.7	2852.0	2876.6	2900.8	2912.4	2900.8	2876.6	2852.0	2840.7	2852.0	2876.6
18°	2749.1	2757.3	2779.8	2806.1	2816.2	2806.1	2779.8	2757.3	2749.1	2757.3	2779.8
18.5°	2653.6	2661.3	2678.6	2704.9	2712.7	2704.9	2678.6	2661.3	2653.6	2661.3	2678.6
19°	2555.7	2560.9	2574.3	2593.9	2601.9	2593.9	2574.3	2560.9	2555.7	2560.9	2574.3
19.5°	2453.5	2454.0	2464.1	2479.1	2486.6	2479.1	2464.1	2454.0	2453.5	2454.0	2464.1
20°	2345.4	2345.4	2350.8	2359.1	2355.2	2359.1	2350.8	2345.4	2345.4	2345.4	2350.8
20.5°	2239.0	2235.2	2237.5	2237.2	2225.9	2237.2	2237.5	2235.2	2239.0	2235.2	2237.5
21°	2129.6	2127.0	2117.5	2127.0	2123.4	2127.0	2117.5	2127.0	2129.6	2127.0	2117.5



TEST NUMBER: P776154

CATALOG NUMBER: HCDJBL51525CSD-HCD82TRC-2500lm-5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	1823.5	1835.6	1852.2	1872.0	1863.2	1872.0	1852.2	1835.6	1823.5	1835.6	1852.2
23°	1752.0	1760.3	1777.3	1804.4	1804.7	1804.4	1777.3	1760.3	1752.0	1760.3	1777.3
23.5°	1699.4	1698.1	1708.9	1735.0	1738.3	1735.0	1708.9	1698.1	1699.4	1698.1	1708.9
24°	1642.8	1648.5	1655.2	1676.4	1677.9	1676.4	1655.2	1648.5	1642.8	1648.5	1655.2
24.5°	1599.5	1602.3	1608.2	1621.7	1621.7	1621.7	1608.2	1602.3	1599.5	1602.3	1608.2
25°	1558.4	1562.0	1568.2	1580.6	1580.1	1580.6	1568.2	1562.0	1558.4	1562.0	1568.2
25.5°	1520.2	1522.0	1528.5	1540.1	1540.9	1540.1	1528.5	1522.0	1520.2	1522.0	1528.5
26°	1483.3	1484.9	1489.5	1498.3	1499.6	1498.3	1489.5	1484.9	1483.3	1484.9	1489.5
26.5°	1448.5	1449.0	1454.4	1462.4	1463.2	1462.4	1454.4	1449.0	1448.5	1449.0	1454.4
27°	1413.1	1414.7	1420.3	1430.4	1433.0	1430.4	1420.3	1414.7	1413.1	1414.7	1420.3
27.5°	1379.8	1381.9	1387.3	1397.1	1400.7	1397.1	1387.3	1381.9	1379.8	1381.9	1387.3
28°	1348.3	1350.4	1355.6	1362.8	1366.1	1362.8	1355.6	1350.4	1348.3	1350.4	1355.6
28.5°	1319.2	1320.2	1325.1	1330.8	1333.6	1330.8	1325.1	1320.2	1319.2	1320.2	1325.1
29°	1290.3	1291.0	1295.7	1300.6	1303.7	1300.6	1295.7	1291.0	1290.3	1291.0	1295.7
29.5°	1261.6	1263.2	1267.0	1272.5	1275.0	1272.5	1267.0	1263.2	1261.6	1263.2	1267.0
30°	1233.7	1235.3	1238.9	1244.1	1246.6	1244.1	1238.9	1235.3	1233.7	1235.3	1238.9
30.5°	1206.6	1207.9	1211.5	1216.4	1218.2	1216.4	1211.5	1207.9	1206.6	1207.9	1211.5
31°	1180.0	1181.3	1184.7	1189.9	1192.4	1189.9	1184.7	1181.3	1180.0	1181.3	1184.7
31.5°	1154.5	1155.8	1159.4	1164.0	1165.9	1164.0	1159.4	1155.8	1154.5	1155.8	1159.4
32°	1130.0	1131.0	1134.4	1139.0	1140.8	1139.0	1134.4	1131.0	1130.0	1131.0	1134.4
32.5°	1106.5	1107.5	1109.8	1114.2	1115.8	1114.2	1109.8	1107.5	1106.5	1107.5	1109.8
33°	1083.8	1084.3	1085.6	1087.6	1089.2	1087.6	1085.6	1084.3	1083.8	1084.3	1085.6
33.5°	1060.3	1060.3	1059.8	1058.7	1061.1	1058.7	1059.8	1060.3	1060.3	1060.3	1059.8
34°	1033.7	1032.7	1032.2	1028.8	1034.0	1028.8	1032.2	1032.7	1033.7	1032.7	1032.2
34.5°	1005.1	1002.7	1002.5	998.1	1002.0	998.1	1002.5	1002.7	1005.1	1002.7	1002.5
35°	974.1	971.0	971.0	966.9	969.4	966.9	971.0	971.0	974.1	971.0	971.0
35.5°	940.3	939.0	937.4	933.8	935.4	933.8	937.4	939.0	940.3	939.0	937.4
36°	905.2	904.7	901.8	899.7	900.0	899.7	901.8	904.7	905.2	904.7	901.8
36.5°	868.0	869.0	864.9	863.6	862.1	863.6	864.9	869.0	868.0	869.0	864.9
37°	828.0	831.1	827.5	826.7	824.6	826.7	827.5	831.1	828.0	831.1	827.5
37.5°	788.2	790.6	789.5	788.2	787.5	788.2	789.5	790.6	788.2	790.6	789.5
38°	748.5	750.3	749.0	750.0	749.3	750.0	749.0	750.3	748.5	750.3	749.0
38.5°	708.8	707.7	708.2	708.5	710.6	708.5	708.2	707.7	708.8	707.7	708.2
39°	668.2	665.9	667.2	667.2	671.3	667.2	667.2	665.9	668.2	665.9	667.2
39.5°	625.6	624.4	626.2	627.7	630.8	627.7	626.2	624.4	625.6	624.4	626.2
40°	583.1	584.1	586.4	588.7	591.1	588.7	586.4	584.1	583.1	584.1	586.4
40.5°	540.7	543.3	545.6	551.3	551.1	551.3	545.6	543.3	540.7	543.3	545.6
41°	499.7	502.5	505.9	512.6	511.6	512.6	505.9	502.5	499.7	502.5	505.9
41.5°	458.4	462.0	466.4	474.4	472.6	474.4	466.4	462.0	458.4	462.0	466.4
42°	419.2	422.8	428.7	436.7	435.4	436.7	428.7	422.8	419.2	422.8	428.7
42.5°	381.2	384.6	392.3	400.6	399.8	400.6	392.3	384.6	381.2	384.6	392.3
43°	344.6	349.0	357.0	366.2	365.5	366.2	357.0	349.0	344.6	349.0	357.0
43.5°	311.8	314.1	322.1	331.1	331.9	331.1	322.1	314.1	311.8	314.1	322.1



TEST NUMBER: P776154

CATALOG NUMBER: HCDJBLS1525CSD-HCD82TRC-2500lm-5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	217.8	218.9	227.6	235.9	239.3	235.9	227.6	218.9	217.8	218.9	227.6
45.5°	187.9	190.2	200.0	207.3	211.6	207.3	200.0	190.2	187.9	190.2	200.0
46°	161.6	163.4	174.0	182.2	186.9	182.2	174.0	163.4	161.6	163.4	174.0
46.5°	137.8	140.9	149.2	159.5	164.9	159.5	149.2	140.9	137.8	140.9	149.2
47°	116.1	119.8	126.2	137.8	143.0	137.8	126.2	119.8	116.1	119.8	126.2
47.5°	97.6	101.2	107.1	117.2	121.1	117.2	107.1	101.2	97.6	101.2	107.1
48°	80.8	85.2	89.3	98.3	99.1	98.3	89.3	85.2	80.8	85.2	89.3
48.5°	66.6	70.5	73.8	81.6	80.3	81.6	73.8	70.5	66.6	70.5	73.8
49°	55.2	57.6	59.9	67.1	65.0	67.1	59.9	57.6	55.2	57.6	59.9
49.5°	46.2	47.0	49.6	53.9	51.6	53.9	49.6	47.0	46.2	47.0	49.6
50°	37.2	36.9	39.7	43.9	41.3	43.9	39.7	36.9	37.2	36.9	39.7
50.5°	28.1	29.2	30.7	34.8	32.5	34.8	30.7	29.2	28.1	29.2	30.7
51°	21.7	22.2	25.0	27.9	25.8	27.9	25.0	22.2	21.7	22.2	25.0
51.5°	16.3	18.3	19.9	23.2	23.0	23.2	19.9	18.3	16.3	18.3	19.9
52°	14.2	15.2	16.8	18.3	20.1	18.3	16.8	15.2	14.2	15.2	16.8
52.5°	12.9	13.2	14.5	15.5	17.0	15.5	14.5	13.2	12.9	13.2	14.5
53°	12.1	12.4	12.4	13.4	14.2	13.4	12.4	12.4	12.1	12.4	12.4
53.5°	11.6	11.6	11.9	11.6	11.4	11.6	11.9	11.6	11.6	11.6	11.9
54°	11.1	11.1	11.1	11.1	10.8	11.1	11.1	11.1	11.1	11.1	11.1
54.5°	10.6	10.6	10.6	10.6	10.3	10.6	10.6	10.6	10.6	10.6	10.6
55°	10.1	10.1	10.1	10.1	9.8	10.1	10.1	10.1	10.1	10.1	10.1
55.5°	9.5	9.5	9.5	9.5	9.3	9.5	9.5	9.5	9.5	9.5	9.5
56°	9.0	9.0	9.0	9.0	8.8	9.0	9.0	9.0	9.0	9.0	9.0
56.5°	8.5	8.5	8.8	8.5	8.3	8.5	8.8	8.5	8.5	8.5	8.8
57°	8.0	8.0	8.3	8.0	8.0	8.0	8.3	8.0	8.0	8.0	8.3
57.5°	7.5	7.7	7.7	7.5	7.5	7.5	7.7	7.7	7.5	7.7	7.7
58°	7.2	7.2	7.2	7.2	7.0	7.2	7.2	7.2	7.2	7.2	7.2
58.5°	6.7	7.0	7.0	6.7	6.7	6.7	7.0	7.0	6.7	7.0	7.0
59°	6.5	6.5	6.5	6.5	6.2	6.5	6.5	6.5	6.5	6.5	6.5
59.5°	5.9	6.2	6.2	6.2	5.9	6.2	6.2	6.2	5.9	6.2	6.2
60°	5.7	5.7	5.9	5.7	5.7	5.7	5.9	5.7	5.7	5.7	5.9
60.5°	5.4	5.4	5.7	5.4	5.4	5.4	5.7	5.4	5.4	5.4	5.7
61°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
61.5°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
62°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
62.5°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
63°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
63.5°	3.9	3.9	4.1	3.9	3.9	3.9	4.1	3.9	3.9	3.9	4.1
64°	3.6	3.6	3.9	3.9	3.6	3.9	3.9	3.6	3.6	3.6	3.9
64.5°	3.4	3.6	3.6	3.6	3.4	3.6	3.6	3.6	3.4	3.6	3.6
65°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
65.5°	3.1	3.1	3.4	3.1	3.1	3.1	3.4	3.1	3.1	3.1	3.4
66°	2.8	3.1	3.1	3.1	3.1	3.1	3.1	3.1	2.8	3.1	3.1





TEST NUMBER: P776154

CATALOG NUMBER: HCDJBL51525CSD-HCD82TRC-2500lm-5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
68°	2.3	2.3	2.6	2.6	2.3	2.6	2.6	2.3	2.3	2.3	2.6
68.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
69°	2.1	2.1	2.3	2.3	2.1	2.3	2.3	2.1	2.1	2.1	2.3
69.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
70°	1.8	1.8	2.1	2.1	2.1	2.1	2.1	1.8	1.8	1.8	2.1
70.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
71°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
71.5°	1.5	1.5	1.8	1.8	1.5	1.8	1.8	1.5	1.5	1.5	1.8
72°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
72.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
73°	1.3	1.3	1.3	1.5	1.3	1.5	1.3	1.3	1.3	1.3	1.3
73.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
74°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
74.5°	1.0	1.0	1.3	1.3	1.3	1.3	1.3	1.0	1.0	1.0	1.3
75°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
75.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
76°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
76.5°	0.8	0.8	0.8	1.0	1.0	1.0	0.8	0.8	0.8	0.8	0.8
77°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
77.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
78°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
78.5°	0.5	0.5	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.8
79°	0.5	0.5	0.5	0.8	0.5	0.8	0.5	0.5	0.5	0.5	0.5
79.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
80.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
81°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
81.5°	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.5
82°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
82.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
83°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
83.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
84°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
84.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
85°	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.3
85.5°	0.0	0.0	0.0	0.3	0.3	0.3	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: P776154  
CATALOG NUMBER: HCDJBL51525CSD-HCD82TRC-2500lm-5000K

**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: P776154

CATALOG NUMBER: HCDJBL51525CSD-HCD82TRC-2500lm-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	4699.3	4699.3	4699.3	4699.3	4699.3	4699.3
0.5°	4695.4	4700.6	4695.4	4700.1	4697.7	4697.2
1°	4692.6	4698.0	4692.6	4697.0	4693.4	4692.3
1.5°	4687.9	4693.6	4687.9	4691.3	4685.9	4683.5
2°	4681.0	4689.0	4681.0	4683.3	4675.0	4671.9
2.5°	4671.7	4680.5	4671.7	4672.2	4661.9	4657.0
3°	4659.0	4669.1	4659.0	4658.8	4646.1	4639.7
3.5°	4643.0	4654.4	4643.0	4642.3	4628.1	4619.5
4°	4623.7	4636.1	4623.7	4622.6	4608.4	4597.1
4.5°	4601.5	4613.9	4601.5	4599.1	4585.2	4571.0
5°	4575.7	4587.5	4575.7	4572.3	4559.4	4541.6
5.5°	4546.8	4557.1	4546.8	4540.3	4530.0	4508.8
6°	4514.7	4521.2	4514.7	4504.9	4496.7	4472.9
6.5°	4478.9	4481.2	4478.9	4464.7	4459.3	4433.7
7°	4440.4	4436.8	4440.4	4421.1	4417.4	4392.4
7.5°	4398.3	4390.3	4398.3	4373.0	4371.5	4348.5
8°	4352.7	4340.3	4352.7	4323.0	4321.9	4301.6
8.5°	4302.6	4289.2	4302.6	4269.5	4267.0	4250.2
9°	4247.9	4235.0	4247.9	4214.3	4208.4	4195.5
9.5°	4188.5	4181.5	4188.5	4158.0	4144.4	4135.1
10°	4123.5	4125.5	4123.5	4099.2	4077.8	4070.8
10.5°	4054.5	4068.0	4054.5	4038.5	4007.1	4002.7
11°	3982.5	4005.0	3982.5	3975.6	3935.0	3933.2
11.5°	3908.2	3935.8	3908.2	3907.7	3862.0	3860.7
12°	3834.4	3861.5	3834.4	3833.1	3788.7	3787.7
12.5°	3759.3	3778.6	3759.3	3752.3	3717.0	3710.8
13°	3682.9	3695.5	3682.9	3668.9	3644.2	3635.1
13.5°	3601.8	3606.5	3601.8	3582.0	3569.1	3556.7
14°	3517.2	3516.9	3517.2	3495.2	3490.1	3477.7
14.5°	3431.5	3428.4	3431.5	3409.3	3405.4	3395.6
15°	3343.2	3339.3	3343.2	3323.1	3316.9	3310.7
15.5°	3255.2	3256.0	3255.2	3237.1	3223.5	3219.8
16°	3166.4	3170.3	3166.4	3150.4	3129.8	3127.4
16.5°	3078.4	3087.7	3078.4	3061.6	3037.1	3030.1
17°	2991.2	3003.0	2991.2	2971.3	2944.2	2935.9
17.5°	2900.8	2912.4	2900.8	2876.6	2852.0	2840.7
18°	2806.1	2816.2	2806.1	2779.8	2757.3	2749.1
18.5°	2704.9	2712.7	2704.9	2678.6	2661.3	2653.6
19°	2593.9	2601.9	2593.9	2574.3	2560.9	2555.7
19.5°	2479.1	2486.6	2479.1	2464.1	2454.0	2453.5
20°	2359.1	2355.2	2359.1	2350.8	2345.4	2345.4
20.5°	2237.2	2225.9	2237.2	2237.5	2235.2	2239.0
21°	2127.0	2123.4	2127.0	2117.5	2127.0	2129.6

TEST NUMBER: P776154

CATALOG NUMBER: HCDJBLS1525CSD-HCD82TRC-2500lm-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1872.0	1863.2	1872.0	1852.2	1835.6	1823.5
23°	1804.4	1804.7	1804.4	1777.3	1760.3	1752.0
23.5°	1735.0	1738.3	1735.0	1708.9	1698.1	1699.4
24°	1676.4	1677.9	1676.4	1655.2	1648.5	1642.8
24.5°	1621.7	1621.7	1621.7	1608.2	1602.3	1599.5
25°	1580.6	1580.1	1580.6	1568.2	1562.0	1558.4
25.5°	1540.1	1540.9	1540.1	1528.5	1522.0	1520.2
26°	1498.3	1499.6	1498.3	1489.5	1484.9	1483.3
26.5°	1462.4	1463.2	1462.4	1454.4	1449.0	1448.5
27°	1430.4	1433.0	1430.4	1420.3	1414.7	1413.1
27.5°	1397.1	1400.7	1397.1	1387.3	1381.9	1379.8
28°	1362.8	1366.1	1362.8	1355.6	1350.4	1348.3
28.5°	1330.8	1333.6	1330.8	1325.1	1320.2	1319.2
29°	1300.6	1303.7	1300.6	1295.7	1291.0	1290.3
29.5°	1272.5	1275.0	1272.5	1267.0	1263.2	1261.6
30°	1244.1	1246.6	1244.1	1238.9	1235.3	1233.7
30.5°	1216.4	1218.2	1216.4	1211.5	1207.9	1206.6
31°	1189.9	1192.4	1189.9	1184.7	1181.3	1180.0
31.5°	1164.0	1165.9	1164.0	1159.4	1155.8	1154.5
32°	1139.0	1140.8	1139.0	1134.4	1131.0	1130.0
32.5°	1114.2	1115.8	1114.2	1109.8	1107.5	1106.5
33°	1087.6	1089.2	1087.6	1085.6	1084.3	1083.8
33.5°	1058.7	1061.1	1058.7	1059.8	1060.3	1060.3
34°	1028.8	1034.0	1028.8	1032.2	1032.7	1033.7
34.5°	998.1	1002.0	998.1	1002.5	1002.7	1005.1
35°	966.9	969.4	966.9	971.0	971.0	974.1
35.5°	933.8	935.4	933.8	937.4	939.0	940.3
36°	899.7	900.0	899.7	901.8	904.7	905.2
36.5°	863.6	862.1	863.6	864.9	869.0	868.0
37°	826.7	824.6	826.7	827.5	831.1	828.0
37.5°	788.2	787.5	788.2	789.5	790.6	788.2
38°	750.0	749.3	750.0	749.0	750.3	748.5
38.5°	708.5	710.6	708.5	708.2	707.7	708.8
39°	667.2	671.3	667.2	667.2	665.9	668.2
39.5°	627.7	630.8	627.7	626.2	624.4	625.6
40°	588.7	591.1	588.7	586.4	584.1	583.1
40.5°	551.3	551.1	551.3	545.6	543.3	540.7
41°	512.6	511.6	512.6	505.9	502.5	499.7
41.5°	474.4	472.6	474.4	466.4	462.0	458.4
42°	436.7	435.4	436.7	428.7	422.8	419.2
42.5°	400.6	399.8	400.6	392.3	384.6	381.2
43°	366.2	365.5	366.2	357.0	349.0	344.6
43.5°	331.1	331.9	331.1	322.1	314.1	311.8



TEST NUMBER: P776154

CATALOG NUMBER: HCDJBLS1525CSD-HCD82TRC-2500lm-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	235.9	239.3	235.9	227.6	218.9	217.8
45.5°	207.3	211.6	207.3	200.0	190.2	187.9
46°	182.2	186.9	182.2	174.0	163.4	161.6
46.5°	159.5	164.9	159.5	149.2	140.9	137.8
47°	137.8	143.0	137.8	126.2	119.8	116.1
47.5°	117.2	121.1	117.2	107.1	101.2	97.6
48°	98.3	99.1	98.3	89.3	85.2	80.8
48.5°	81.6	80.3	81.6	73.8	70.5	66.6
49°	67.1	65.0	67.1	59.9	57.6	55.2
49.5°	53.9	51.6	53.9	49.6	47.0	46.2
50°	43.9	41.3	43.9	39.7	36.9	37.2
50.5°	34.8	32.5	34.8	30.7	29.2	28.1
51°	27.9	25.8	27.9	25.0	22.2	21.7
51.5°	23.2	23.0	23.2	19.9	18.3	16.3
52°	18.3	20.1	18.3	16.8	15.2	14.2
52.5°	15.5	17.0	15.5	14.5	13.2	12.9
53°	13.4	14.2	13.4	12.4	12.4	12.1
53.5°	11.6	11.4	11.6	11.9	11.6	11.6
54°	11.1	10.8	11.1	11.1	11.1	11.1
54.5°	10.6	10.3	10.6	10.6	10.6	10.6
55°	10.1	9.8	10.1	10.1	10.1	10.1
55.5°	9.5	9.3	9.5	9.5	9.5	9.5
56°	9.0	8.8	9.0	9.0	9.0	9.0
56.5°	8.5	8.3	8.5	8.8	8.5	8.5
57°	8.0	8.0	8.0	8.3	8.0	8.0
57.5°	7.5	7.5	7.5	7.7	7.7	7.5
58°	7.2	7.0	7.2	7.2	7.2	7.2
58.5°	6.7	6.7	6.7	7.0	7.0	6.7
59°	6.5	6.2	6.5	6.5	6.5	6.5
59.5°	6.2	5.9	6.2	6.2	6.2	5.9
60°	5.7	5.7	5.7	5.9	5.7	5.7
60.5°	5.4	5.4	5.4	5.7	5.4	5.4
61°	5.2	5.2	5.2	5.2	5.2	5.2
61.5°	4.9	4.9	4.9	4.9	4.9	4.9
62°	4.6	4.6	4.6	4.6	4.6	4.6
62.5°	4.4	4.4	4.4	4.4	4.4	4.4
63°	4.1	4.1	4.1	4.1	4.1	4.1
63.5°	3.9	3.9	3.9	4.1	3.9	3.9
64°	3.9	3.6	3.9	3.9	3.6	3.6
64.5°	3.6	3.4	3.6	3.6	3.6	3.4
65°	3.4	3.4	3.4	3.4	3.4	3.4
65.5°	3.1	3.1	3.1	3.4	3.1	3.1
66°	3.1	3.1	3.1	3.1	3.1	2.8



TEST NUMBER: P776154

CATALOG NUMBER: HCDJBL51525CSD-HCD82TRC-2500lm-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	2.6	2.6	2.6	2.6	2.6	2.6
68°	2.6	2.3	2.6	2.6	2.3	2.3
68.5°	2.3	2.3	2.3	2.3	2.3	2.3
69°	2.3	2.1	2.3	2.3	2.1	2.1
69.5°	2.1	2.1	2.1	2.1	2.1	2.1
70°	2.1	2.1	2.1	2.1	1.8	1.8
70.5°	1.8	1.8	1.8	1.8	1.8	1.8
71°	1.8	1.8	1.8	1.8	1.8	1.8
71.5°	1.8	1.5	1.8	1.8	1.5	1.5
72°	1.5	1.5	1.5	1.5	1.5	1.5
72.5°	1.5	1.5	1.5	1.5	1.5	1.5
73°	1.5	1.3	1.5	1.3	1.3	1.3
73.5°	1.3	1.3	1.3	1.3	1.3	1.3
74°	1.3	1.3	1.3	1.3	1.3	1.3
74.5°	1.3	1.3	1.3	1.3	1.0	1.0
75°	1.0	1.0	1.0	1.0	1.0	1.0
75.5°	1.0	1.0	1.0	1.0	1.0	1.0
76°	1.0	1.0	1.0	1.0	1.0	1.0
76.5°	1.0	1.0	1.0	0.8	0.8	0.8
77°	0.8	0.8	0.8	0.8	0.8	0.8
77.5°	0.8	0.8	0.8	0.8	0.8	0.8
78°	0.8	0.8	0.8	0.8	0.8	0.8
78.5°	0.8	0.8	0.8	0.8	0.5	0.5
79°	0.8	0.5	0.8	0.5	0.5	0.5
79.5°	0.5	0.5	0.5	0.5	0.5	0.5
80°	0.5	0.5	0.5	0.5	0.5	0.5
80.5°	0.5	0.5	0.5	0.5	0.5	0.5
81°	0.5	0.5	0.5	0.5	0.5	0.5
81.5°	0.5	0.5	0.5	0.5	0.3	0.3
82°	0.3	0.3	0.3	0.3	0.3	0.3
82.5°	0.3	0.3	0.3	0.3	0.3	0.3
83°	0.3	0.3	0.3	0.3	0.3	0.3
83.5°	0.3	0.3	0.3	0.3	0.3	0.3
84°	0.3	0.3	0.3	0.3	0.3	0.3
84.5°	0.3	0.3	0.3	0.3	0.3	0.3
85°	0.3	0.3	0.3	0.3	0.0	0.0
85.5°	0.3	0.3	0.3	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: P776154

CATALOG NUMBER: HCDJBL51525CSD-HCD82TRC-2500lm-5000K

**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

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



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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°	2018.1	2016.8	2020.4	2031.8	2030.2	2031.8	2020.4	2016.8	2018.1	2016.8	2020.4
22°	1904.8	1922.9	1931.4	1946.4	1944.6	1946.4	1931.4	1922.9	1904.8	1922.9	1931.4



44°	279.5	281.6	288.8	297.9	298.9	297.9	288.8	281.6	279.5	281.6	288.8
44.5°	248.3	249.6	256.6	265.8	268.4	265.8	256.6	249.6	248.3	249.6	256.6



66.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
67°	2.6	2.6	2.8	2.8	2.6	2.8	2.8	2.6	2.6	2.6	2.8



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°	2031.8	2030.2	2031.8	2020.4	2016.8	2018.1
22°	1946.4	1944.6	1946.4	1931.4	1922.9	1904.8



44°	297.9	298.9	297.9	288.8	281.6	279.5
44.5°	265.8	268.4	265.8	256.6	249.6	248.3

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66.5°	2.8	2.8	2.8	2.8	2.8	2.8
67°	2.8	2.6	2.8	2.8	2.6	2.6

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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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Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)