

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: P776363

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

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P776363
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: HCDJBL3040CSD-HCD62TRC-4000lm-4000K
Description: 6 INCH ROUND NARROW SPECULAR CLEAR TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT
Ballast/Driver: -

Summary

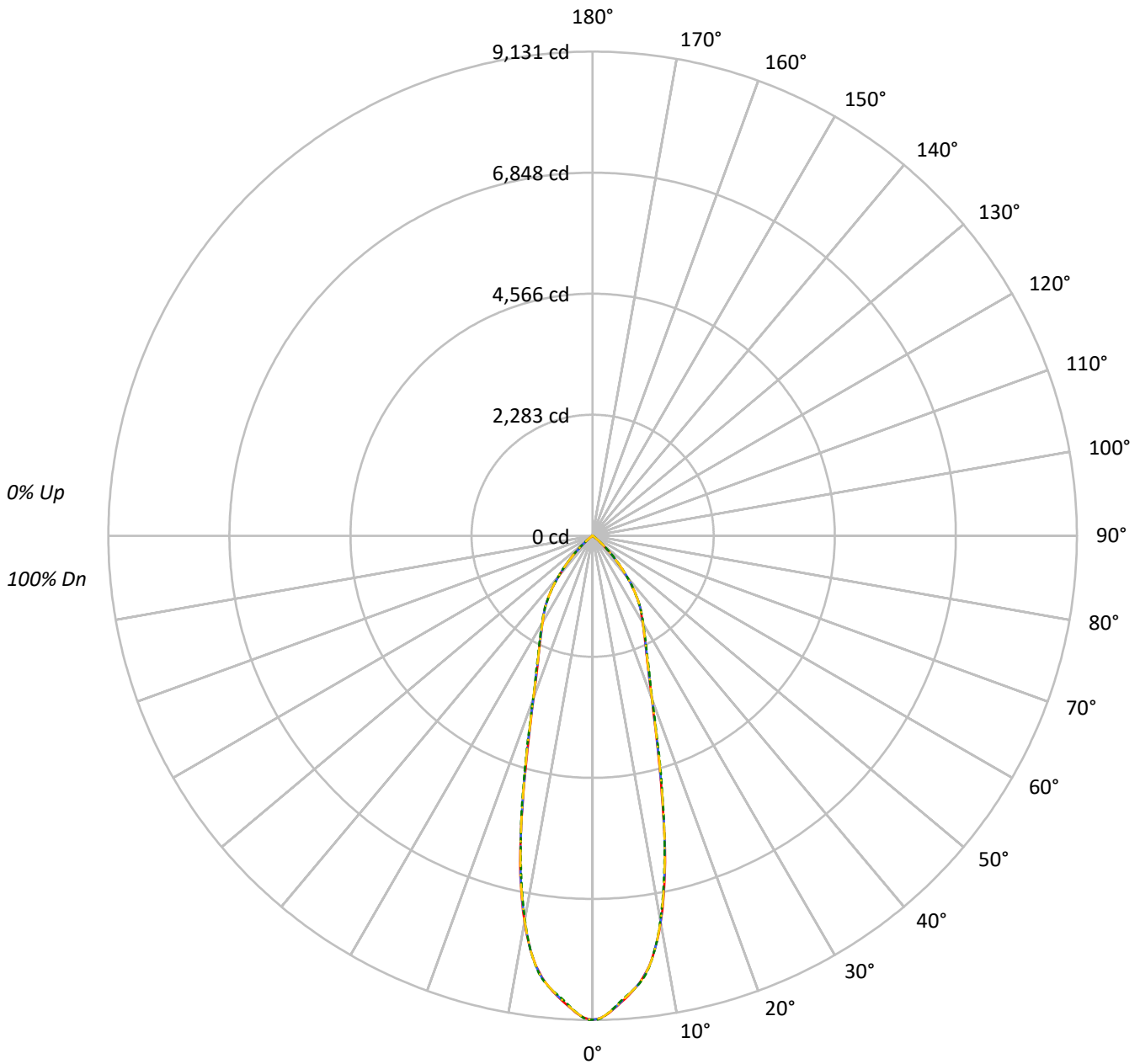
Lumens per Lamp: N/A
Luminaire Lumens: 4671.4 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Spacing Criteria (0/90/45): 0.53 / 0.54 / 0.57
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 38.5
Input Voltage (V): NR
Input Current (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				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	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	92	89	101	96	91	88	93	90	87	91	88	85	89	86	84	82			
4	98	91	86	82	97	90	85	81	88	84	80	86	82	79	84	81	79	77			
5	94	86	80	76	92	85	80	76	83	79	75	81	77	74	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	63	59	67	62	59	66	62	59	57			
10	75	65	60	56	74	65	60	56	64	59	56	63	59	56	63	59	56	55			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	500283	500283	500283	500283
5°	474509	473981	474509	473981
10°	411554	409200	411554	409200
15°	286262	289627	286262	289627
20°	189973	191998	189973	191998
25°	144401	146452	144401	146452
30°	119398	120854	119398	120854
35°	99930	100010	99930	100010
40°	71169	72293	71169	72293
45°	39911	41880	39911	41880
50°	13577	16162	13577	16162
55°	965	2084	965	2084
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: 41880 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	787.0	16.8
10°-20°	1400.6	30.0
20°-30°	1118.4	23.9
30°-40°	915.5	19.6
40°-50°	413.5	8.9
50°-60°	35.4	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°	3306.0	70.8
0°-40°	4221.5	90.4
0°-60°	4670.3	100.0
0°-90°	4671.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4671.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	9126	9126	9126	9126	9126	
5°	8623	8613	8623	8613	8623	787
15°	5044	5103	5044	5103	5044	1398
25°	2387	2421	2387	2421	2387	1112
35°	1493	1494	1493	1494	1493	913
45°	515	540	515	540	515	406
55°	10	22	10	22	10	32
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°	9125.9	9125.9	9125.9	9125.9	9125.9	9125.9	9125.9	9125.9	9125.9	9125.9	9125.9
0.5°	9115.1	9115.1	9115.1	9116.7	9130.8	9116.7	9115.1	9115.1	9115.1	9115.1	9115.1
1°	9090.9	9090.9	9089.7	9090.1	9099.7	9090.1	9089.7	9090.9	9090.9	9090.9	9089.7
1.5°	9051.4	9051.0	9047.7	9045.7	9051.8	9045.7	9047.7	9051.0	9051.4	9051.0	9047.7
2°	9001.4	8999.0	8994.5	8989.7	8990.5	8989.7	8994.5	8999.0	9001.4	8999.0	8994.5
2.5°	8941.7	8940.1	8933.6	8925.6	8923.2	8925.6	8933.6	8940.1	8941.7	8940.1	8933.6
3°	8878.8	8876.8	8869.5	8858.7	8854.2	8858.7	8869.5	8876.8	8878.8	8876.8	8869.5
3.5°	8815.9	8813.1	8804.6	8793.8	8788.1	8793.8	8804.6	8813.1	8815.9	8813.1	8804.6
4°	8753.4	8749.0	8741.0	8732.5	8726.8	8732.5	8741.0	8749.0	8753.4	8749.0	8741.0
4.5°	8688.9	8684.9	8678.9	8673.2	8668.8	8673.2	8678.9	8684.9	8688.9	8684.9	8678.9
5°	8622.8	8620.0	8616.4	8614.0	8613.2	8614.0	8616.4	8620.0	8622.8	8620.0	8616.4
5.5°	8551.5	8549.9	8549.9	8551.5	8554.7	8551.5	8549.9	8549.9	8551.5	8549.9	8549.9
6°	8474.1	8474.1	8476.5	8483.0	8486.6	8483.0	8476.5	8474.1	8474.1	8474.1	8476.5
6.5°	8387.8	8389.8	8394.7	8401.5	8406.4	8401.5	8394.7	8389.8	8387.8	8389.8	8394.7
7°	8289.9	8293.9	8298.3	8305.6	8311.2	8305.6	8298.3	8293.9	8289.9	8293.9	8298.3
7.5°	8179.0	8180.6	8186.3	8191.5	8194.7	8191.5	8186.3	8180.6	8179.0	8180.6	8186.3
8°	8052.4	8053.2	8056.4	8059.7	8061.3	8059.7	8056.4	8053.2	8052.4	8053.2	8056.4
8.5°	7907.7	7907.7	7908.1	7907.3	7904.5	7907.3	7908.1	7907.7	7907.7	7907.7	7908.1
9°	7749.3	7748.9	7745.2	7739.6	7737.2	7739.6	7745.2	7748.9	7749.3	7748.9	7745.2
9.5°	7576.7	7575.5	7566.2	7558.2	7551.7	7558.2	7566.2	7575.5	7576.7	7575.5	7566.2
10°	7393.3	7389.3	7376.0	7361.1	7351.0	7361.1	7376.0	7389.3	7393.3	7389.3	7376.0
10.5°	7198.2	7189.7	7174.8	7156.7	7142.2	7156.7	7174.8	7189.7	7198.2	7189.7	7174.8
11°	6989.8	6982.5	6963.2	6948.3	6935.0	6948.3	6963.2	6982.5	6989.8	6982.5	6963.2
11.5°	6773.7	6767.3	6750.7	6729.0	6718.5	6729.0	6750.7	6767.3	6773.7	6767.3	6750.7
12°	6550.0	6544.7	6524.6	6504.4	6490.7	6504.4	6524.6	6544.7	6550.0	6544.7	6524.6
12.5°	6314.9	6306.1	6290.0	6270.6	6258.5	6270.6	6290.0	6306.1	6314.9	6306.1	6290.0
13°	6069.0	6064.6	6049.7	6038.4	6031.1	6038.4	6049.7	6064.6	6069.0	6064.6	6049.7
13.5°	5805.4	5808.6	5805.0	5801.0	5797.3	5801.0	5805.0	5808.6	5805.4	5808.6	5805.0
14°	5545.0	5550.6	5555.1	5560.7	5565.1	5560.7	5555.1	5550.6	5545.0	5550.6	5555.1
14.5°	5287.0	5295.8	5310.8	5325.3	5335.8	5325.3	5310.8	5295.8	5287.0	5295.8	5310.8
15°	5043.9	5051.2	5071.3	5090.3	5103.2	5090.3	5071.3	5051.2	5043.9	5051.2	5071.3
15.5°	4814.1	4823.8	4841.5	4862.5	4878.2	4862.5	4841.5	4823.8	4814.1	4823.8	4841.5
16°	4600.9	4606.9	4622.6	4647.6	4665.8	4647.6	4622.6	4606.9	4600.9	4606.9	4622.6
16.5°	4396.5	4401.3	4420.3	4442.8	4460.2	4442.8	4420.3	4401.3	4396.5	4401.3	4420.3
17°	4201.0	4206.2	4223.1	4245.7	4263.8	4245.7	4223.1	4206.2	4201.0	4206.2	4223.1
17.5°	4015.5	4020.8	4037.3	4055.8	4072.0	4055.8	4037.3	4020.8	4015.5	4020.8	4037.3
18°	3842.6	3847.0	3858.3	3876.0	3892.2	3876.0	3858.3	3847.0	3842.6	3847.0	3858.3
18.5°	3680.5	3681.7	3693.0	3714.8	3719.6	3714.8	3693.0	3681.7	3680.5	3681.7	3693.0
19°	3524.9	3528.1	3544.7	3565.2	3566.0	3565.2	3544.7	3528.1	3524.9	3528.1	3544.7
19.5°	3381.0	3389.9	3404.8	3422.5	3424.1	3422.5	3404.8	3389.9	3381.0	3389.9	3404.8
20°	3256.4	3258.5	3271.0	3289.1	3291.1	3289.1	3271.0	3258.5	3256.4	3258.5	3271.0
20.5°	3137.1	3140.3	3146.8	3162.9	3166.9	3162.9	3146.8	3140.3	3137.1	3140.3	3146.8
21°	3021.8	3027.1	3041.6	3051.3	3056.9	3051.3	3041.6	3027.1	3021.8	3027.1	3041.6



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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°	2737.2	2740.4	2758.2	2774.3	2789.6	2774.3	2758.2	2740.4	2737.2	2740.4	2758.2
23°	2658.6	2661.8	2673.1	2692.5	2709.8	2692.5	2673.1	2661.8	2658.6	2661.8	2673.1
23.5°	2584.4	2586.9	2597.7	2612.2	2631.6	2612.2	2597.7	2586.9	2584.4	2586.9	2597.7
24°	2514.3	2516.7	2526.4	2541.7	2554.6	2541.7	2526.4	2516.7	2514.3	2516.7	2526.4
24.5°	2449.4	2450.6	2458.3	2474.8	2485.3	2474.8	2458.3	2450.6	2449.4	2450.6	2458.3
25°	2387.3	2388.5	2394.6	2411.5	2421.2	2411.5	2394.6	2388.5	2387.3	2388.5	2394.6
25.5°	2327.6	2328.4	2334.9	2351.0	2359.9	2351.0	2334.9	2328.4	2327.6	2328.4	2334.9
26°	2270.4	2271.2	2277.3	2293.4	2302.2	2293.4	2277.3	2271.2	2270.4	2271.2	2277.3
26.5°	2214.4	2215.6	2221.2	2236.5	2245.4	2236.5	2221.2	2215.6	2214.4	2215.6	2221.2
27°	2162.0	2163.2	2168.0	2182.9	2193.0	2182.9	2168.0	2163.2	2162.0	2163.2	2168.0
27.5°	2112.4	2113.2	2117.6	2131.3	2141.0	2131.3	2117.6	2113.2	2112.4	2113.2	2117.6
28°	2064.4	2064.8	2069.6	2082.1	2091.0	2082.1	2069.6	2064.8	2064.4	2064.8	2069.6
28.5°	2018.0	2018.0	2022.9	2034.2	2043.4	2034.2	2022.9	2018.0	2018.0	2018.0	2022.9
29°	1973.3	1972.9	1976.9	1988.2	1996.7	1988.2	1976.9	1972.9	1973.3	1972.9	1976.9
29.5°	1928.5	1928.5	1933.4	1943.1	1951.5	1943.1	1933.4	1928.5	1928.5	1928.5	1933.4
30°	1886.2	1886.2	1891.1	1900.3	1909.2	1900.3	1891.1	1886.2	1886.2	1886.2	1891.1
30.5°	1845.5	1845.5	1849.9	1858.8	1867.3	1858.8	1849.9	1845.5	1845.5	1845.5	1849.9
31°	1806.8	1806.4	1811.6	1819.7	1828.2	1819.7	1811.6	1806.4	1806.8	1806.4	1811.6
31.5°	1769.7	1768.9	1773.3	1780.6	1789.1	1780.6	1773.3	1768.9	1769.7	1768.9	1773.3
32°	1734.2	1733.4	1737.5	1743.5	1749.6	1743.5	1737.5	1733.4	1734.2	1733.4	1737.5
32.5°	1698.8	1698.4	1700.0	1704.8	1708.8	1704.8	1700.0	1698.4	1698.8	1698.4	1700.0
33°	1662.1	1660.9	1660.9	1664.5	1668.1	1664.5	1660.9	1660.9	1662.1	1660.9	1660.9
33.5°	1623.0	1621.0	1621.4	1623.0	1628.2	1623.0	1621.4	1621.0	1623.0	1621.0	1621.4
34°	1581.5	1579.4	1579.4	1578.2	1583.9	1578.2	1579.4	1579.4	1581.5	1579.4	1579.4
34.5°	1538.3	1535.9	1536.7	1535.1	1539.9	1535.1	1536.7	1535.9	1538.3	1535.9	1536.7
35°	1493.2	1492.4	1492.0	1492.0	1494.4	1492.0	1492.0	1492.4	1493.2	1492.4	1492.0
35.5°	1447.2	1446.0	1445.6	1448.0	1448.0	1448.0	1445.6	1446.0	1447.2	1446.0	1445.6
36°	1400.1	1399.6	1399.6	1402.5	1400.5	1402.5	1399.6	1399.6	1400.1	1399.6	1399.6
36.5°	1350.9	1352.5	1352.5	1356.5	1353.3	1356.5	1352.5	1352.5	1350.9	1352.5	1352.5
37°	1301.3	1303.7	1305.3	1308.9	1304.9	1308.9	1305.3	1303.7	1301.3	1303.7	1305.3
37.5°	1252.5	1254.1	1259.4	1260.2	1256.9	1260.2	1259.4	1254.1	1252.5	1254.1	1259.4
38°	1203.3	1203.7	1210.2	1209.4	1209.0	1209.4	1210.2	1203.7	1203.3	1203.7	1210.2
38.5°	1153.3	1152.5	1160.2	1158.2	1159.8	1158.2	1160.2	1152.5	1153.3	1152.5	1160.2
39°	1100.9	1101.7	1110.2	1106.6	1111.0	1106.6	1110.2	1101.7	1100.9	1101.7	1110.2
39.5°	1047.7	1050.1	1059.8	1055.8	1060.6	1055.8	1059.8	1050.1	1047.7	1050.1	1059.8
40°	994.5	998.9	1009.0	1005.4	1010.2	1005.4	1009.0	998.9	994.5	998.9	1009.0
40.5°	943.7	948.1	957.4	956.6	959.8	956.6	957.4	948.1	943.7	948.1	957.4
41°	893.7	897.8	905.8	907.4	909.4	907.4	905.8	897.8	893.7	897.8	905.8
41.5°	844.5	848.2	854.2	859.5	860.3	859.5	854.2	848.2	844.5	848.2	854.2
42°	795.8	798.6	803.4	811.1	811.9	811.1	803.4	798.6	795.8	798.6	803.4
42.5°	748.2	750.2	753.4	763.5	765.5	763.5	753.4	750.2	748.2	750.2	753.4
43°	700.2	701.8	704.3	715.5	719.2	715.5	704.3	701.8	700.2	701.8	704.3
43.5°	653.1	653.5	656.7	668.0	673.2	668.0	656.7	653.5	653.1	653.5	656.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	514.8	516.0	521.6	533.7	540.2	533.7	521.6	516.0	514.8	516.0	521.6
45.5°	472.1	473.7	479.3	491.8	497.5	491.8	479.3	473.7	472.1	473.7	479.3
46°	431.7	432.1	438.2	449.9	456.3	449.9	438.2	432.1	431.7	432.1	438.2
46.5°	391.8	392.6	397.9	408.8	416.8	408.8	397.9	392.6	391.8	392.6	397.9
47°	353.1	353.9	360.0	370.5	378.5	370.5	360.0	353.9	353.1	353.9	360.0
47.5°	314.8	317.3	324.5	333.4	343.1	333.4	324.5	317.3	314.8	317.3	324.5
48°	280.2	281.8	290.2	299.1	307.6	299.1	290.2	281.8	280.2	281.8	290.2
48.5°	246.7	248.3	257.6	266.9	275.7	266.9	257.6	248.3	246.7	248.3	257.6
49°	215.7	217.3	227.0	236.2	246.7	236.2	227.0	217.3	215.7	217.3	227.0
49.5°	186.2	189.5	198.3	207.6	218.1	207.6	198.3	189.5	186.2	189.5	198.3
50°	159.2	162.9	172.1	180.6	189.5	180.6	172.1	162.9	159.2	162.9	172.1
50.5°	134.2	139.9	147.9	155.2	160.8	155.2	147.9	139.9	134.2	139.9	147.9
51°	112.5	118.1	125.4	131.4	134.6	131.4	125.4	118.1	112.5	118.1	125.4
51.5°	94.7	98.8	104.0	110.5	112.9	110.5	104.0	98.8	94.7	98.8	104.0
52°	78.6	82.2	86.3	91.9	93.1	91.9	86.3	82.2	78.6	82.2	86.3
52.5°	64.5	66.1	70.9	75.8	75.0	75.8	70.9	66.1	64.5	66.1	70.9
53°	50.4	53.2	56.4	60.5	59.7	60.5	56.4	53.2	50.4	53.2	56.4
53.5°	36.3	40.3	43.5	46.4	46.0	46.4	43.5	40.3	36.3	40.3	43.5
54°	26.2	27.8	31.4	35.1	37.9	35.1	31.4	27.8	26.2	27.8	31.4
54.5°	16.5	18.5	22.6	25.0	29.8	25.0	22.6	18.5	16.5	18.5	22.6
55°	10.1	11.7	15.3	17.3	21.8	17.3	15.3	11.7	10.1	11.7	15.3
55.5°	7.3	7.3	8.9	10.9	14.1	10.9	8.9	7.3	7.3	7.3	8.9
56°	5.2	4.8	5.6	6.9	7.3	6.9	5.6	4.8	5.2	4.8	5.6
56.5°	3.6	3.2	4.0	5.2	4.0	5.2	4.0	3.2	3.6	3.2	4.0
57°	2.0	2.8	2.8	3.6	2.4	3.6	2.8	2.8	2.0	2.8	2.8
57.5°	2.0	2.0	2.0	2.8	2.0	2.8	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: P776363

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

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: P776363
CATALOG NUMBER: HCDJBL3040CSD-HCD62TRC-4000lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P776363

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

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	9125.9	9125.9	9125.9	9125.9	9125.9	9125.9
0.5°	9116.7	9130.8	9116.7	9115.1	9115.1	9115.1
1°	9090.1	9099.7	9090.1	9089.7	9090.9	9090.9
1.5°	9045.7	9051.8	9045.7	9047.7	9051.0	9051.4
2°	8989.7	8990.5	8989.7	8994.5	8999.0	9001.4
2.5°	8925.6	8923.2	8925.6	8933.6	8940.1	8941.7
3°	8858.7	8854.2	8858.7	8869.5	8876.8	8878.8
3.5°	8793.8	8788.1	8793.8	8804.6	8813.1	8815.9
4°	8732.5	8726.8	8732.5	8741.0	8749.0	8753.4
4.5°	8673.2	8668.8	8673.2	8678.9	8684.9	8688.9
5°	8614.0	8613.2	8614.0	8616.4	8620.0	8622.8
5.5°	8551.5	8554.7	8551.5	8549.9	8549.9	8551.5
6°	8483.0	8486.6	8483.0	8476.5	8474.1	8474.1
6.5°	8401.5	8406.4	8401.5	8394.7	8389.8	8387.8
7°	8305.6	8311.2	8305.6	8298.3	8293.9	8289.9
7.5°	8191.5	8194.7	8191.5	8186.3	8180.6	8179.0
8°	8059.7	8061.3	8059.7	8056.4	8053.2	8052.4
8.5°	7907.3	7904.5	7907.3	7908.1	7907.7	7907.7
9°	7739.6	7737.2	7739.6	7745.2	7748.9	7749.3
9.5°	7558.2	7551.7	7558.2	7566.2	7575.5	7576.7
10°	7361.1	7351.0	7361.1	7376.0	7389.3	7393.3
10.5°	7156.7	7142.2	7156.7	7174.8	7189.7	7198.2
11°	6948.3	6935.0	6948.3	6963.2	6982.5	6989.8
11.5°	6729.0	6718.5	6729.0	6750.7	6767.3	6773.7
12°	6504.4	6490.7	6504.4	6524.6	6544.7	6550.0
12.5°	6270.6	6258.5	6270.6	6290.0	6306.1	6314.9
13°	6038.4	6031.1	6038.4	6049.7	6064.6	6069.0
13.5°	5801.0	5797.3	5801.0	5805.0	5808.6	5805.4
14°	5560.7	5565.1	5560.7	5555.1	5550.6	5545.0
14.5°	5325.3	5335.8	5325.3	5310.8	5295.8	5287.0
15°	5090.3	5103.2	5090.3	5071.3	5051.2	5043.9
15.5°	4862.5	4878.2	4862.5	4841.5	4823.8	4814.1
16°	4647.6	4665.8	4647.6	4622.6	4606.9	4600.9
16.5°	4442.8	4460.2	4442.8	4420.3	4401.3	4396.5
17°	4245.7	4263.8	4245.7	4223.1	4206.2	4201.0
17.5°	4055.8	4072.0	4055.8	4037.3	4020.8	4015.5
18°	3876.0	3892.2	3876.0	3858.3	3847.0	3842.6
18.5°	3714.8	3719.6	3714.8	3693.0	3681.7	3680.5
19°	3565.2	3566.0	3565.2	3544.7	3528.1	3524.9
19.5°	3422.5	3424.1	3422.5	3404.8	3389.9	3381.0
20°	3289.1	3291.1	3289.1	3271.0	3258.5	3256.4
20.5°	3162.9	3166.9	3162.9	3146.8	3140.3	3137.1
21°	3051.3	3056.9	3051.3	3041.6	3027.1	3021.8

TEST NUMBER: P776363

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

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	2774.3	2789.6	2774.3	2758.2	2740.4	2737.2
23°	2692.5	2709.8	2692.5	2673.1	2661.8	2658.6
23.5°	2612.2	2631.6	2612.2	2597.7	2586.9	2584.4
24°	2541.7	2554.6	2541.7	2526.4	2516.7	2514.3
24.5°	2474.8	2485.3	2474.8	2458.3	2450.6	2449.4
25°	2411.5	2421.2	2411.5	2394.6	2388.5	2387.3
25.5°	2351.0	2359.9	2351.0	2334.9	2328.4	2327.6
26°	2293.4	2302.2	2293.4	2277.3	2271.2	2270.4
26.5°	2236.5	2245.4	2236.5	2221.2	2215.6	2214.4
27°	2182.9	2193.0	2182.9	2168.0	2163.2	2162.0
27.5°	2131.3	2141.0	2131.3	2117.6	2113.2	2112.4
28°	2082.1	2091.0	2082.1	2069.6	2064.8	2064.4
28.5°	2034.2	2043.4	2034.2	2022.9	2018.0	2018.0
29°	1988.2	1996.7	1988.2	1976.9	1972.9	1973.3
29.5°	1943.1	1951.5	1943.1	1933.4	1928.5	1928.5
30°	1900.3	1909.2	1900.3	1891.1	1886.2	1886.2
30.5°	1858.8	1867.3	1858.8	1849.9	1845.5	1845.5
31°	1819.7	1828.2	1819.7	1811.6	1806.4	1806.8
31.5°	1780.6	1789.1	1780.6	1773.3	1768.9	1769.7
32°	1743.5	1749.6	1743.5	1737.5	1733.4	1734.2
32.5°	1704.8	1708.8	1704.8	1700.0	1698.4	1698.8
33°	1664.5	1668.1	1664.5	1660.9	1660.9	1662.1
33.5°	1623.0	1628.2	1623.0	1621.4	1621.0	1623.0
34°	1578.2	1583.9	1578.2	1579.4	1579.4	1581.5
34.5°	1535.1	1539.9	1535.1	1536.7	1535.9	1538.3
35°	1492.0	1494.4	1492.0	1492.0	1492.4	1493.2
35.5°	1448.0	1448.0	1448.0	1445.6	1446.0	1447.2
36°	1402.5	1400.5	1402.5	1399.6	1399.6	1400.1
36.5°	1356.5	1353.3	1356.5	1352.5	1352.5	1350.9
37°	1308.9	1304.9	1308.9	1305.3	1303.7	1301.3
37.5°	1260.2	1256.9	1260.2	1259.4	1254.1	1252.5
38°	1209.4	1209.0	1209.4	1210.2	1203.7	1203.3
38.5°	1158.2	1159.8	1158.2	1160.2	1152.5	1153.3
39°	1106.6	1111.0	1106.6	1110.2	1101.7	1100.9
39.5°	1055.8	1060.6	1055.8	1059.8	1050.1	1047.7
40°	1005.4	1010.2	1005.4	1009.0	998.9	994.5
40.5°	956.6	959.8	956.6	957.4	948.1	943.7
41°	907.4	909.4	907.4	905.8	897.8	893.7
41.5°	859.5	860.3	859.5	854.2	848.2	844.5
42°	811.1	811.9	811.1	803.4	798.6	795.8
42.5°	763.5	765.5	763.5	753.4	750.2	748.2
43°	715.5	719.2	715.5	704.3	701.8	700.2
43.5°	668.0	673.2	668.0	656.7	653.5	653.1



TEST NUMBER: P776363

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

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	533.7	540.2	533.7	521.6	516.0	514.8
45.5°	491.8	497.5	491.8	479.3	473.7	472.1
46°	449.9	456.3	449.9	438.2	432.1	431.7
46.5°	408.8	416.8	408.8	397.9	392.6	391.8
47°	370.5	378.5	370.5	360.0	353.9	353.1
47.5°	333.4	343.1	333.4	324.5	317.3	314.8
48°	299.1	307.6	299.1	290.2	281.8	280.2
48.5°	266.9	275.7	266.9	257.6	248.3	246.7
49°	236.2	246.7	236.2	227.0	217.3	215.7
49.5°	207.6	218.1	207.6	198.3	189.5	186.2
50°	180.6	189.5	180.6	172.1	162.9	159.2
50.5°	155.2	160.8	155.2	147.9	139.9	134.2
51°	131.4	134.6	131.4	125.4	118.1	112.5
51.5°	110.5	112.9	110.5	104.0	98.8	94.7
52°	91.9	93.1	91.9	86.3	82.2	78.6
52.5°	75.8	75.0	75.8	70.9	66.1	64.5
53°	60.5	59.7	60.5	56.4	53.2	50.4
53.5°	46.4	46.0	46.4	43.5	40.3	36.3
54°	35.1	37.9	35.1	31.4	27.8	26.2
54.5°	25.0	29.8	25.0	22.6	18.5	16.5
55°	17.3	21.8	17.3	15.3	11.7	10.1
55.5°	10.9	14.1	10.9	8.9	7.3	7.3
56°	6.9	7.3	6.9	5.6	4.8	5.2
56.5°	5.2	4.0	5.2	4.0	3.2	3.6
57°	3.6	2.4	3.6	2.8	2.8	2.0
57.5°	2.8	2.0	2.8	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: P776363
 CATALOG NUMBER: HCDJBL3040CSD-HCD62TRC-4000lm-4000K

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: P776363

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

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.0	0.0	0.0	0.0	0.0

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

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report





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

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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



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Peachtree City, GA 30269

Scaled Data Report





21.5°	2913.0	2924.7	2942.0	2952.5	2955.7	2952.5	2942.0	2924.7	2913.0	2924.7	2942.0
22°	2823.5	2829.9	2847.3	2861.4	2871.1	2861.4	2847.3	2829.9	2823.5	2829.9	2847.3



44°	605.1	606.3	609.9	621.2	628.1	621.2	609.9	606.3	605.1	606.3	609.9
44.5°	559.5	560.7	564.4	577.3	583.7	577.3	564.4	560.7	559.5	560.7	564.4



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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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report





21.5°	2952.5	2955.7	2952.5	2942.0	2924.7	2913.0
22°	2861.4	2871.1	2861.4	2847.3	2829.9	2823.5



44°	621.2	628.1	621.2	609.9	606.3	605.1
44.5°	577.3	583.7	577.3	564.4	560.7	559.5

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Peachtree City, GA 30269

Scaled Data Report



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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Peachtree City, GA 30269

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)