

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: P776572

Luminaire Tested: HCDJBS4050CSD-HCD42TRC-5000lm-3500K

Issue Date: 2/13/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P776572  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2312156B049)  
Test Lab:  
Issue Date: 2/13/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCDJBS4050CSD-HCD42TRC-5000lm-3500K  
Description: 4 INCH ROUND NARROW SPECULAR CLEAR TRIM  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

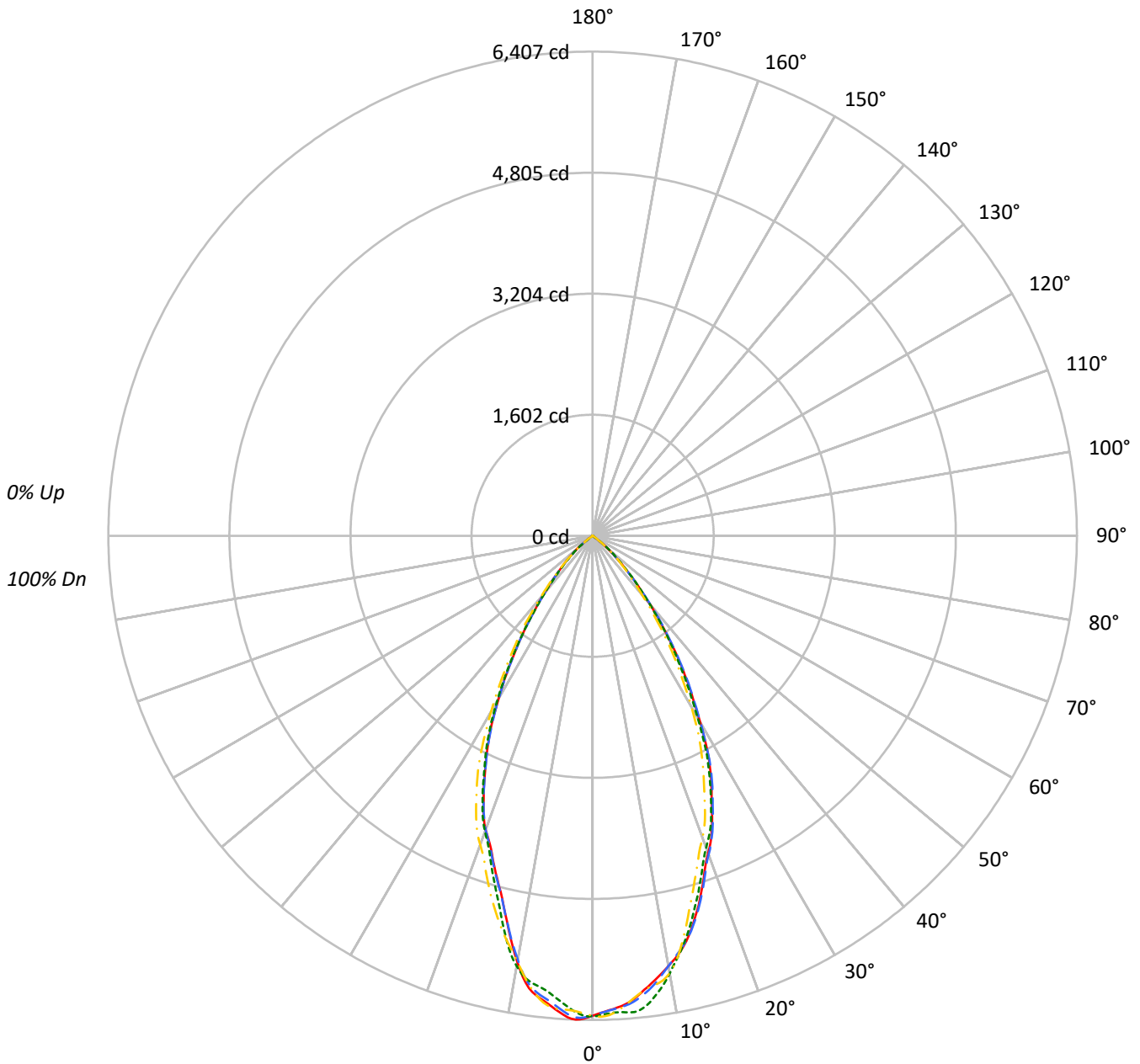
Lumens per Lamp: N/A  
Luminaire Lumens: 5227.6 lumens  
Efficiency: N/A  
Efficacy: 108.9 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 0.81 / 0.84  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 48  
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



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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								
1	114	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93								
2	108	103	99	96	106	101	98	94	98	95	92	95	93	90	92	90	89	87								
3	102	96	91	87	100	95	90	86	92	88	85	89	86	84	87	85	82	81								
4	97	90	84	80	95	88	83	79	86	82	78	84	80	77	82	79	76	75								
5	92	84	78	74	90	83	77	73	81	76	73	79	75	72	78	74	71	70								
6	87	78	72	68	86	78	72	68	76	71	67	75	70	67	73	70	66	65								
7	83	74	68	63	82	73	67	63	72	67	63	71	66	63	69	65	62	61								
8	79	69	63	59	78	69	63	59	68	62	59	67	62	59	66	61	58	57								
9	75	65	59	55	74	65	59	55	64	59	55	63	58	55	62	58	55	53								
10	72	62	56	52	71	61	56	52	61	55	52	60	55	52	59	55	52	50								

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

	0°	90°	180°	270°
0°	799499	799499	799499	799499
5°	778284	799331	789616	770768
10°	738787	751157	732282	739336
15°	681843	672436	624294	638808
20°	598357	588192	554242	557844
25°	516934	512476	465417	470263
30°	413069	403943	362323	367671
35°	301185	292627	255217	256969
40°	192509	190883	163677	160030
45°	107517	110453	97853	95076
50°	48888	52197	48516	46656
55°	2896	2787	2282	2589
60°	831	1057	956	956
65°	417	566	566	566
70°	331	331	331	331
75°	243	243	243	243
80°	0	0	0	0
85°	0	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 110453 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	579.7	11.1
10°-20°	1402.6	26.8
20°-30°	1609.0	30.8
30°-40°	1124.7	21.5
40°-50°	458.8	8.8
50°-60°	50.5	1.0
60°-70°	1.9	0.0
70°-80°	0.5	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	3591.3	68.7
0°-40°	4716.0	90.2
0°-60°	5225.2	100.0
0°-90°	5227.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5227.6	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	6353	6353	6353	6353	6353	
5°	6161	6327	6250	6101	6161	575
15°	5233	5161	4792	4903	5233	1451
25°	3723	3691	3352	3387	3723	1695
35°	1960	1905	1661	1673	1960	1217
45°	604	621	550	534	604	484
55°	13	13	10	12	13	49
65°	1	2	2	2	1	2
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°	6352.8	6352.8	6352.8	6352.8	6352.8	6352.8	6352.8	6352.8	6352.8	6352.8	6352.8
0.5°	6332.5	6332.0	6332.0	6333.4	6355.6	6357.5	6363.1	6368.8	6371.2	6370.7	6364.6
1°	6315.5	6314.1	6316.4	6320.2	6344.3	6352.3	6365.5	6379.7	6389.1	6388.6	6376.8
1.5°	6299.0	6297.1	6301.3	6308.9	6333.9	6342.4	6359.8	6382.5	6401.8	6402.8	6382.5
2°	6283.4	6279.1	6287.2	6300.9	6323.5	6328.7	6345.2	6374.9	6406.6	6410.3	6377.8
2.5°	6268.3	6260.3	6273.0	6296.1	6316.9	6313.1	6322.6	6355.1	6397.6	6406.6	6361.7
3°	6252.7	6238.1	6260.3	6296.1	6314.5	6296.1	6294.7	6327.3	6378.2	6389.1	6335.8
3.5°	6235.7	6212.6	6246.6	6301.8	6316.4	6278.7	6262.2	6294.2	6350.9	6364.6	6304.6
4°	6216.4	6185.2	6231.9	6309.3	6322.6	6259.3	6225.8	6257.4	6319.3	6332.9	6271.6
4.5°	6191.4	6151.2	6214.0	6317.8	6327.3	6236.7	6187.6	6219.7	6285.3	6299.9	6237.1
5°	6160.7	6114.4	6192.8	6321.1	6327.3	6208.4	6149.4	6182.4	6250.4	6267.3	6203.6
5.5°	6124.8	6075.7	6164.5	6314.5	6316.4	6175.3	6112.1	6148.9	6218.3	6233.8	6172.5
6°	6087.1	6037.0	6131.4	6296.1	6292.8	6136.6	6078.6	6119.2	6188.5	6200.8	6144.2
6.5°	6047.9	6002.6	6096.0	6264.0	6260.3	6100.7	6050.3	6094.6	6159.3	6168.2	6116.3
7°	6011.6	5973.8	6059.2	6219.7	6219.7	6065.8	6029.0	6073.4	6126.7	6132.4	6086.1
7.5°	5974.3	5948.3	6020.0	6164.0	6172.0	6032.3	6012.5	6054.0	6090.4	6087.5	6049.3
8°	5938.4	5925.7	5977.6	6097.4	6122.0	6001.6	5996.9	6030.9	6043.6	6031.4	6002.1
8.5°	5898.3	5905.8	5929.9	6020.5	6067.2	5969.6	5980.4	6000.2	5981.3	5962.0	5941.7
9°	5859.1	5887.4	5880.4	5938.9	6009.7	5934.6	5954.4	5958.2	5907.7	5879.4	5871.9
9.5°	5819.0	5870.0	5830.8	5857.2	5944.5	5898.8	5919.5	5903.5	5820.4	5784.6	5787.9
10°	5781.2	5854.9	5781.2	5776.5	5878.0	5858.6	5875.2	5837.4	5730.3	5682.6	5701.0
10.5°	5741.6	5839.8	5733.6	5704.3	5810.0	5813.3	5818.1	5763.3	5635.4	5571.2	5611.3
11°	5702.9	5822.3	5688.3	5637.8	5742.5	5761.0	5751.5	5682.6	5537.3	5458.9	5520.3
11.5°	5660.0	5796.3	5643.0	5578.8	5678.4	5700.5	5672.2	5598.6	5435.3	5346.1	5424.5
12°	5614.2	5757.7	5598.1	5525.0	5611.3	5631.2	5588.2	5512.2	5335.7	5231.9	5327.2
12.5°	5561.8	5704.8	5550.9	5475.4	5542.9	5551.9	5494.3	5422.6	5234.7	5121.9	5228.1
13°	5507.1	5640.1	5503.3	5425.9	5474.5	5468.4	5399.4	5330.5	5134.7	5019.5	5136.1
13.5°	5443.8	5567.0	5448.1	5371.6	5400.4	5376.3	5300.8	5232.4	5039.4	4922.8	5042.2
14°	5378.2	5487.2	5388.6	5311.2	5321.1	5282.9	5203.6	5141.8	4949.2	4835.5	4953.9
14.5°	5307.4	5404.2	5323.0	5248.4	5241.3	5186.1	5107.3	5048.3	4865.2	4752.9	4872.8
15°	5233.3	5316.4	5253.6	5182.4	5161.1	5092.7	5017.2	4961.5	4791.6	4676.4	4799.6
15.5°	5160.2	5233.3	5180.9	5116.8	5080.9	5004.9	4930.3	4876.1	4717.5	4606.6	4727.9
16°	5084.2	5148.4	5106.4	5047.4	5001.6	4919.5	4844.4	4793.5	4646.2	4537.7	4657.1
16.5°	5005.9	5060.6	5029.4	4974.7	4922.3	4833.6	4757.1	4707.6	4571.7	4468.3	4583.0
17°	4922.8	4972.3	4949.2	4896.8	4839.7	4747.7	4675.0	4621.7	4498.5	4398.9	4510.3
17.5°	4840.7	4881.3	4867.6	4818.5	4755.7	4661.3	4592.4	4536.7	4424.0	4330.5	4436.2
18°	4755.7	4791.6	4782.6	4738.7	4675.0	4575.9	4511.7	4457.0	4353.6	4266.3	4367.3
18.5°	4673.1	4705.2	4698.6	4659.4	4593.4	4495.7	4434.8	4378.6	4291.3	4209.2	4302.2
19°	4596.2	4625.0	4619.8	4585.4	4519.3	4423.0	4366.8	4313.0	4237.1	4159.7	4248.4
19.5°	4528.7	4554.2	4549.5	4521.2	4450.4	4361.2	4307.4	4253.6	4188.0	4112.5	4193.2
20°	4467.8	4490.0	4487.2	4463.6	4391.9	4303.6	4251.2	4196.0	4138.4	4062.4	4138.4
20.5°	4413.1	4429.6	4429.6	4411.2	4337.1	4246.5	4192.2	4132.8	4081.3	4003.9	4075.7
21°	4350.8	4365.4	4365.4	4356.5	4281.9	4184.2	4122.9	4061.0	4015.3	3937.9	4005.8



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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°	4130.9	4146.0	4153.5	4168.2	4090.8	3973.3	3882.6	3799.1	3768.9	3703.8	3769.8
23°	4043.6	4064.3	4070.9	4092.7	4012.4	3893.5	3793.4	3705.7	3685.4	3627.3	3684.9
23.5°	3958.6	3984.6	3990.2	4016.2	3931.7	3816.6	3702.8	3619.8	3601.8	3550.4	3600.4
24°	3876.5	3905.3	3908.1	3934.6	3852.0	3741.5	3625.0	3533.9	3518.8	3473.9	3515.9
24.5°	3798.2	3831.2	3831.7	3850.1	3770.3	3662.2	3547.1	3448.0	3435.2	3397.0	3431.5
25°	3722.7	3758.0	3752.4	3760.4	3690.6	3585.8	3469.2	3362.1	3351.7	3320.1	3346.5
25.5°	3650.4	3686.8	3678.3	3674.0	3608.0	3509.8	3391.4	3281.9	3271.9	3245.0	3262.0
26°	3574.5	3615.0	3599.0	3582.0	3525.4	3433.4	3313.5	3204.5	3193.6	3164.8	3183.2
26.5°	3496.6	3539.5	3519.2	3491.9	3442.3	3356.9	3235.6	3125.2	3111.0	3082.2	3100.2
27°	3414.9	3458.4	3432.9	3396.1	3359.3	3268.6	3155.9	3046.8	3028.4	2997.3	3016.2
27.5°	3329.5	3374.4	3344.2	3305.5	3276.2	3181.3	3072.8	2965.2	2943.0	2910.0	2931.2
28°	3238.0	3286.1	3249.8	3210.6	3177.6	3090.3	2987.8	2876.5	2855.7	2820.8	2842.5
28.5°	3141.7	3195.0	3151.1	3120.0	3076.6	2997.3	2894.4	2786.8	2763.7	2726.4	2750.9
29°	3040.2	3105.4	3050.6	3026.1	2976.5	2905.3	2800.5	2696.2	2673.5	2632.9	2661.7
29.5°	2942.1	3010.5	2951.0	2935.0	2877.4	2809.9	2705.2	2601.8	2583.4	2539.5	2570.2
30°	2842.5	2914.7	2853.8	2843.4	2779.7	2714.6	2610.8	2509.3	2493.3	2450.8	2480.0
30.5°	2744.8	2818.9	2758.5	2752.3	2683.4	2620.2	2515.9	2421.0	2403.6	2358.3	2389.4
31°	2650.4	2721.2	2666.5	2658.4	2595.2	2531.0	2424.8	2336.1	2316.7	2270.0	2304.9
31.5°	2558.9	2626.8	2579.1	2567.3	2497.5	2439.9	2338.5	2251.6	2230.9	2184.1	2218.1
32°	2470.6	2532.9	2492.8	2475.8	2409.2	2350.3	2253.0	2170.9	2145.0	2106.3	2134.1
32.5°	2383.8	2439.0	2407.8	2386.1	2320.5	2257.3	2169.0	2088.3	2057.7	2023.7	2051.0
33°	2300.2	2347.9	2325.2	2298.3	2239.3	2170.0	2085.0	2008.6	1975.1	1945.3	1968.0
33.5°	2215.8	2257.8	2238.9	2212.9	2149.2	2080.8	2003.9	1930.2	1891.5	1867.0	1887.8
34°	2131.3	2168.1	2153.5	2129.9	2064.3	1996.8	1921.7	1850.9	1815.1	1794.8	1807.5
34.5°	2045.4	2077.0	2067.6	2048.7	1983.1	1909.9	1840.1	1768.8	1736.3	1718.3	1731.1
35°	1960.4	1987.8	1982.6	1966.1	1904.7	1827.3	1756.1	1690.0	1661.2	1645.2	1655.6
35.5°	1876.4	1900.5	1898.1	1885.4	1823.6	1745.2	1674.4	1613.1	1587.6	1572.5	1581.5
36°	1792.9	1815.1	1813.2	1803.7	1744.8	1668.8	1592.8	1537.6	1517.3	1503.6	1507.4
36.5°	1707.5	1731.1	1731.1	1719.3	1667.8	1586.7	1511.6	1459.2	1444.1	1431.9	1435.6
37°	1628.7	1653.2	1652.3	1640.9	1595.2	1509.7	1432.3	1383.3	1373.3	1366.7	1364.8
37.5°	1549.8	1575.3	1573.4	1562.6	1516.8	1434.2	1357.3	1312.9	1304.0	1301.6	1296.4
38°	1471.0	1497.0	1495.1	1483.8	1444.1	1363.9	1284.1	1242.6	1238.4	1238.4	1228.9
38.5°	1392.2	1419.1	1416.3	1405.4	1371.5	1293.1	1214.8	1173.2	1174.7	1177.0	1165.2
39°	1313.4	1341.2	1337.5	1327.1	1303.0	1225.2	1147.3	1105.8	1112.8	1118.5	1103.4
39.5°	1240.3	1267.2	1263.4	1256.3	1228.9	1160.0	1081.7	1041.1	1052.4	1060.0	1044.4
40°	1171.8	1196.4	1189.8	1187.9	1161.9	1097.7	1018.4	977.9	996.3	1004.8	986.4
40.5°	1103.4	1128.4	1117.1	1122.3	1096.3	1037.3	957.6	918.9	942.9	951.4	933.0
41°	1035.4	1063.3	1049.6	1057.1	1034.5	980.2	900.5	861.8	891.5	901.4	881.1
41.5°	971.2	999.1	984.5	994.4	973.1	924.5	846.7	810.8	842.4	852.8	831.6
42°	913.7	939.6	923.6	933.0	918.4	872.1	796.2	762.2	794.3	806.5	784.4
42.5°	857.0	881.1	864.1	872.1	862.7	822.1	749.4	718.8	750.4	762.2	738.6
43°	802.3	824.0	808.0	815.5	810.8	773.5	706.0	678.2	707.0	719.2	695.6
43.5°	747.6	767.4	754.6	759.3	760.3	726.8	665.0	640.9	665.0	677.2	654.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	604.1	614.0	609.3	611.6	620.6	601.2	555.0	535.7	549.8	559.7	542.7
45.5°	557.4	567.7	564.4	569.2	579.1	560.2	521.5	504.0	514.9	522.9	508.7
46°	517.2	525.7	522.4	528.1	537.1	522.0	488.5	472.9	480.9	487.0	475.7
46.5°	475.7	483.7	481.4	487.5	498.8	486.1	457.8	443.6	449.8	454.9	445.0
47°	438.4	444.1	443.2	450.2	461.6	453.5	427.6	414.4	419.1	423.3	414.8
47.5°	399.7	405.4	405.4	413.9	427.1	420.5	397.4	385.1	387.9	391.2	384.2
48°	365.8	370.5	370.0	378.5	392.7	387.9	367.2	355.8	356.8	359.1	354.0
48.5°	333.2	337.4	337.4	345.9	358.2	354.9	337.0	327.1	326.1	327.1	323.7
49°	304.9	307.2	307.2	314.8	324.2	322.3	309.6	300.2	299.2	300.6	297.3
49.5°	277.0	278.0	278.4	284.1	294.5	293.5	283.6	274.7	272.8	274.7	271.8
50°	249.7	249.7	250.1	255.8	266.6	265.7	255.8	248.7	247.8	249.2	245.9
50.5°	220.9	220.9	220.4	225.6	237.4	236.4	228.4	221.3	221.3	222.3	219.0
51°	189.7	189.2	188.3	192.6	205.3	204.8	197.3	191.1	191.6	191.6	188.3
51.5°	155.3	154.8	154.3	154.8	171.3	170.8	165.7	160.5	160.9	160.0	157.2
52°	127.0	126.5	126.5	127.0	136.4	134.5	130.7	127.9	128.4	126.5	123.6
52.5°	98.6	98.2	99.1	99.1	104.3	101.5	98.6	97.2	96.3	95.3	93.0
53°	70.3	70.3	71.3	70.8	85.9	83.5	80.7	79.8	78.8	78.3	76.5
53.5°	42.0	42.5	43.9	43.4	67.5	65.6	63.2	62.3	61.8	61.4	59.5
54°	25.5	26.0	26.9	26.9	48.6	47.2	45.8	44.8	44.8	44.4	42.9
54.5°	15.1	15.6	16.5	16.0	30.2	29.3	28.3	27.8	27.8	27.4	26.0
55°	13.2	13.2	13.7	13.7	12.7	11.8	10.9	10.4	10.4	10.4	10.4
55.5°	10.9	10.9	11.3	11.3	9.9	9.4	8.5	8.5	8.0	8.0	8.5
56°	8.5	8.5	9.0	9.4	8.5	8.0	7.6	7.1	7.1	7.1	7.6
56.5°	6.1	6.1	6.6	7.1	7.6	7.1	6.6	6.6	6.1	6.6	6.6
57°	5.7	5.7	6.1	6.6	7.1	6.6	6.1	5.7	5.7	5.7	6.1
57.5°	5.2	5.2	5.7	6.1	6.1	6.1	5.7	5.2	5.2	5.2	5.7
58°	4.7	4.7	5.2	5.7	5.7	5.7	5.2	5.2	4.7	4.7	5.2
58.5°	4.2	4.2	4.7	5.2	5.2	5.2	4.7	4.7	4.2	4.7	4.7
59°	3.8	4.2	4.2	4.7	5.2	4.7	4.2	4.2	4.2	4.2	4.2
59.5°	3.8	3.8	4.2	4.2	4.7	4.2	4.2	3.8	3.8	3.8	4.2
60°	3.3	3.3	3.8	4.2	4.2	4.2	3.8	3.8	3.8	3.8	3.8
60.5°	3.3	3.3	3.3	3.8	3.8	3.8	3.3	3.3	3.3	3.3	3.3
61°	2.8	2.8	3.3	3.3	3.8	3.3	3.3	3.3	2.8	3.3	3.3
61.5°	2.8	2.8	2.8	3.3	3.3	3.3	2.8	2.8	2.8	2.8	2.8
62°	2.4	2.4	2.8	2.8	3.3	2.8	2.8	2.8	2.8	2.8	2.8
62.5°	2.4	2.4	2.4	2.8	2.8	2.8	2.8	2.4	2.4	2.4	2.8
63°	2.4	2.4	2.4	2.4	2.8	2.8	2.4	2.4	2.4	2.4	2.4
63.5°	1.9	1.9	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
64°	1.9	1.9	1.9	2.4	2.4	2.4	1.9	1.9	1.9	1.9	2.4
64.5°	1.9	1.9	1.9	1.9	2.4	1.9	1.9	1.9	1.9	1.9	1.9
65°	1.4	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
65.5°	1.4	1.4	1.9	1.9	1.9	1.9	1.9	1.4	1.4	1.9	1.9
66°	1.4	1.4	1.4	1.9	1.9	1.9	1.4	1.4	1.4	1.4	1.4





TEST NUMBER: P776572

CATALOG NUMBER: HCDJBL54050CSD-HCD42TRC-5000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	0.9	0.9	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
68°	0.9	0.9	0.9	1.4	1.4	1.4	1.4	0.9	0.9	0.9	1.4
68.5°	0.9	0.9	0.9	0.9	1.4	1.4	0.9	0.9	0.9	0.9	0.9
69°	0.9	0.9	0.9	0.9	1.4	0.9	0.9	0.9	0.9	0.9	0.9
69.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
70°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
70.5°	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
71°	0.5	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
71.5°	0.5	0.5	0.5	0.9	0.9	0.9	0.9	0.5	0.5	0.5	0.9
72°	0.5	0.5	0.5	0.5	0.9	0.9	0.5	0.5	0.5	0.5	0.5
72.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
73°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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°	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
76.5°	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
77°	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5
77.5°	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.5
78°	0.0	0.0	0.0	0.0	0.5	0.5	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: P776572  
CATALOG NUMBER: HCDJBL54050CSD-HCD42TRC-5000lm-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: P776572

CATALOG NUMBER: HCDJBL54050CSD-HCD42TRC-5000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	6352.8	6352.8	6352.8	6352.8	6352.8	6352.8
0.5°	6355.6	6361.3	6347.6	6340.5	6335.8	6332.5
1°	6359.4	6352.8	6334.8	6325.4	6319.7	6315.5
1.5°	6354.2	6335.3	6318.3	6310.3	6305.6	6299.0
2°	6338.1	6310.8	6297.5	6297.1	6293.8	6283.4
2.5°	6311.2	6279.1	6276.3	6287.6	6285.7	6268.3
3°	6278.2	6244.2	6255.5	6282.0	6281.0	6252.7
3.5°	6240.4	6207.9	6234.3	6279.6	6279.6	6235.7
4°	6203.2	6173.0	6212.1	6278.2	6279.6	6216.4
4.5°	6165.9	6137.1	6186.2	6275.4	6276.8	6191.4
5°	6131.4	6101.2	6156.9	6265.5	6266.9	6160.7
5.5°	6099.8	6068.2	6121.5	6243.7	6247.5	6124.8
6°	6072.0	6040.3	6084.7	6211.7	6217.8	6087.1
6.5°	6050.3	6017.2	6046.9	6170.6	6178.1	6047.9
7°	6032.3	5997.4	6010.1	6122.9	6131.0	6011.6
7.5°	6015.3	5979.5	5973.3	6067.7	6069.1	5974.3
8°	5996.0	5957.8	5934.2	6011.1	6007.8	5938.4
8.5°	5966.7	5928.5	5895.0	5944.5	5934.6	5898.3
9°	5926.6	5890.7	5851.1	5872.8	5861.5	5859.1
9.5°	5872.3	5842.6	5803.4	5797.3	5784.1	5819.0
10°	5806.3	5785.5	5752.0	5725.6	5713.8	5781.2
10.5°	5728.9	5723.7	5696.8	5655.7	5649.1	5741.6
11°	5645.8	5650.5	5636.4	5592.0	5588.7	5702.9
11.5°	5559.9	5564.2	5569.3	5529.7	5532.1	5660.0
12°	5466.9	5471.7	5496.7	5469.3	5481.6	5614.2
12.5°	5370.7	5375.4	5418.3	5406.5	5431.5	5561.8
13°	5275.8	5275.8	5336.7	5343.8	5382.0	5507.1
13.5°	5177.2	5176.2	5248.4	5274.4	5327.7	5443.8
14°	5075.7	5079.9	5156.9	5204.1	5271.1	5378.2
14.5°	4981.3	4989.3	5067.2	5131.9	5209.3	5307.4
15°	4891.2	4903.0	4978.5	5060.1	5146.5	5233.3
15.5°	4805.3	4819.4	4893.1	4988.4	5083.2	5160.2
16°	4720.8	4736.4	4807.6	4914.8	5015.8	5084.2
16.5°	4636.3	4655.7	4722.7	4837.8	4945.0	5005.9
17°	4550.4	4574.0	4640.1	4760.0	4869.5	4922.8
17.5°	4465.0	4491.9	4555.2	4682.1	4793.0	4840.7
18°	4382.4	4412.6	4473.0	4603.3	4715.1	4755.7
18.5°	4305.0	4343.3	4396.1	4525.9	4637.3	4673.1
19°	4238.0	4278.6	4330.0	4457.5	4566.5	4596.2
19.5°	4177.6	4222.4	4271.5	4400.8	4506.5	4528.7
20°	4119.1	4165.3	4213.5	4349.9	4454.2	4467.8
20.5°	4054.9	4107.3	4154.9	4297.5	4401.8	4413.1
21°	3983.6	4040.7	4091.2	4239.0	4345.1	4350.8

TEST NUMBER: P776572

CATALOG NUMBER: HCDJBL54050CSD-HCD42TRC-5000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	3736.3	3807.1	3880.3	4028.0	4137.0	4130.9
23°	3652.3	3722.7	3801.5	3946.8	4053.5	4043.6
23.5°	3568.8	3638.6	3724.1	3863.3	3970.4	3958.6
24°	3484.8	3552.3	3646.2	3781.6	3884.1	3876.5
24.5°	3401.3	3468.7	3568.8	3700.9	3800.5	3798.2
25°	3317.3	3386.6	3485.7	3620.7	3716.0	3722.7
25.5°	3242.2	3308.8	3408.3	3540.0	3631.1	3650.4
26°	3165.3	3229.9	3326.7	3455.1	3542.8	3574.5
26.5°	3085.5	3151.1	3244.1	3367.3	3455.5	3496.6
27°	3005.3	3070.9	3154.9	3275.3	3363.0	3414.9
27.5°	2919.9	2985.5	3067.6	3179.0	3269.6	3329.5
28°	2833.0	2898.6	2973.7	3076.1	3175.2	3238.0
28.5°	2739.6	2808.5	2878.4	2977.0	3086.5	3141.7
29°	2646.2	2717.9	2780.7	2877.9	2990.2	3040.2
29.5°	2554.1	2622.1	2685.3	2781.1	2897.7	2942.1
30°	2465.9	2530.1	2591.9	2685.3	2802.4	2842.5
30.5°	2379.0	2437.1	2496.6	2593.8	2709.4	2744.8
31°	2297.4	2345.5	2406.4	2501.3	2616.4	2650.4
31.5°	2214.8	2255.9	2318.2	2411.6	2524.9	2558.9
32°	2137.9	2167.1	2231.3	2323.4	2432.8	2470.6
32.5°	2056.2	2083.1	2145.0	2232.3	2342.7	2383.8
33°	1978.4	2000.1	2061.4	2145.4	2256.8	2300.2
33.5°	1897.7	1919.4	1977.0	2060.5	2172.8	2215.8
34°	1816.5	1837.3	1892.9	1977.0	2088.8	2131.3
34.5°	1737.2	1753.7	1812.2	1897.2	2007.2	2045.4
35°	1660.3	1672.6	1729.7	1816.0	1925.0	1960.4
35.5°	1583.8	1595.2	1654.1	1740.0	1846.2	1876.4
36°	1510.7	1517.3	1578.6	1687.2	1764.1	1792.9
36.5°	1436.6	1439.9	1503.6	1608.4	1674.9	1707.5
37°	1368.1	1362.5	1428.1	1528.6	1597.5	1628.7
37.5°	1295.5	1290.3	1353.0	1449.3	1520.6	1549.8
38°	1225.6	1222.8	1283.2	1370.0	1443.2	1471.0
38.5°	1157.2	1156.2	1217.1	1299.2	1366.3	1392.2
39°	1088.8	1094.9	1153.4	1230.8	1295.0	1313.4
39.5°	1022.7	1031.2	1091.1	1163.8	1223.7	1240.3
40°	959.9	974.1	1030.2	1097.3	1156.7	1171.8
40.5°	900.5	916.5	974.1	1035.0	1091.1	1103.4
41°	846.7	865.1	919.3	974.6	1027.9	1035.4
41.5°	796.6	814.6	867.4	917.9	967.0	971.2
42°	749.9	766.9	820.7	863.6	906.6	913.7
42.5°	707.9	724.0	772.6	812.7	850.4	857.0
43°	668.3	681.5	726.8	760.8	795.2	802.3
43.5°	631.5	641.8	682.9	711.7	742.4	747.6



TEST NUMBER: P776572

CATALOG NUMBER: HCDJBL54050CSD-HCD42TRC-5000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	530.0	534.2	563.5	578.1	596.5	604.1
45.5°	498.4	501.2	525.7	537.5	553.6	557.4
46°	467.7	469.1	488.9	499.3	513.9	517.2
46.5°	438.4	436.5	453.1	461.6	474.8	475.7
47°	409.6	405.9	418.6	425.2	437.5	438.4
47.5°	380.9	375.7	384.6	390.8	402.1	399.7
48°	352.1	346.4	354.0	358.2	368.1	365.8
48.5°	322.8	319.0	324.2	327.1	335.5	333.2
49°	297.3	292.6	297.3	298.7	306.8	304.9
49.5°	271.8	266.2	270.4	270.4	278.4	277.0
50°	245.4	238.3	242.6	243.0	250.6	249.7
50.5°	218.0	209.1	213.8	213.8	221.3	220.9
51°	187.4	176.5	180.8	182.6	190.2	189.7
51.5°	156.7	148.7	152.4	153.9	155.7	155.3
52°	122.7	120.8	123.6	125.1	127.0	127.0
52.5°	93.9	93.0	95.3	96.3	98.2	98.6
53°	76.9	65.1	66.5	67.5	69.8	70.3
53.5°	60.4	37.3	38.2	39.2	41.1	42.0
54°	43.4	22.2	23.1	23.6	25.0	25.5
54.5°	26.9	13.2	14.2	14.2	14.6	15.1
55°	10.9	11.8	12.3	11.8	12.3	13.2
55.5°	9.0	10.4	10.4	10.4	10.4	10.9
56°	8.0	8.5	8.5	8.5	8.5	8.5
56.5°	7.1	7.1	6.6	6.6	6.1	6.1
57°	6.6	6.1	6.1	5.7	5.7	5.7
57.5°	6.1	5.7	5.7	5.2	5.2	5.2
58°	5.7	5.2	5.2	4.7	4.7	4.7
58.5°	5.2	5.2	4.7	4.7	4.2	4.2
59°	4.7	4.7	4.2	4.2	4.2	3.8
59.5°	4.2	4.2	4.2	3.8	3.8	3.8
60°	4.2	3.8	3.8	3.8	3.3	3.3
60.5°	3.8	3.8	3.8	3.3	3.3	3.3
61°	3.3	3.3	3.3	3.3	2.8	2.8
61.5°	3.3	3.3	3.3	2.8	2.8	2.8
62°	2.8	2.8	2.8	2.8	2.4	2.4
62.5°	2.8	2.8	2.8	2.4	2.4	2.4
63°	2.8	2.8	2.4	2.4	2.4	2.4
63.5°	2.4	2.4	2.4	2.4	1.9	1.9
64°	2.4	2.4	2.4	1.9	1.9	1.9
64.5°	2.4	2.4	1.9	1.9	1.9	1.9
65°	1.9	1.9	1.9	1.9	1.4	1.4
65.5°	1.9	1.9	1.9	1.4	1.4	1.4
66°	1.9	1.9	1.4	1.4	1.4	1.4



TEST NUMBER: P776572  
 CATALOG NUMBER: HCDJBL4050CSD-HCD42TRC-5000lm-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	1.4	1.4	1.4	1.4	0.9	0.9
68°	1.4	1.4	1.4	0.9	0.9	0.9
68.5°	1.4	1.4	0.9	0.9	0.9	0.9
69°	0.9	0.9	0.9	0.9	0.9	0.9
69.5°	0.9	0.9	0.9	0.9	0.9	0.9
70°	0.9	0.9	0.9	0.9	0.9	0.9
70.5°	0.9	0.9	0.9	0.9	0.9	0.5
71°	0.9	0.9	0.9	0.9	0.5	0.5
71.5°	0.9	0.9	0.9	0.5	0.5	0.5
72°	0.9	0.9	0.5	0.5	0.5	0.5
72.5°	0.5	0.5	0.5	0.5	0.5	0.5
73°	0.5	0.5	0.5	0.5	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	0.0
76.5°	0.5	0.5	0.5	0.5	0.0	0.0
77°	0.5	0.5	0.5	0.5	0.0	0.0
77.5°	0.5	0.5	0.5	0.0	0.0	0.0
78°	0.5	0.5	0.0	0.0	0.0	0.0
78.5°	0.5	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: P776572  
CATALOG NUMBER: HCDJBL54050CSD-HCD42TRC-5000lm-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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Scaled Data Report





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

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Scaled Data Report



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Peachtree City, GA 30269

Scaled Data Report





21.5°	4282.4	4297.5	4298.9	4301.2	4222.4	4119.1	4049.2	3980.3	3939.7	3862.8	3931.7
22°	4206.9	4222.0	4226.7	4238.5	4159.7	4049.7	3969.0	3893.0	3856.7	3785.4	3852.9



44°	698.5	714.5	703.2	706.0	711.7	682.0	626.7	602.7	624.8	636.6	615.9
44.5°	650.8	662.6	654.6	656.9	664.5	641.4	591.3	569.2	586.1	597.5	578.6



66.5°	1.4	1.4	1.4	1.4	1.9	1.4	1.4	1.4	1.4	1.4	1.4	1.4
67°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4



89°	0.0	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	0.0



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21.5°	3908.1	3969.0	4025.6	4174.8	4282.8	4282.4
22°	3824.1	3889.7	3952.0	4105.9	4212.1	4206.9



44°	595.6	603.6	642.3	665.0	690.9	698.5
44.5°	562.1	568.7	601.2	620.6	641.8	650.8

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66.5°	1.4	1.4	1.4	1.4	1.4	1.4
67°	1.4	1.4	1.4	1.4	1.4	1.4

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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)