

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: P776147

Luminaire Tested: HCDJBS1525CSD-HCD81TRMW-2500lm-3500K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P776147
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B044)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBS1525CSD-HCD81TRMW-2500lm-3500K
Description: 8 INCH ROUND SHALLOW-WIDE MATTE WHITE TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3500K CCT
Ballast/Driver: -

Summary

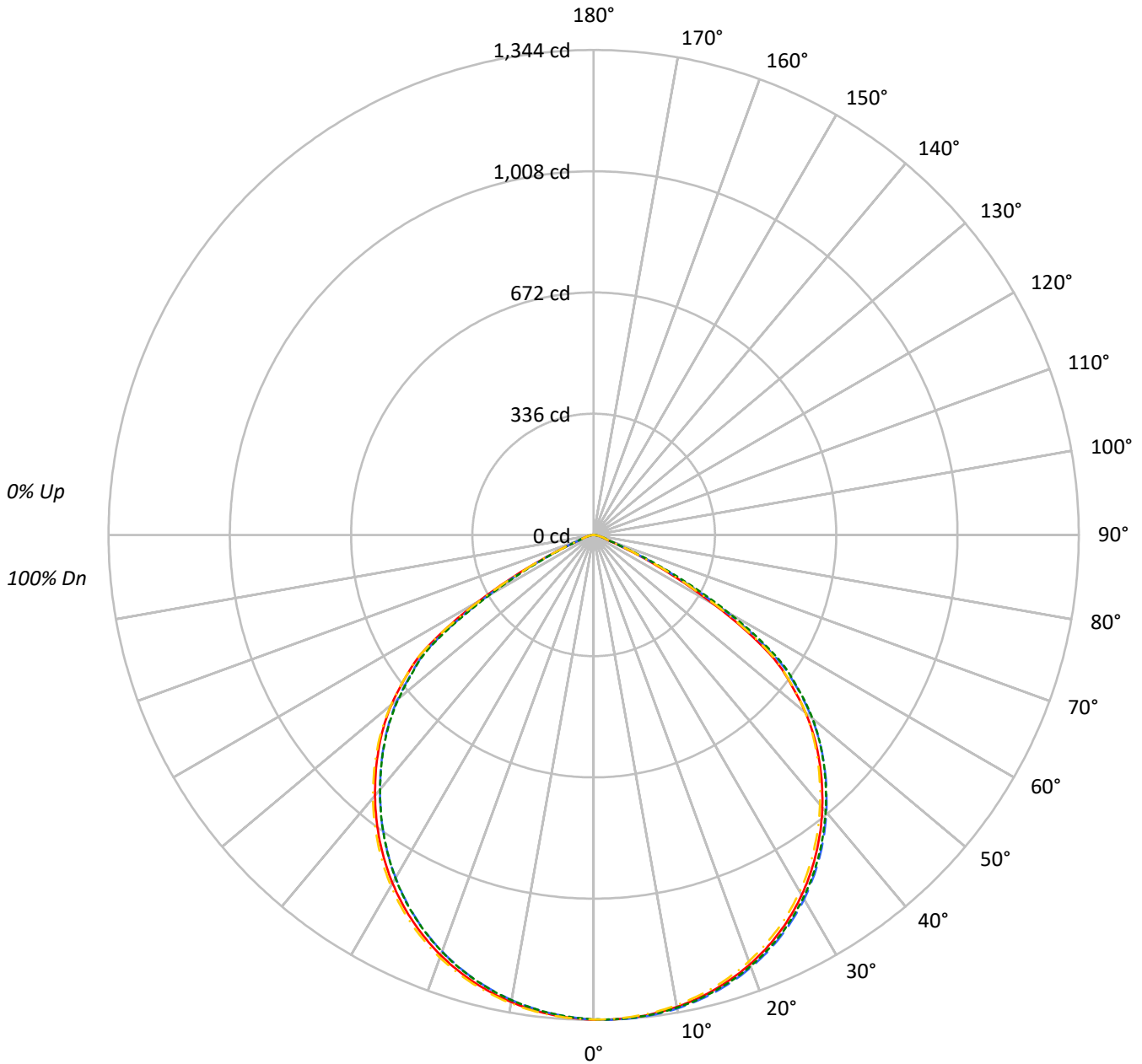
Lumens per Lamp: N/A
Luminaire Lumens: 3094.9 lumens
Efficiency: N/A
Efficacy: 123.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.35
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

Input Watts (W): 25
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



TEST NUMBER: P776147
CATALOG NUMBER: HCDJBL51525CSD-HCD81TRMW-2500lm-3500K

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	111	107	104	101	109	105	102	99	101	98	96	97	95	93	94	92	91	89																			
2	103	96	90	85	100	94	89	84	91	86	83	87	84	81	85	82	79	77																			
3	95	86	79	73	92	84	78	72	81	76	71	79	74	70	76	72	69	67																			
4	87	77	69	63	85	75	68	63	73	67	62	71	65	61	69	64	60	58																			
5	81	69	61	55	79	68	60	55	66	59	54	64	58	54	62	57	53	51																			
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45																			
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40																			
8	65	52	44	39	63	51	44	38	50	43	38	49	43	38	48	42	38	36																			
9	60	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	32																			
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	29																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	41002	41002	41002	41002
5°	41113	41128	40904	40797
10°	41176	41247	40757	40587
15°	41197	41314	40546	40309
20°	41142	41320	40268	39936
25°	40959	41212	39851	39413
30°	40626	40954	39293	38708
35°	40085	40513	38530	37785
40°	39273	39854	37555	36694
45°	38172	38954	36398	35422
50°	36397	37589	34715	33466
55°	33236	34848	31671	30335
60°	23502	26458	22385	20486
65°	11537	13805	10417	9399
70°	3669	4053	3696	3624
75°	2666	2984	2689	2748
80°	1846	2198	1846	1987
85°	1051	1506	1051	1226

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 39040 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.1	4.1
10°-20°	364.7	11.8
20°-30°	551.9	17.8
30°-40°	657.9	21.3
40°-50°	664.0	21.5
50°-60°	527.4	17.0
60°-70°	171.0	5.5
70°-80°	26.2	0.8
80°-90°	4.6	0.1
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°	1043.8	33.7
0°-40°	1701.7	55.0
0°-60°	2893.1	93.5
0°-90°	3094.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3094.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1343	1343	1343	1343	1343	
5°	1342	1342	1335	1331	1342	128
15°	1303	1307	1283	1275	1303	368
25°	1216	1223	1183	1170	1216	560
35°	1076	1087	1034	1014	1076	672
45°	884	902	843	820	884	680
55°	624	655	595	570	624	539
65°	160	191	144	130	160	173
75°	23	25	23	23	23	25
85°	3	4	3	4	3	4
90°	0	0	0	0	0	



TEST NUMBER: P776147

CATALOG NUMBER: HCDJBLS1525CSD-HCD81TRMW-2500lm-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1343.0	1343.0	1343.0	1343.0	1343.0	1343.0	1343.0	1343.0	1343.0	1343.0	1343.0
0.5°	1343.8	1343.5	1343.5	1343.8	1342.5	1342.8	1343.3	1343.3	1343.0	1342.5	1342.2
1°	1343.8	1343.8	1344.0	1344.3	1343.0	1343.0	1343.0	1343.0	1342.5	1341.7	1341.5
1.5°	1344.0	1344.0	1344.3	1344.5	1343.3	1343.0	1343.0	1342.8	1341.7	1341.0	1340.5
2°	1343.8	1344.0	1344.5	1344.8	1343.5	1343.0	1342.8	1342.2	1341.2	1340.0	1339.5
2.5°	1343.5	1344.0	1344.5	1344.8	1343.5	1343.0	1342.2	1341.5	1340.2	1339.2	1338.5
3°	1343.5	1344.0	1344.5	1344.8	1343.3	1342.8	1342.0	1340.7	1339.5	1338.0	1337.5
3.5°	1343.0	1343.8	1344.3	1344.8	1343.3	1342.2	1341.2	1340.0	1338.5	1336.7	1336.0
4°	1342.8	1343.5	1344.0	1344.3	1343.0	1342.0	1340.5	1339.0	1337.2	1335.5	1334.7
4.5°	1342.0	1343.0	1343.8	1344.0	1342.5	1341.2	1339.7	1338.0	1336.0	1334.0	1333.0
5°	1341.5	1342.5	1343.5	1343.5	1342.0	1340.7	1338.7	1336.7	1334.7	1332.5	1331.5
5.5°	1340.7	1341.7	1342.8	1343.0	1341.2	1340.0	1337.7	1335.5	1333.0	1330.7	1329.7
6°	1339.7	1341.0	1342.0	1342.2	1340.5	1339.0	1336.5	1334.2	1331.5	1329.0	1328.0
6.5°	1338.7	1340.2	1341.2	1341.5	1339.7	1338.0	1335.2	1332.7	1329.7	1327.0	1326.0
7°	1337.5	1339.2	1340.5	1340.5	1338.7	1336.7	1334.0	1331.2	1328.0	1324.9	1323.7
7.5°	1336.2	1338.0	1339.5	1339.5	1337.7	1335.5	1332.7	1329.2	1326.0	1322.9	1321.7
8°	1335.0	1336.7	1338.2	1338.5	1336.5	1334.2	1331.0	1327.5	1323.9	1320.7	1319.2
8.5°	1333.2	1335.5	1337.0	1337.0	1335.2	1332.5	1329.2	1325.4	1321.7	1318.4	1316.9
9°	1331.7	1334.2	1335.7	1335.7	1333.7	1331.0	1327.2	1323.4	1319.4	1315.9	1314.4
9.5°	1330.0	1332.5	1334.2	1334.2	1332.2	1329.5	1325.4	1321.2	1317.2	1313.4	1311.7
10°	1328.2	1331.0	1332.5	1332.5	1330.5	1327.5	1323.4	1318.9	1314.7	1310.7	1308.9
10.5°	1326.2	1329.2	1330.7	1330.7	1328.7	1325.4	1321.4	1316.4	1311.9	1307.9	1305.9
11°	1324.2	1327.2	1329.0	1329.0	1326.7	1323.4	1318.9	1313.9	1309.2	1304.9	1302.9
11.5°	1321.9	1325.2	1327.0	1327.0	1324.7	1321.2	1316.4	1311.4	1306.4	1301.9	1299.9
12°	1319.7	1323.2	1324.9	1324.9	1322.4	1318.9	1313.9	1308.4	1303.4	1298.9	1296.6
12.5°	1317.4	1320.9	1322.7	1322.7	1320.4	1316.4	1311.4	1305.6	1300.1	1295.4	1293.1
13°	1314.7	1318.4	1320.4	1320.2	1317.9	1313.9	1308.6	1302.6	1296.9	1292.1	1289.8
13.5°	1311.9	1315.7	1317.9	1317.7	1315.4	1311.2	1305.9	1299.4	1293.6	1288.6	1286.1
14°	1309.2	1313.2	1315.4	1315.2	1312.7	1308.4	1302.9	1296.4	1290.1	1285.1	1282.3
14.5°	1306.4	1310.4	1312.9	1312.4	1310.2	1305.4	1299.6	1292.9	1286.6	1281.3	1278.6
15°	1303.4	1307.9	1310.2	1309.7	1307.1	1302.6	1296.4	1289.3	1282.8	1277.3	1274.8
15.5°	1300.1	1304.6	1307.1	1306.6	1304.1	1299.4	1293.1	1286.1	1279.1	1273.5	1270.5
16°	1296.9	1301.6	1304.1	1303.4	1300.9	1296.1	1289.6	1282.1	1275.0	1269.3	1266.3
16.5°	1293.6	1298.4	1300.9	1300.1	1297.9	1292.9	1286.1	1278.3	1271.0	1265.3	1262.0
17°	1289.8	1295.1	1297.6	1296.9	1294.6	1289.3	1282.3	1274.3	1267.0	1261.0	1257.5
17.5°	1286.3	1291.6	1294.4	1293.4	1291.1	1285.8	1278.3	1270.3	1262.5	1256.2	1253.0
18°	1282.6	1287.8	1290.6	1289.8	1287.6	1282.1	1274.5	1266.0	1258.2	1251.7	1248.2
18.5°	1278.8	1284.3	1287.1	1285.8	1283.8	1278.1	1270.5	1261.8	1253.7	1247.0	1243.5
19°	1274.5	1280.6	1283.1	1282.3	1279.8	1274.0	1266.3	1257.2	1249.0	1241.9	1238.4
19.5°	1270.5	1276.6	1279.3	1278.3	1275.8	1270.0	1262.0	1252.7	1244.2	1237.2	1233.4
20°	1266.3	1272.3	1275.3	1274.3	1271.8	1265.8	1257.5	1248.2	1239.4	1232.2	1228.2
20.5°	1262.0	1268.0	1271.0	1270.0	1267.5	1261.5	1253.0	1243.2	1234.2	1226.9	1222.9
21°	1257.2	1263.8	1266.5	1265.8	1263.0	1257.0	1248.0	1238.2	1229.2	1221.4	1217.4



TEST NUMBER: P776147

CATALOG NUMBER: HCDJBLS1525CSD-HCD81TRMW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	1243.0	1249.7	1253.0	1251.7	1249.2	1242.7	1233.2	1222.9	1212.9	1204.6	1200.3
23°	1237.7	1245.0	1248.0	1247.0	1244.5	1237.7	1228.2	1217.1	1207.1	1199.1	1194.3
23.5°	1232.7	1239.9	1243.2	1241.9	1239.2	1232.7	1222.6	1211.9	1201.3	1192.8	1188.3
24°	1227.2	1234.7	1237.9	1236.9	1234.2	1227.4	1217.1	1206.1	1195.6	1187.0	1182.0
24.5°	1221.6	1229.4	1232.7	1231.4	1228.9	1221.9	1211.6	1200.3	1189.3	1180.5	1175.5
25°	1215.9	1223.9	1227.2	1225.9	1223.4	1216.1	1206.1	1194.3	1183.0	1174.2	1169.0
25.5°	1210.4	1218.4	1221.6	1220.4	1217.9	1210.6	1200.3	1188.0	1177.0	1168.0	1162.5
26°	1204.6	1212.6	1215.9	1214.9	1212.1	1204.8	1194.3	1182.0	1170.5	1161.2	1155.9
26.5°	1198.6	1206.8	1210.4	1209.1	1206.1	1199.1	1188.0	1175.8	1164.0	1154.4	1148.9
27°	1192.3	1200.8	1204.1	1203.1	1200.1	1193.1	1182.0	1169.2	1157.2	1147.7	1141.9
27.5°	1186.0	1194.6	1198.3	1196.8	1194.3	1186.8	1175.5	1162.7	1150.4	1140.6	1134.9
28°	1179.5	1188.3	1192.1	1190.5	1188.0	1180.5	1169.0	1155.7	1143.4	1133.6	1127.9
28.5°	1173.0	1181.8	1185.5	1184.3	1181.5	1174.0	1162.5	1148.9	1136.4	1126.1	1120.3
29°	1166.5	1175.5	1179.0	1177.8	1175.0	1167.2	1155.4	1141.9	1129.4	1119.1	1112.8
29.5°	1159.5	1169.0	1172.5	1171.2	1168.5	1160.7	1148.7	1134.9	1121.8	1111.3	1105.3
30°	1152.4	1162.0	1165.5	1164.5	1161.7	1153.7	1141.7	1127.6	1114.6	1103.8	1097.5
30.5°	1145.7	1154.9	1158.7	1157.4	1154.9	1146.9	1134.6	1120.3	1106.8	1096.0	1089.5
31°	1138.1	1147.9	1151.7	1150.4	1147.7	1139.6	1127.1	1112.8	1099.3	1088.2	1081.7
31.5°	1130.9	1140.6	1144.4	1143.2	1140.6	1132.4	1119.8	1105.0	1091.5	1080.2	1073.7
32°	1123.3	1133.1	1137.1	1135.9	1133.4	1125.1	1112.3	1097.5	1083.5	1072.2	1065.7
32.5°	1115.6	1125.6	1129.9	1128.4	1125.9	1117.6	1104.5	1089.5	1075.5	1063.9	1056.9
33°	1108.1	1118.1	1122.3	1120.8	1118.6	1110.1	1096.8	1081.7	1067.2	1055.6	1048.9
33.5°	1100.0	1110.3	1114.6	1113.3	1110.8	1102.3	1088.7	1073.4	1059.2	1046.9	1040.1
34°	1091.8	1102.3	1106.8	1105.3	1102.8	1094.5	1081.0	1065.2	1050.6	1038.3	1031.6
34.5°	1083.7	1094.3	1098.8	1097.3	1094.8	1086.2	1072.7	1056.9	1042.1	1029.8	1022.5
35°	1075.5	1086.0	1090.7	1089.2	1087.0	1078.2	1064.4	1048.6	1033.8	1021.0	1014.0
35.5°	1066.9	1077.7	1082.5	1081.0	1078.7	1069.9	1055.9	1039.8	1025.1	1012.0	1005.0
36°	1058.4	1069.4	1073.9	1072.9	1070.7	1061.7	1047.6	1031.1	1016.0	1003.2	996.0
36.5°	1049.6	1060.7	1065.4	1064.4	1061.9	1053.1	1039.1	1022.5	1007.3	994.2	986.9
37°	1040.9	1051.9	1056.9	1055.9	1053.6	1044.6	1030.3	1014.0	998.0	984.9	977.9
37.5°	1032.1	1043.1	1048.4	1047.1	1044.9	1035.6	1021.5	1004.7	988.9	975.9	968.4
38°	1022.8	1034.1	1039.3	1038.3	1036.1	1027.1	1012.5	995.7	979.9	966.4	959.1
38.5°	1013.8	1025.1	1030.3	1029.6	1027.1	1018.0	1003.5	986.7	970.6	957.1	949.6
39°	1004.5	1015.8	1021.3	1020.3	1018.3	1009.0	994.5	977.4	961.4	947.6	940.3
39.5°	995.0	1006.5	1012.0	1011.3	1009.3	999.7	984.9	968.1	951.8	938.0	930.8
40°	985.4	997.0	1003.0	1002.0	1000.0	990.7	975.7	958.4	942.3	928.5	921.0
40.5°	975.9	987.4	993.2	992.7	990.7	981.2	966.1	948.8	932.8	918.5	911.5
41°	965.9	977.7	983.7	983.2	980.9	971.6	956.6	939.3	923.0	909.0	901.4
41.5°	955.8	967.9	973.9	973.7	971.6	962.1	947.1	929.8	913.5	899.2	891.7
42°	946.1	958.1	964.4	964.1	962.1	952.3	937.3	920.2	903.4	889.1	881.6
42.5°	936.0	948.1	954.6	954.3	952.3	942.6	927.5	910.2	893.4	879.4	871.8
43°	926.0	937.8	944.6	944.6	942.8	932.8	917.7	900.4	883.6	869.1	861.8
43.5°	915.7	927.8	934.5	934.8	932.8	922.7	907.7	890.4	873.6	859.1	851.8



TEST NUMBER: P776147

CATALOG NUMBER: HCDJBL5125CSD-HCD81TRMW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	884.1	896.2	903.7	904.2	902.2	892.2	877.4	860.3	843.0	828.2	821.2
45.5°	873.1	885.4	892.9	893.9	891.9	881.6	866.8	849.5	832.7	817.9	810.9
46°	862.3	874.9	882.4	883.4	881.4	871.1	856.6	839.3	822.2	807.4	800.4
46.5°	851.3	863.3	871.6	872.6	870.8	860.6	845.8	828.7	811.4	796.9	789.9
47°	839.8	852.3	860.6	861.8	860.3	849.5	834.7	817.7	800.6	786.1	778.8
47.5°	828.2	840.8	849.3	850.8	849.5	838.5	823.7	806.7	789.9	774.8	767.8
48°	816.7	829.0	838.0	839.5	838.0	827.5	813.4	795.9	778.8	763.8	756.8
48.5°	804.4	816.9	826.0	828.0	827.0	816.4	801.4	784.6	767.3	752.5	745.2
49°	792.4	805.1	814.2	816.7	815.4	804.4	789.9	772.8	755.2	740.5	733.2
49.5°	779.6	792.6	801.9	804.4	803.6	792.6	777.8	760.8	743.5	728.4	720.9
50°	766.3	779.6	789.4	792.1	791.4	780.6	766.0	748.7	730.9	715.9	708.1
50.5°	752.7	765.8	776.3	778.8	778.6	768.3	753.2	735.7	718.1	702.6	695.1
51°	739.5	752.5	762.8	766.0	765.8	754.7	739.7	722.4	704.6	689.3	681.8
51.5°	724.9	738.2	748.7	752.2	752.7	741.5	726.4	708.9	691.6	676.5	668.5
52°	710.6	724.4	734.9	738.4	738.7	727.7	712.6	694.8	677.3	662.5	654.4
52.5°	696.3	709.6	720.6	723.9	724.7	713.4	698.3	680.8	663.7	648.7	640.9
53°	682.0	695.1	706.1	710.1	710.4	699.3	684.0	666.7	649.9	635.1	627.6
53.5°	668.0	680.5	691.8	695.6	696.3	685.5	670.0	653.4	636.9	622.6	615.3
54°	654.4	667.2	678.0	682.3	682.5	671.5	656.7	640.2	624.4	609.8	602.3
54.5°	640.4	653.4	664.2	668.5	668.7	658.5	643.4	626.4	610.6	596.0	588.8
55°	624.4	637.1	648.7	653.2	654.7	643.7	628.6	611.3	595.0	580.7	573.5
55.5°	606.6	619.3	631.6	636.1	638.4	627.6	611.8	594.3	576.5	561.7	555.2
56°	585.7	600.3	611.6	616.3	620.1	609.6	592.8	573.7	555.7	541.4	534.3
56.5°	563.7	578.7	590.3	595.5	599.8	589.5	572.5	552.4	534.3	519.0	512.0
57°	540.1	554.9	567.7	573.2	578.2	566.9	549.9	530.1	511.3	496.0	488.5
57.5°	515.3	529.3	544.1	550.6	555.7	543.6	526.6	507.0	488.0	472.9	464.4
58°	489.5	503.8	519.8	527.6	532.6	519.0	501.5	482.4	464.1	448.6	440.1
58.5°	464.1	477.9	494.5	503.8	509.0	494.7	476.9	458.4	440.3	425.3	415.7
59°	437.3	452.3	469.4	479.4	483.9	468.1	450.8	432.8	415.5	400.7	390.7
59.5°	411.5	426.0	443.6	453.9	458.6	442.6	424.8	407.2	390.9	376.4	366.3
60°	384.9	400.7	417.7	428.8	433.3	416.7	398.7	381.1	366.6	352.6	342.8
60.5°	359.8	375.4	391.7	402.7	408.0	391.9	372.6	356.3	342.3	328.5	319.0
61°	334.5	350.5	365.6	376.6	381.6	366.6	347.3	330.5	317.7	305.4	295.9
61.5°	309.9	326.5	340.5	350.0	356.6	342.8	322.5	305.9	293.9	282.8	273.1
62°	286.1	301.9	315.9	324.2	331.7	317.7	298.4	281.6	270.6	260.8	251.5
62.5°	263.0	278.6	291.6	298.1	306.2	293.6	274.3	257.8	249.0	240.2	231.4
63°	240.7	255.5	267.8	273.3	281.8	270.1	253.3	236.5	227.4	219.7	211.1
63.5°	218.9	233.2	243.7	248.0	258.3	248.5	231.9	214.9	205.9	198.8	190.8
64°	197.8	211.1	221.2	224.4	236.0	226.7	210.6	193.3	184.3	178.3	170.8
64.5°	178.0	190.6	199.1	201.6	213.6	205.1	189.3	172.0	163.0	157.5	152.7
65°	159.7	170.5	177.8	180.0	191.1	183.3	168.3	153.2	144.2	139.4	136.2
65.5°	141.2	151.2	157.7	160.0	168.8	161.7	149.2	135.9	127.1	122.4	120.9
66°	122.4	132.6	138.2	140.4	148.2	141.9	131.9	120.1	110.8	106.8	106.6



TEST NUMBER: P776147

CATALOG NUMBER: HCDJBLS1525CSD-HCD81TRMW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	80.2	85.5	89.0	91.0	95.5	92.8	87.0	80.0	70.0	70.2	71.7
68°	71.0	75.7	79.7	81.5	81.5	79.0	74.5	69.7	60.4	61.7	62.9
68.5°	61.7	66.2	70.7	72.0	69.5	66.9	64.2	60.7	52.9	55.2	55.7
69°	52.7	56.7	61.7	62.7	59.4	57.2	55.9	53.2	47.4	49.6	49.6
69.5°	43.4	47.1	52.7	53.2	51.4	49.9	48.9	47.1	43.6	45.1	44.9
70°	41.1	42.6	43.6	43.6	45.4	44.6	43.9	42.9	41.4	41.6	41.9
70.5°	39.1	39.9	40.6	40.6	41.6	41.4	41.1	40.4	39.4	39.6	39.6
71°	36.9	37.9	38.6	38.6	39.4	39.4	39.1	38.4	37.4	37.6	37.9
71.5°	34.9	36.1	36.9	36.9	37.6	37.4	37.1	36.4	35.1	35.6	35.9
72°	32.8	34.1	34.9	34.9	35.6	35.6	35.4	34.6	33.3	33.9	34.1
72.5°	31.1	32.1	33.1	33.1	33.9	33.6	33.3	32.6	31.3	31.8	32.3
73°	29.1	30.3	31.1	31.3	32.1	31.8	31.6	30.8	29.6	30.1	30.6
73.5°	27.3	28.6	29.3	29.6	30.3	30.1	29.8	29.1	27.8	28.3	28.8
74°	25.8	26.8	27.8	27.8	28.6	28.3	28.3	27.3	26.1	26.6	27.1
74.5°	24.1	25.1	26.1	26.1	26.8	26.8	26.6	25.6	24.3	25.1	25.6
75°	22.6	23.6	24.6	24.6	25.3	25.1	25.1	24.1	22.8	23.3	24.1
75.5°	21.1	22.1	23.1	23.1	23.8	23.6	23.6	22.6	21.6	21.8	22.6
76°	19.6	20.6	21.6	21.6	22.3	22.3	22.1	21.1	20.1	20.6	21.3
76.5°	18.3	19.1	20.1	20.3	21.1	20.8	20.8	19.8	18.8	19.3	19.8
77°	17.1	17.8	18.8	19.1	19.6	19.6	19.3	18.6	17.3	17.8	18.6
77.5°	15.8	16.5	17.6	17.8	18.3	18.3	18.1	17.1	16.0	16.5	17.3
78°	14.5	15.3	16.3	16.5	17.1	17.1	16.8	15.8	14.8	15.3	15.8
78.5°	13.5	14.3	15.0	15.3	15.8	15.8	15.5	14.5	13.5	14.0	14.8
79°	12.5	13.0	14.0	14.3	14.5	14.5	14.3	13.3	12.5	12.8	13.5
79.5°	11.3	12.0	13.0	13.0	13.5	13.5	13.3	12.3	11.5	11.8	12.5
80°	10.5	11.0	11.8	12.0	12.5	12.5	12.3	11.3	10.5	10.8	11.5
80.5°	9.5	10.0	10.8	11.0	11.5	11.5	11.3	10.3	9.5	9.8	10.5
81°	8.5	9.0	10.0	10.3	10.5	10.5	10.3	9.3	8.5	8.8	9.5
81.5°	7.8	8.3	9.0	9.3	9.5	9.5	9.3	8.5	7.8	8.0	8.5
82°	7.0	7.5	8.3	8.3	8.8	8.8	8.5	7.5	7.0	7.0	7.8
82.5°	6.0	6.5	7.3	7.5	7.8	7.8	7.5	6.8	6.0	6.3	7.0
83°	5.3	5.8	6.5	6.8	7.0	7.0	6.8	6.0	5.3	5.5	6.3
83.5°	4.8	5.0	5.8	6.0	6.3	6.3	6.0	5.3	4.8	4.8	5.5
84°	4.0	4.3	5.0	5.3	5.5	5.5	5.3	4.5	4.0	4.3	4.8
84.5°	3.5	3.8	4.3	4.5	4.8	4.8	4.5	3.8	3.5	3.5	4.0
85°	3.0	3.3	3.8	4.0	4.3	4.3	4.0	3.3	3.0	3.0	3.5
85.5°	2.3	2.5	3.3	3.5	3.5	3.5	3.3	2.5	2.5	2.3	3.0
86°	2.0	2.0	2.8	2.8	3.0	3.0	2.8	2.0	2.0	1.8	2.5
86.5°	1.5	1.5	2.3	2.3	2.5	2.5	2.3	1.8	1.5	1.5	2.0
87°	1.0	1.3	1.8	2.0	2.0	2.0	1.8	1.3	1.0	1.0	1.5
87.5°	0.8	1.0	1.3	1.5	1.5	1.5	1.5	1.0	0.8	0.8	1.3
88°	0.5	0.8	1.0	1.0	1.3	1.3	1.0	0.8	0.5	0.5	0.8
88.5°	0.3	0.5	0.5	0.8	0.8	0.8	0.8	0.5	0.3	0.3	0.5



TEST NUMBER: P776147

CATALOG NUMBER: HCDJBL51525CSD-HCD81TRMW-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: P776147

CATALOG NUMBER: HCDJBLS1525CSD-HCD81TRMW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1343.0	1343.0	1343.0	1343.0	1343.0	1343.0
0.5°	1342.5	1341.5	1342.0	1342.8	1343.5	1343.8
1°	1341.7	1340.7	1341.5	1342.5	1343.5	1343.8
1.5°	1341.0	1340.0	1340.7	1342.2	1343.5	1344.0
2°	1340.0	1339.2	1340.0	1341.7	1343.3	1343.8
2.5°	1339.0	1338.2	1339.2	1341.0	1342.8	1343.5
3°	1337.7	1337.0	1338.2	1340.2	1342.2	1343.5
3.5°	1336.5	1335.7	1337.2	1339.5	1341.7	1343.0
4°	1335.0	1334.5	1336.0	1338.5	1341.0	1342.8
4.5°	1333.5	1333.0	1334.7	1337.5	1340.2	1342.0
5°	1332.0	1331.2	1333.5	1336.2	1339.2	1341.5
5.5°	1330.0	1329.7	1332.0	1335.0	1338.2	1340.7
6°	1328.2	1328.0	1330.2	1333.7	1337.0	1339.7
6.5°	1326.5	1326.0	1328.5	1332.0	1335.7	1338.7
7°	1324.2	1323.9	1327.0	1330.5	1334.5	1337.5
7.5°	1322.2	1321.7	1324.9	1328.7	1333.0	1336.2
8°	1319.7	1319.4	1322.7	1326.7	1331.5	1335.0
8.5°	1317.4	1316.9	1320.4	1324.9	1329.5	1333.2
9°	1314.9	1314.4	1317.9	1322.7	1327.7	1331.7
9.5°	1312.2	1311.9	1315.7	1320.4	1325.7	1330.0
10°	1309.4	1309.2	1313.2	1318.2	1323.7	1328.2
10.5°	1306.4	1306.4	1310.4	1315.7	1321.4	1326.2
11°	1303.6	1303.4	1307.6	1313.2	1319.2	1324.2
11.5°	1300.4	1300.4	1304.6	1310.4	1316.9	1321.9
12°	1297.1	1297.1	1301.6	1307.6	1314.2	1319.7
12.5°	1293.9	1293.9	1298.6	1304.6	1311.7	1317.4
13°	1290.3	1290.3	1295.4	1301.6	1308.9	1314.7
13.5°	1286.6	1286.8	1291.8	1298.4	1305.9	1311.9
14°	1282.8	1282.8	1288.3	1295.1	1302.9	1309.2
14.5°	1279.1	1279.1	1284.8	1291.8	1299.6	1306.4
15°	1275.3	1275.3	1281.1	1288.3	1296.4	1303.4
15.5°	1271.0	1271.3	1276.8	1284.6	1293.1	1300.1
16°	1266.8	1267.0	1272.8	1280.8	1289.6	1296.9
16.5°	1262.5	1262.8	1268.8	1276.8	1285.8	1293.6
17°	1258.2	1258.5	1264.5	1272.8	1282.1	1289.8
17.5°	1253.2	1253.7	1260.3	1268.8	1278.3	1286.3
18°	1248.7	1249.2	1255.5	1264.5	1274.0	1282.6
18.5°	1244.0	1244.2	1251.0	1260.0	1270.0	1278.8
19°	1238.9	1239.4	1246.2	1255.5	1265.8	1274.5
19.5°	1233.9	1234.2	1241.2	1251.0	1261.5	1270.5
20°	1228.7	1229.2	1236.2	1246.2	1256.7	1266.3
20.5°	1223.1	1223.6	1231.2	1241.2	1252.2	1262.0
21°	1217.6	1218.1	1225.7	1236.2	1247.5	1257.2

TEST NUMBER: P776147

CATALOG NUMBER: HCDJBLS1525CSD-HCD81TRMW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1200.3	1201.1	1209.4	1220.1	1232.4	1243.0
23°	1194.6	1195.1	1203.3	1214.6	1227.2	1237.7
23.5°	1188.3	1189.0	1197.6	1209.1	1221.6	1232.7
24°	1182.0	1182.8	1191.5	1203.1	1216.1	1227.2
24.5°	1175.8	1176.5	1185.0	1197.3	1210.4	1221.6
25°	1169.2	1170.0	1178.8	1191.0	1204.6	1215.9
25.5°	1162.5	1163.5	1172.5	1185.0	1198.6	1210.4
26°	1155.9	1156.7	1166.0	1178.5	1192.6	1204.6
26.5°	1148.9	1149.9	1159.5	1172.2	1186.0	1198.6
27°	1141.9	1142.9	1152.4	1165.5	1179.8	1192.3
27.5°	1134.9	1135.6	1145.4	1158.7	1173.2	1186.0
28°	1127.6	1128.4	1138.4	1151.9	1166.7	1179.5
28.5°	1120.1	1121.1	1131.4	1144.9	1160.0	1173.0
29°	1112.6	1113.6	1123.6	1137.9	1152.9	1166.5
29.5°	1104.8	1106.0	1116.3	1130.6	1145.9	1159.5
30°	1096.8	1098.0	1108.8	1123.1	1138.9	1152.4
30.5°	1089.0	1090.2	1100.8	1115.6	1131.4	1145.7
31°	1081.2	1082.2	1093.3	1108.1	1123.8	1138.1
31.5°	1072.9	1074.2	1085.2	1100.3	1116.3	1130.9
32°	1064.7	1065.7	1077.0	1092.5	1108.8	1123.3
32.5°	1056.1	1057.4	1068.7	1084.2	1101.0	1115.6
33°	1047.9	1049.1	1060.7	1076.2	1093.3	1108.1
33.5°	1039.3	1040.3	1051.9	1068.2	1085.0	1100.0
34°	1030.6	1031.6	1043.4	1059.7	1076.7	1091.8
34.5°	1021.5	1023.0	1034.8	1051.1	1068.4	1083.7
35°	1012.8	1013.8	1026.1	1042.6	1059.9	1075.5
35.5°	1004.0	1005.2	1017.0	1033.8	1051.4	1066.9
36°	995.0	996.0	1008.3	1025.1	1042.6	1058.4
36.5°	985.7	987.2	999.2	1016.3	1034.1	1049.6
37°	976.7	977.9	989.9	1007.3	1025.1	1040.9
37.5°	967.1	968.4	980.7	998.0	1016.0	1032.1
38°	957.9	958.9	971.1	988.7	1006.7	1022.8
38.5°	948.6	949.6	961.9	979.4	997.5	1013.8
39°	938.8	940.1	952.3	970.1	988.2	1004.5
39.5°	929.3	930.3	942.8	960.4	978.9	995.0
40°	919.7	920.7	933.0	950.8	969.4	985.4
40.5°	910.0	911.0	923.0	941.1	959.9	975.9
41°	900.4	901.2	913.5	931.3	949.8	965.9
41.5°	890.4	890.9	903.2	921.2	940.1	955.8
42°	880.6	881.4	893.4	911.7	930.3	946.1
42.5°	870.8	871.1	883.4	901.7	920.0	936.0
43°	860.6	861.3	873.6	891.4	910.0	926.0
43.5°	850.5	851.0	863.1	881.1	899.7	915.7



TEST NUMBER: P776147

CATALOG NUMBER: HCDJBLS1525CSD-HCD81TRMW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	820.2	820.4	832.0	850.0	868.6	884.1
45.5°	809.9	809.9	821.4	839.5	857.6	873.1
46°	799.4	799.1	810.7	828.7	846.8	862.3
46.5°	788.9	788.1	799.9	817.7	835.7	851.3
47°	778.1	777.6	788.6	806.4	824.5	839.8
47.5°	766.8	766.0	776.8	794.9	812.9	828.2
48°	755.5	754.5	765.3	783.1	800.9	816.7
48.5°	744.0	742.5	753.5	771.0	788.9	804.4
49°	731.9	730.4	741.2	758.5	776.8	792.4
49.5°	719.6	717.9	728.4	746.2	764.0	779.6
50°	706.9	704.6	715.4	732.7	751.0	766.3
50.5°	693.8	691.8	702.1	719.4	737.2	752.7
51°	680.5	678.3	688.8	706.1	723.7	739.5
51.5°	667.0	664.7	674.8	692.6	709.9	724.9
52°	652.9	651.2	661.5	678.5	695.6	710.6
52.5°	639.4	637.6	647.9	664.5	680.5	696.3
53°	626.4	624.9	634.9	651.2	667.2	682.0
53.5°	613.6	612.6	622.6	638.4	653.9	668.0
54°	601.3	600.0	609.8	625.9	640.9	654.4
54.5°	587.5	586.0	596.0	611.6	626.6	640.4
55°	572.7	569.9	580.7	596.3	611.3	624.4
55.5°	555.2	550.9	561.7	577.2	592.5	606.6
56°	533.8	529.8	540.9	556.2	571.7	585.7
56.5°	511.5	507.3	518.0	534.1	549.1	563.7
57°	488.5	483.4	494.5	510.5	526.3	540.1
57.5°	464.4	458.6	470.7	486.7	502.0	515.3
58°	440.1	433.5	446.3	462.6	477.4	489.5
58.5°	414.7	409.0	421.8	438.3	450.6	464.1
59°	389.4	383.6	396.9	412.7	425.8	437.3
59.5°	364.6	359.8	372.6	388.2	400.2	411.5
60°	339.8	335.5	348.5	363.1	373.9	384.9
60.5°	315.7	311.7	324.5	338.0	347.5	359.8
61°	291.6	287.9	300.4	312.9	322.7	334.5
61.5°	269.3	266.0	277.3	289.1	298.4	309.9
62°	249.0	243.5	255.3	264.8	273.6	286.1
62.5°	228.9	222.4	233.2	241.5	250.5	263.0
63°	208.9	202.1	211.6	218.9	227.4	240.7
63.5°	188.8	182.5	191.3	197.3	205.9	218.9
64°	168.8	163.7	171.0	176.5	184.5	197.8
64.5°	152.0	146.7	152.2	157.2	165.5	178.0
65°	136.2	130.1	134.4	138.7	146.9	159.7
65.5°	121.4	115.3	117.6	121.6	129.6	141.2
66°	107.3	101.3	101.8	106.1	113.8	122.4



TEST NUMBER: P776147

CATALOG NUMBER: HCDJBLS1525CSD-HCD81TRMW-2500lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	73.2	72.2	71.7	75.0	77.5	80.2
68°	63.9	63.9	63.7	66.2	68.5	71.0
68.5°	56.2	55.7	55.7	57.4	59.7	61.7
69°	49.9	47.4	47.6	48.6	50.7	52.7
69.5°	44.9	43.1	43.4	44.1	45.1	43.4
70°	41.6	40.6	40.9	41.4	41.6	41.1
70.5°	39.6	38.9	39.1	39.4	39.4	39.1
71°	37.9	36.9	37.1	37.6	37.6	36.9
71.5°	35.9	35.1	35.4	35.6	35.6	34.9
72°	34.1	33.1	33.3	33.9	33.6	32.8
72.5°	32.1	31.3	31.6	32.1	31.8	31.1
73°	30.3	29.6	29.8	30.1	29.8	29.1
73.5°	28.8	28.1	28.1	28.6	28.1	27.3
74°	27.1	26.3	26.6	26.8	26.6	25.8
74.5°	25.6	24.8	25.1	25.3	24.8	24.1
75°	24.1	23.3	23.6	23.6	23.3	22.6
75.5°	22.6	21.8	22.1	22.3	21.8	21.1
76°	21.3	20.6	20.6	20.8	20.3	19.6
76.5°	19.8	19.1	19.3	19.3	18.8	18.3
77°	18.6	17.8	18.1	18.1	17.6	17.1
77.5°	17.3	16.5	16.8	16.8	16.3	15.8
78°	16.0	15.5	15.5	15.8	15.0	14.5
78.5°	14.8	14.3	14.5	14.5	14.0	13.5
79°	13.8	13.3	13.3	13.5	12.8	12.5
79.5°	12.8	12.3	12.3	12.3	11.8	11.3
80°	11.8	11.3	11.3	11.3	10.8	10.5
80.5°	10.8	10.3	10.3	10.3	9.8	9.5
81°	9.8	9.5	9.5	9.5	9.0	8.5
81.5°	8.8	8.5	8.8	8.5	8.0	7.8
82°	8.0	7.8	7.8	7.8	7.3	7.0
82.5°	7.3	7.0	7.0	7.0	6.3	6.0
83°	6.5	6.0	6.3	6.0	5.5	5.3
83.5°	5.8	5.5	5.5	5.3	4.8	4.8
84°	5.0	4.8	4.8	4.8	4.3	4.0
84.5°	4.3	4.0	4.3	4.0	3.5	3.5
85°	3.8	3.5	3.5	3.5	3.0	3.0
85.5°	3.3	3.0	3.0	3.0	2.3	2.3
86°	2.5	2.5	2.5	2.5	2.0	2.0
86.5°	2.3	2.0	2.0	2.0	1.5	1.5
87°	1.8	1.5	1.5	1.5	1.3	1.0
87.5°	1.3	1.0	1.0	1.0	1.0	0.8
88°	0.8	0.8	0.8	0.8	0.5	0.5
88.5°	0.5	0.3	0.3	0.3	0.3	0.3



TEST NUMBER: P776147
CATALOG NUMBER: HCDJBL1525CSD-HCD81TRMW-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

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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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°	1252.5	1259.3	1262.3	1261.3	1258.5	1252.2	1243.2	1233.2	1223.9	1215.9	1211.9
22°	1247.7	1254.7	1257.5	1256.7	1254.0	1247.5	1238.2	1228.2	1218.6	1210.6	1206.1



44°	905.2	917.5	924.3	924.5	922.5	912.7	897.7	880.6	863.3	848.8	841.8
44.5°	894.7	906.7	913.7	914.5	912.7	902.2	887.4	870.3	853.3	838.7	831.5



66.5°	105.1	116.1	120.4	122.6	129.4	124.1	115.3	105.1	95.5	92.8	93.8
67°	89.5	100.0	103.8	105.8	112.1	107.8	100.3	92.0	81.5	80.5	82.0



89°	0.0	0.3	0.3	0.3	0.5	0.3	0.3	0.3	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°	1212.1	1212.9	1220.4	1231.2	1242.5	1252.5
22°	1206.3	1207.1	1214.9	1225.7	1237.4	1247.7



44°	840.5	841.0	853.0	871.1	889.4	905.2
44.5°	830.5	830.7	842.5	860.8	879.1	894.7

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66.5°	94.8	89.0	88.0	92.3	100.0	105.1
67°	83.7	80.7	79.7	83.5	86.5	89.5

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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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Scaled Data Report



(END OF REPORT)