

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: P775993

Luminaire Tested: HCDJBS1525CSD-HCD4TRMB-2500lm-4000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P775993
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2310613A001)
Test Lab:
Issue Date: 2/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL51525CSD-HCD4TRMB-2500lm-4000K
Description: 4 INCH ROUND MEDIUM MATTE BLACK TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1611.1 lumens
Efficiency: N/A
Efficacy: 64.4 lumens/watt
Spacing Criteria (0/90/45): 0.95 / 0.95 / 0.94
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

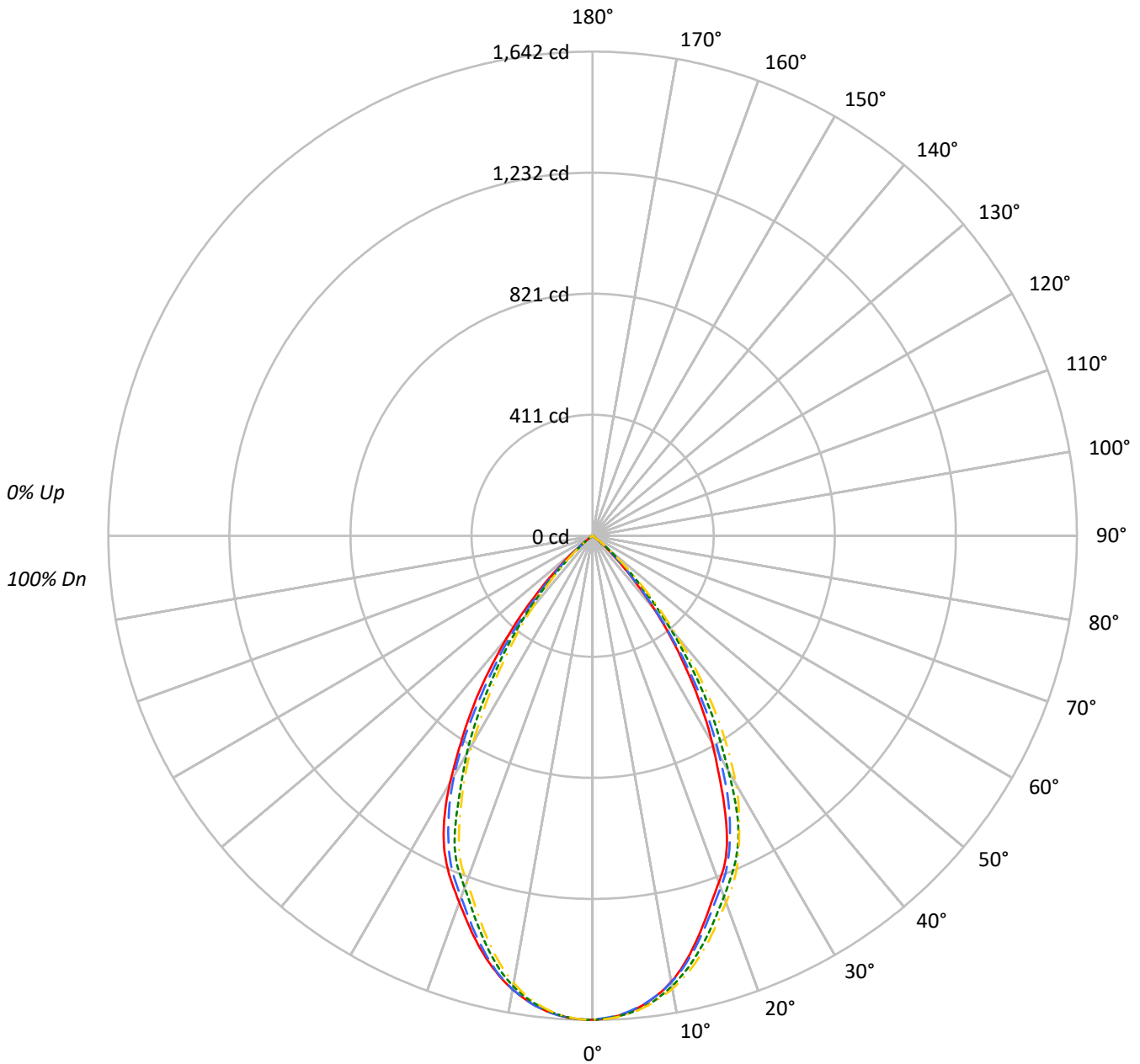
Input Watts (W): 25
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P775993

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMB-2500lm-4000K

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	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	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93																			
2	108	103	98	95	105	101	97	94	98	95	92	95	92	90	92	90	88	86																			
3	102	95	90	86	100	94	89	85	91	87	84	89	86	83	87	84	82	80																			
4	97	89	83	79	95	88	82	78	85	81	77	83	80	76	82	78	76	74																			
5	91	83	77	72	90	82	76	72	80	75	71	78	74	71	77	73	70	69																			
6	87	77	71	67	85	77	71	67	75	70	66	74	69	66	72	68	65	64																			
7	82	72	66	62	81	72	66	62	70	65	61	69	65	61	68	64	61	59																			
8	78	68	62	58	77	67	62	57	66	61	57	65	60	57	64	60	57	55																			
9	74	64	58	54	73	63	58	54	62	57	53	62	57	53	61	56	53	52																			
10	70	60	54	50	69	60	54	50	59	54	50	58	53	50	57	53	50	48																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	206532	206532	206532	206532
5°	203822	204529	205135	204744
10°	196185	198140	199635	198204
15°	182197	187226	189753	185115
20°	167582	174332	177091	170033
25°	148816	161605	164785	153399
30°	117766	133621	140465	124088
35°	85605	101706	108312	91197
40°	53590	67176	74536	58896
45°	24223	36005	41487	27676
50°	7029	11003	14351	8262
55°	1119	1119	1514	1404
60°	453	453	503	453
65°	298	298	298	298
70°	184	294	294	294
75°	146	243	146	243
80°	0	217	217	217
85°	0	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 41487 cd/sqm



TEST NUMBER: P775993

CATALOG NUMBER: HCDJBLS1525CSD-HCD4TRMB-2500lm-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.4	9.5
10°-20°	399.6	24.8
20°-30°	510.0	31.7
30°-40°	389.9	24.2
40°-50°	145.7	9.0
50°-60°	11.9	0.7
60°-70°	1.1	0.1
70°-80°	0.4	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°	1062.0	65.9
0°-40°	1451.9	90.1
0°-60°	1609.5	99.9
0°-90°	1611.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1611.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1641	1641	1641	1641	1641	
5°	1613	1619	1624	1621	1613	152
15°	1398	1437	1456	1421	1398	391
25°	1072	1164	1187	1105	1072	482
35°	557	662	705	594	557	347
45°	136	202	233	156	136	114
55°	5	5	7	6	5	8
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	0



TEST NUMBER: P775993

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMB-2500lm-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1641.1	1641.1	1641.1	1641.1	1641.1	1641.1	1641.1	1641.1	1641.1	1641.1	1641.1
0.5°	1640.6	1639.3	1639.3	1639.3	1640.6	1640.8	1641.6	1642.1	1641.3	1640.6	1640.6
1°	1639.6	1638.3	1638.0	1638.3	1639.6	1640.1	1640.8	1641.3	1641.1	1640.6	1640.3
1.5°	1638.0	1636.5	1636.3	1636.5	1638.3	1639.1	1639.8	1640.6	1640.1	1639.8	1640.1
2°	1636.0	1634.5	1634.0	1634.5	1636.8	1637.5	1638.3	1639.1	1639.1	1638.8	1639.1
2.5°	1633.5	1631.7	1631.4	1632.2	1634.7	1635.5	1636.3	1637.3	1637.5	1637.3	1637.5
3°	1630.4	1628.6	1628.4	1629.4	1632.2	1633.2	1634.0	1635.0	1635.5	1635.5	1635.7
3.5°	1626.8	1624.8	1625.1	1626.3	1629.4	1630.4	1631.4	1632.4	1633.2	1633.5	1633.5
4°	1622.8	1621.0	1621.0	1622.5	1626.3	1627.4	1628.1	1629.4	1630.4	1630.9	1630.9
4.5°	1618.2	1616.4	1616.7	1618.7	1623.0	1624.0	1624.8	1626.1	1627.4	1627.9	1627.9
5°	1613.4	1611.3	1611.6	1614.1	1619.0	1620.0	1620.7	1622.3	1623.8	1624.6	1624.3
5.5°	1607.8	1605.5	1606.5	1609.0	1614.4	1615.4	1616.4	1617.9	1619.7	1620.5	1620.0
6°	1601.9	1599.6	1600.6	1603.7	1609.5	1610.6	1611.6	1613.4	1615.4	1616.2	1615.4
6.5°	1595.5	1593.5	1594.8	1597.8	1603.9	1605.5	1606.5	1608.3	1610.6	1611.3	1610.6
7°	1588.7	1586.6	1588.2	1591.2	1597.8	1599.6	1600.9	1602.9	1605.0	1606.0	1605.2
7.5°	1581.3	1579.5	1580.8	1584.1	1591.2	1593.3	1595.0	1596.8	1598.9	1600.1	1599.4
8°	1573.4	1571.9	1573.2	1576.7	1584.1	1586.4	1588.7	1590.7	1592.7	1593.5	1592.7
8.5°	1564.8	1563.7	1565.3	1568.6	1576.5	1579.0	1582.1	1583.8	1585.6	1586.9	1585.9
9°	1555.6	1554.8	1556.6	1559.9	1568.3	1571.6	1574.9	1576.7	1578.5	1579.3	1578.5
9.5°	1545.4	1545.4	1547.5	1551.0	1559.7	1563.5	1567.3	1569.6	1570.6	1571.4	1570.6
10°	1535.2	1535.2	1537.5	1541.4	1550.5	1555.1	1559.2	1561.5	1562.2	1562.7	1562.0
10.5°	1524.6	1524.6	1527.1	1531.4	1541.6	1545.9	1550.5	1553.1	1553.6	1553.8	1552.8
11°	1512.3	1512.9	1516.2	1520.5	1531.4	1536.5	1541.6	1544.2	1544.7	1544.4	1543.1
11.5°	1499.9	1500.9	1504.7	1509.3	1521.0	1526.9	1532.4	1534.7	1534.7	1534.5	1532.7
12°	1486.6	1488.2	1492.5	1497.6	1510.6	1516.7	1522.5	1525.1	1525.1	1524.1	1522.3
12.5°	1472.9	1474.7	1479.5	1485.6	1499.1	1505.7	1512.1	1514.9	1514.6	1513.1	1511.1
13°	1458.7	1461.0	1466.5	1473.2	1487.4	1494.5	1501.7	1504.5	1503.7	1501.7	1498.6
13.5°	1443.9	1447.0	1452.8	1459.9	1475.7	1483.1	1490.2	1493.0	1492.5	1490.2	1486.6
14°	1428.9	1432.5	1439.3	1447.0	1462.7	1471.4	1478.5	1481.8	1480.8	1477.7	1473.7
14.5°	1413.6	1417.7	1425.1	1433.5	1450.0	1459.2	1466.3	1469.6	1468.6	1465.3	1460.2
15°	1398.4	1402.7	1410.6	1419.5	1437.0	1446.4	1454.1	1457.4	1456.4	1452.3	1446.7
15.5°	1382.6	1387.7	1395.8	1405.7	1424.1	1433.5	1441.6	1444.7	1443.7	1439.3	1432.7
16°	1366.8	1372.4	1381.6	1391.5	1410.3	1420.8	1428.9	1431.9	1430.7	1425.8	1418.7
16.5°	1351.5	1357.7	1367.1	1377.5	1396.8	1407.5	1415.4	1419.5	1417.7	1412.4	1404.5
17°	1336.3	1342.4	1352.3	1363.5	1383.1	1394.0	1402.4	1406.0	1404.2	1398.4	1390.2
17.5°	1321.0	1327.4	1337.8	1349.5	1369.1	1380.3	1388.7	1392.0	1390.5	1384.4	1375.5
18°	1305.7	1312.6	1323.3	1335.3	1355.4	1366.8	1375.2	1379.0	1376.7	1370.4	1361.2
18.5°	1291.0	1298.6	1309.1	1321.3	1341.4	1353.3	1362.0	1365.3	1362.7	1356.1	1346.5
19°	1277.3	1285.1	1296.1	1307.8	1327.9	1340.1	1348.5	1351.8	1349.0	1342.1	1332.0
19.5°	1264.3	1272.4	1282.8	1294.8	1314.9	1326.9	1335.8	1338.8	1336.0	1328.1	1317.7
20°	1251.3	1259.7	1270.1	1282.1	1301.7	1313.9	1323.6	1326.1	1322.3	1314.9	1304.2
20.5°	1238.6	1246.7	1257.4	1269.1	1289.0	1301.4	1310.8	1313.6	1309.8	1301.7	1291.0
21°	1225.6	1234.0	1244.2	1256.1	1276.2	1289.0	1297.9	1301.2	1297.1	1289.0	1278.0



TEST NUMBER: P775993

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMB-2500lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	1180.1	1187.9	1197.9	1213.6	1237.6	1250.0	1258.2	1262.0	1258.9	1250.5	1238.3
23°	1161.7	1169.9	1180.3	1198.9	1224.1	1236.0	1243.2	1247.7	1246.0	1237.1	1223.8
23.5°	1141.9	1150.5	1162.0	1182.1	1210.1	1221.0	1226.6	1231.7	1232.0	1223.3	1208.3
24°	1119.8	1128.9	1142.7	1164.5	1195.8	1205.0	1209.1	1215.4	1217.5	1209.1	1192.0
24.5°	1096.4	1105.5	1122.0	1146.0	1180.3	1188.7	1191.5	1197.9	1202.4	1193.8	1174.2
25°	1071.7	1080.6	1101.9	1127.1	1163.8	1171.2	1172.9	1179.8	1186.7	1178.3	1155.9
25.5°	1045.7	1055.1	1080.8	1106.5	1146.5	1152.6	1153.1	1160.7	1169.9	1161.5	1136.8
26°	1018.7	1029.2	1059.7	1086.7	1127.6	1133.0	1133.8	1141.4	1151.8	1143.9	1117.5
26.5°	991.3	1003.2	1036.8	1065.8	1107.0	1112.6	1114.7	1121.8	1132.5	1124.8	1096.9
27°	963.5	977.8	1013.7	1044.2	1084.9	1092.0	1095.6	1102.2	1111.9	1104.0	1076.2
27.5°	937.1	952.6	989.5	1022.1	1060.5	1070.9	1076.2	1082.4	1090.8	1082.4	1055.9
28°	910.4	928.7	964.0	998.4	1034.8	1049.3	1056.4	1062.5	1067.3	1059.2	1034.0
28.5°	884.4	905.5	938.1	973.5	1006.8	1026.4	1036.6	1042.2	1043.7	1035.5	1011.9
29°	859.5	882.6	911.9	948.0	978.3	1003.2	1016.2	1021.5	1019.5	1009.6	988.7
29.5°	834.8	859.5	884.9	921.0	949.0	979.1	994.1	999.4	993.1	983.1	964.3
30°	810.4	835.8	858.2	892.8	919.5	953.6	971.2	977.3	966.6	955.6	938.3
30.5°	786.2	811.4	832.5	863.3	891.5	927.4	947.0	953.4	938.3	926.9	912.4
31°	761.5	786.2	806.3	834.5	864.3	900.4	923.3	930.0	910.9	898.1	885.4
31.5°	736.8	760.2	781.1	804.3	838.1	873.2	898.7	904.5	883.4	869.1	858.5
32°	711.9	734.0	755.2	774.7	813.4	845.5	874.5	879.1	857.2	841.2	830.0
32.5°	687.0	706.3	729.5	746.0	788.2	818.3	850.1	852.3	830.7	813.9	802.7
33°	661.0	679.1	703.3	716.5	764.3	791.3	825.1	826.1	805.5	787.0	773.7
33.5°	634.6	651.9	676.8	687.5	738.9	764.6	799.2	799.7	779.6	760.5	744.5
34°	608.3	625.9	649.6	659.2	713.4	739.1	773.5	773.2	755.4	734.3	714.7
34.5°	582.9	598.9	622.6	631.8	687.2	714.2	746.8	745.7	730.0	708.8	686.5
35°	557.2	573.7	595.6	604.5	662.0	690.3	720.0	719.3	705.0	683.7	657.2
35.5°	533.0	549.6	567.9	578.1	634.0	665.3	691.8	692.6	679.6	658.2	629.7
36°	509.1	525.1	540.2	552.4	607.1	640.2	664.1	665.9	655.2	632.5	603.0
36.5°	485.7	501.2	513.2	527.2	580.6	615.5	635.8	638.9	629.0	606.3	577.1
37°	462.6	476.8	484.9	502.2	554.7	590.8	608.1	611.4	603.0	579.6	550.8
37.5°	439.7	453.1	457.7	477.8	528.7	565.1	580.1	585.4	576.8	553.1	526.4
38°	416.8	428.7	431.0	453.1	504.3	539.1	554.2	559.8	551.1	526.7	501.5
38.5°	393.9	404.5	406.1	429.2	479.9	512.9	527.4	534.6	526.2	500.7	476.8
39°	371.5	380.9	382.2	405.8	456.7	487.5	501.2	509.4	501.7	477.1	452.4
39.5°	348.3	356.2	358.2	383.9	432.3	462.0	475.3	484.4	477.3	451.4	428.5
40°	326.2	332.5	334.8	361.0	408.9	437.6	449.3	459.0	453.7	427.7	404.5
40.5°	304.0	309.4	313.5	339.7	386.0	413.5	423.6	434.3	429.7	405.1	380.9
41°	282.4	287.0	292.1	318.5	363.6	390.3	399.0	409.4	407.6	383.7	357.0
41.5°	261.0	265.4	271.5	297.7	340.4	366.9	375.0	384.2	384.7	361.0	334.3
42°	241.5	244.0	251.4	276.6	317.8	344.5	351.4	360.0	361.0	340.2	311.7
42.5°	221.9	224.2	232.6	257.5	296.4	322.1	328.2	336.9	338.4	319.1	290.3
43°	203.5	204.8	213.7	238.4	275.8	299.7	305.6	314.2	316.5	299.5	269.7
43.5°	185.2	186.2	196.4	219.6	256.0	277.1	284.5	292.1	294.4	278.1	249.9



TEST NUMBER: P775993

CATALOG NUMBER: HCDJBL5125CSD-HCD4TRMB-2500lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	136.1	134.8	147.8	167.4	202.3	215.0	225.2	231.5	233.1	222.9	196.4
45.5°	121.4	119.8	133.8	151.6	184.5	194.6	206.1	212.5	214.0	204.8	178.6
46°	107.6	106.1	120.3	136.6	166.7	174.3	187.0	193.4	194.9	186.8	162.6
46.5°	94.4	93.1	107.9	122.9	150.1	156.5	168.2	174.5	175.8	168.9	147.6
47°	85.0	84.0	95.7	109.7	134.1	139.7	151.1	156.7	158.0	152.4	133.1
47.5°	75.8	74.5	86.3	96.9	118.8	123.9	134.8	140.2	142.0	137.1	119.6
48°	66.7	65.1	76.8	85.0	104.3	109.4	120.1	124.4	126.5	122.6	107.1
48.5°	57.5	56.0	67.4	74.5	90.8	95.7	105.8	109.9	112.0	107.9	95.4
49°	48.3	46.6	58.0	65.6	78.1	83.5	92.4	95.9	98.0	94.6	84.2
49.5°	42.0	40.5	48.6	57.5	66.4	72.0	79.9	83.2	85.2	82.4	74.0
50°	35.9	34.6	41.2	49.4	56.2	61.6	68.2	71.7	73.3	71.0	64.6
50.5°	30.5	29.5	34.6	41.2	47.1	52.2	57.8	61.3	62.6	60.8	55.7
51°	25.7	24.7	28.5	33.1	38.9	43.5	48.1	51.6	52.7	51.1	47.8
51.5°	21.1	20.4	23.2	27.0	33.8	35.9	39.7	42.7	43.8	43.0	40.5
52°	17.3	16.5	18.3	21.4	28.8	30.5	33.8	35.1	35.9	35.6	33.8
52.5°	13.7	13.0	14.2	16.3	23.7	25.4	28.0	30.0	30.5	30.5	29.0
53°	10.4	9.9	10.7	12.2	18.6	20.1	22.4	24.7	25.4	25.2	24.2
53.5°	9.2	8.7	9.4	8.9	13.5	14.8	16.5	19.6	20.1	20.1	19.3
54°	7.9	7.1	7.9	7.4	8.4	9.7	10.9	14.2	14.8	15.0	14.2
54.5°	6.6	5.6	6.6	6.4	6.1	6.9	7.6	9.2	9.7	9.7	9.7
55°	5.1	4.3	5.1	5.1	5.1	5.3	5.9	6.6	6.9	7.1	7.1
55.5°	3.8	3.8	3.8	4.1	4.3	4.6	4.8	5.1	5.3	5.6	5.3
56°	3.6	3.3	3.3	3.6	3.8	4.1	4.1	4.3	4.6	4.6	4.6
56.5°	3.1	3.1	3.1	3.1	3.3	3.6	3.8	3.8	4.1	4.1	4.1
57°	2.8	2.8	2.8	2.8	3.1	3.1	3.3	3.6	3.6	3.6	3.6
57.5°	2.5	2.5	2.5	2.5	2.8	2.8	3.1	3.1	3.3	3.3	3.3
58°	2.3	2.3	2.3	2.3	2.5	2.5	2.5	2.8	2.8	2.8	2.8
58.5°	2.0	2.0	2.0	2.0	2.3	2.3	2.3	2.5	2.5	2.5	2.5
59°	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.3	2.3	2.3	2.3
59.5°	1.8	1.8	1.8	1.8	1.8	2.0	2.0	2.0	2.0	2.0	2.0
60°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	2.0	2.0	2.0
60.5°	1.5	1.5	1.5	1.5	1.8	1.8	1.8	1.8	1.8	1.8	1.8
61°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.8	1.8	1.8
61.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
62°	1.3	1.3	1.3	1.3	1.3	1.5	1.5	1.5	1.5	1.5	1.5
62.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.5	1.5
63°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
63.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
64°	1.0	1.0	1.0	1.0	1.0	1.3	1.3	1.3	1.3	1.3	1.3
64.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.3
65°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
65.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
66°	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0



TEST NUMBER: P775993

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMB-2500lm-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	0.8	0.8	0.8	0.8	0.8	0.8	0.8
68°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
68.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
69°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
69.5°	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
70°	0.5	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
70.5°	0.5	0.5	0.5	0.5	0.8	0.8	0.8	0.5	0.5	0.5	0.8
71°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.8
71.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
72°	0.5	0.5	0.5	0.5	0.5	0.5	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°	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
74.5°	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
75°	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.5
75.5°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.3	0.3	0.3	0.5
76°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
76.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
77°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
77.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
78°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
78.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
79°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
79.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
80°	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
80.5°	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
81°	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.3
81.5°	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.3
82°	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.3
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: P775993

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMB-2500lm-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: P775993

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMB-2500lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1641.1	1641.1	1641.1	1641.1	1641.1	1641.1
0.5°	1640.6	1641.1	1641.3	1641.6	1641.6	1640.6
1°	1640.6	1640.8	1640.8	1641.1	1640.8	1639.6
1.5°	1640.1	1640.1	1640.1	1640.1	1639.6	1638.0
2°	1639.1	1638.8	1638.8	1638.5	1637.5	1636.0
2.5°	1637.5	1637.0	1636.8	1636.5	1635.2	1633.5
3°	1635.7	1634.7	1634.5	1634.0	1632.7	1630.4
3.5°	1633.2	1631.9	1631.7	1630.9	1629.1	1626.8
4°	1630.1	1628.6	1628.4	1627.4	1625.3	1622.8
4.5°	1626.8	1624.8	1624.3	1623.3	1621.2	1618.2
5°	1623.3	1620.7	1619.7	1618.4	1616.4	1613.4
5.5°	1619.0	1615.9	1614.6	1613.4	1610.6	1607.8
6°	1614.1	1610.6	1609.3	1607.5	1605.0	1601.9
6.5°	1609.0	1605.0	1603.4	1601.4	1598.6	1595.5
7°	1603.4	1598.9	1596.8	1594.5	1591.2	1588.7
7.5°	1597.3	1592.2	1589.7	1586.9	1583.6	1581.3
8°	1591.0	1585.1	1582.1	1578.8	1576.0	1573.4
8.5°	1583.8	1577.5	1573.9	1570.1	1567.1	1564.8
9°	1576.2	1569.3	1565.0	1560.7	1557.6	1555.6
9.5°	1568.1	1560.4	1555.6	1550.5	1547.0	1545.4
10°	1559.4	1551.0	1545.4	1540.1	1536.8	1535.2
10.5°	1550.0	1541.1	1534.5	1528.6	1525.6	1524.6
11°	1540.3	1530.4	1523.0	1516.7	1513.4	1512.3
11.5°	1529.9	1518.7	1510.8	1504.0	1500.4	1499.9
12°	1518.5	1506.7	1497.8	1490.5	1486.9	1486.6
12.5°	1506.7	1493.5	1484.1	1476.5	1472.9	1472.9
13°	1494.5	1479.8	1470.1	1462.2	1458.4	1458.7
13.5°	1481.3	1465.8	1455.4	1447.0	1443.9	1443.9
14°	1467.6	1451.3	1440.3	1431.7	1427.9	1428.9
14.5°	1453.6	1436.0	1424.8	1416.4	1412.4	1413.6
15°	1439.3	1420.8	1409.0	1400.7	1396.8	1398.4
15.5°	1424.6	1405.5	1393.3	1384.9	1381.1	1382.6
16°	1409.8	1389.7	1377.5	1368.3	1365.3	1366.8
16.5°	1394.8	1374.4	1361.7	1352.6	1349.5	1351.5
17°	1379.5	1358.9	1345.4	1336.5	1333.5	1336.3
17.5°	1364.3	1343.1	1329.7	1321.0	1318.0	1321.0
18°	1349.3	1327.4	1314.1	1305.0	1302.7	1305.7
18.5°	1334.2	1312.4	1298.4	1289.5	1287.4	1291.0
19°	1319.2	1297.1	1283.4	1274.7	1273.2	1277.3
19.5°	1305.0	1283.1	1269.9	1261.2	1259.4	1264.3
20°	1291.2	1269.6	1255.9	1248.0	1246.2	1251.3
20.5°	1278.0	1256.6	1242.9	1234.8	1233.5	1238.6
21°	1264.8	1243.7	1229.4	1221.3	1220.8	1225.6

TEST NUMBER: P775993

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMB-2500lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1224.8	1203.2	1187.2	1177.0	1174.5	1180.1
23°	1209.1	1187.2	1169.9	1157.9	1155.4	1161.7
23.5°	1192.8	1169.6	1151.3	1137.3	1135.8	1141.9
24°	1175.0	1149.8	1129.9	1114.7	1113.7	1119.8
24.5°	1156.1	1128.2	1108.8	1091.3	1090.2	1096.4
25°	1136.0	1104.7	1085.4	1066.6	1066.1	1071.7
25.5°	1115.4	1079.6	1061.2	1042.4	1041.6	1045.7
26°	1093.6	1053.1	1035.3	1018.7	1015.7	1018.7
26.5°	1070.9	1025.4	1009.3	994.8	990.5	991.3
27°	1047.8	998.6	981.6	971.4	964.8	963.5
27.5°	1023.3	972.2	952.3	946.5	938.6	937.1
28°	998.4	947.5	924.1	921.6	912.6	910.4
28.5°	973.5	923.3	896.6	895.6	886.7	884.4
29°	947.8	899.9	870.2	868.6	859.7	859.5
29.5°	922.1	877.3	844.5	840.6	833.0	834.8
30°	897.1	853.9	819.0	812.7	805.5	810.4
30.5°	871.7	829.7	794.3	783.7	777.5	786.2
31°	847.0	805.0	769.7	754.4	750.1	761.5
31.5°	823.1	778.8	745.0	726.7	722.1	736.8
32°	798.7	752.1	719.8	698.9	695.6	711.9
32.5°	774.5	725.1	695.1	671.7	670.2	687.0
33°	750.3	697.7	669.7	645.5	645.0	661.0
33.5°	726.2	670.2	644.0	618.8	620.1	634.6
34°	700.5	643.7	618.3	592.8	595.1	608.3
34.5°	674.5	618.5	591.8	566.9	569.9	582.9
35°	647.3	593.6	566.1	540.9	544.7	557.2
35.5°	621.1	570.2	541.4	515.2	519.6	533.0
36°	592.1	547.5	516.8	490.8	494.1	509.1
36.5°	564.8	524.1	493.6	467.4	468.4	485.7
37°	536.9	501.2	469.9	444.2	443.7	462.6
37.5°	510.4	478.1	446.8	421.6	419.8	439.7
38°	483.7	453.9	423.9	399.2	396.7	416.8
38.5°	458.7	429.7	401.2	377.3	374.5	393.9
39°	433.3	406.1	379.6	356.5	353.7	371.5
39.5°	408.6	382.2	357.0	335.1	333.1	348.3
40°	383.9	358.5	335.3	315.2	313.0	326.2
40.5°	360.8	335.6	314.2	295.1	293.1	304.0
41°	337.1	314.0	293.4	276.3	274.5	282.4
41.5°	314.5	292.3	273.3	258.2	255.7	261.0
42°	292.3	272.0	253.7	241.5	237.9	241.5
42.5°	270.7	251.6	234.8	224.4	220.6	221.9
43°	249.9	232.0	216.8	208.6	204.3	203.5
43.5°	231.3	211.7	199.7	192.9	188.0	185.2



TEST NUMBER: P775993

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMB-2500lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	176.1	155.5	152.2	149.9	144.8	136.1
45.5°	159.8	138.4	137.6	136.6	131.5	121.4
46°	144.5	122.6	124.2	124.4	119.6	107.6
46.5°	130.0	107.9	111.2	112.7	107.6	94.4
47°	116.5	94.9	98.7	101.3	96.4	85.0
47.5°	104.1	85.5	87.3	90.8	87.3	75.8
48°	92.1	76.1	78.4	82.2	78.4	66.7
48.5°	81.4	66.9	69.2	73.5	69.2	57.5
49°	71.5	57.8	60.3	64.9	60.0	48.3
49.5°	62.3	48.6	51.4	56.2	50.9	42.0
50°	53.9	42.2	44.0	47.6	43.8	35.9
50.5°	46.6	36.6	37.7	40.5	36.6	30.5
51°	39.7	31.3	32.1	34.1	30.8	25.7
51.5°	33.8	26.7	26.7	28.2	25.4	21.1
52°	29.3	22.4	21.9	22.9	20.4	17.3
52.5°	24.9	18.3	17.8	18.1	16.0	13.7
53°	20.4	14.8	14.0	13.7	12.2	10.4
53.5°	16.0	11.4	10.7	10.2	8.9	9.2
54°	11.4	8.7	9.2	8.7	7.6	7.9
54.5°	8.7	7.4	7.9	7.1	6.4	6.6
55°	6.6	6.4	6.6	5.6	5.1	5.1
55.5°	5.1	5.1	5.1	4.1	4.1	3.8
56°	4.6	4.1	3.8	3.8	3.6	3.6
56.5°	3.8	3.6	3.3	3.3	3.3	3.1
57°	3.6	3.1	3.1	3.1	2.8	2.8
57.5°	3.1	2.8	2.8	2.8	2.5	2.5
58°	2.8	2.5	2.5	2.5	2.3	2.3
58.5°	2.5	2.3	2.3	2.3	2.3	2.0
59°	2.3	2.0	2.0	2.0	2.0	2.0
59.5°	2.0	2.0	2.0	2.0	1.8	1.8
60°	2.0	1.8	1.8	1.8	1.8	1.8
60.5°	1.8	1.8	1.8	1.8	1.8	1.5
61°	1.8	1.5	1.5	1.5	1.5	1.5
61.5°	1.5	1.5	1.5	1.5	1.5	1.5
62°	1.5	1.5	1.5	1.5	1.3	1.3
62.5°	1.5	1.3	1.3	1.3	1.3	1.3
63°	1.3	1.3	1.3	1.3	1.3	1.3
63.5°	1.3	1.3	1.3	1.3	1.3	1.3
64°	1.3	1.3	1.3	1.3	1.0	1.0
64.5°	1.3	1.0	1.0	1.0	1.0	1.0
65°	1.0	1.0	1.0	1.0	1.0	1.0
65.5°	1.0	1.0	1.0	1.0	1.0	1.0
66°	1.0	1.0	1.0	1.0	1.0	0.8



TEST NUMBER: P775993

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMB-2500lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	0.8	0.8	0.8	0.8	0.8	0.8
68°	0.8	0.8	0.8	0.8	0.8	0.8
68.5°	0.8	0.8	0.8	0.8	0.8	0.8
69°	0.8	0.8	0.8	0.8	0.8	0.8
69.5°	0.8	0.8	0.8	0.8	0.8	0.5
70°	0.8	0.8	0.8	0.8	0.5	0.5
70.5°	0.8	0.8	0.8	0.5	0.5	0.5
71°	0.8	0.5	0.5	0.5	0.5	0.5
71.5°	0.5	0.5	0.5	0.5	0.5	0.5
72°	0.5	0.5	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	0.3
74.5°	0.5	0.5	0.5	0.5	0.3	0.3
75°	0.5	0.5	0.5	0.5	0.3	0.3
75.5°	0.5	0.5	0.5	0.3	0.3	0.3
76°	0.5	0.3	0.3	0.3	0.3	0.3
76.5°	0.3	0.3	0.3	0.3	0.3	0.3
77°	0.3	0.3	0.3	0.3	0.3	0.3
77.5°	0.3	0.3	0.3	0.3	0.3	0.3
78°	0.3	0.3	0.3	0.3	0.3	0.3
78.5°	0.3	0.3	0.3	0.3	0.3	0.3
79°	0.3	0.3	0.3	0.3	0.3	0.3
79.5°	0.3	0.3	0.3	0.3	0.3	0.3
80°	0.3	0.3	0.3	0.3	0.3	0.0
80.5°	0.3	0.3	0.3	0.3	0.0	0.0
81°	0.3	0.3	0.3	0.3	0.0	0.0
81.5°	0.3	0.3	0.3	0.3	0.0	0.0
82°	0.3	0.3	0.3	0.0	0.0	0.0
82.5°	0.3	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: P775993

CATALOG NUMBER: HCDJBL51525CSD-HCD4TRMB-2500lm-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



Report Generated By 670245859 / DESKTOP-T8S5UU9

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Cooper Lighting Solutions Photometric Lab
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Scaled Data Report





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

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21.5°	1212.1	1220.3	1229.9	1242.9	1263.5	1276.7	1286.2	1288.7	1284.4	1275.7	1265.0
22°	1196.9	1204.7	1214.4	1229.2	1250.8	1263.5	1272.7	1276.0	1271.9	1263.0	1252.3



44°	168.4	168.2	179.1	201.0	238.1	255.5	263.3	270.5	272.8	259.0	232.0
44.5°	151.1	151.1	163.1	184.2	220.3	235.1	244.3	250.6	252.1	240.9	214.2



66.5°	0.8	0.8	0.8	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0
67°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.0



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°	1251.8	1230.9	1217.0	1208.8	1206.8	1212.1
22°	1239.1	1217.5	1202.4	1193.8	1191.5	1196.9



44°	213.0	192.4	183.2	177.8	172.8	168.4
44.5°	194.4	173.5	167.4	163.3	158.5	151.1

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66.5°	1.0	1.0	1.0	1.0	0.8	0.8
67°	1.0	1.0	0.8	0.8	0.8	0.8

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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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(END OF REPORT)