

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P333465-930

Luminaire Tested: **S125DIW-S1270D470U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333465-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIW-S1270D470U930-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5507.1 lumens
Efficiency: N/A
Efficacy: 105.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Direct

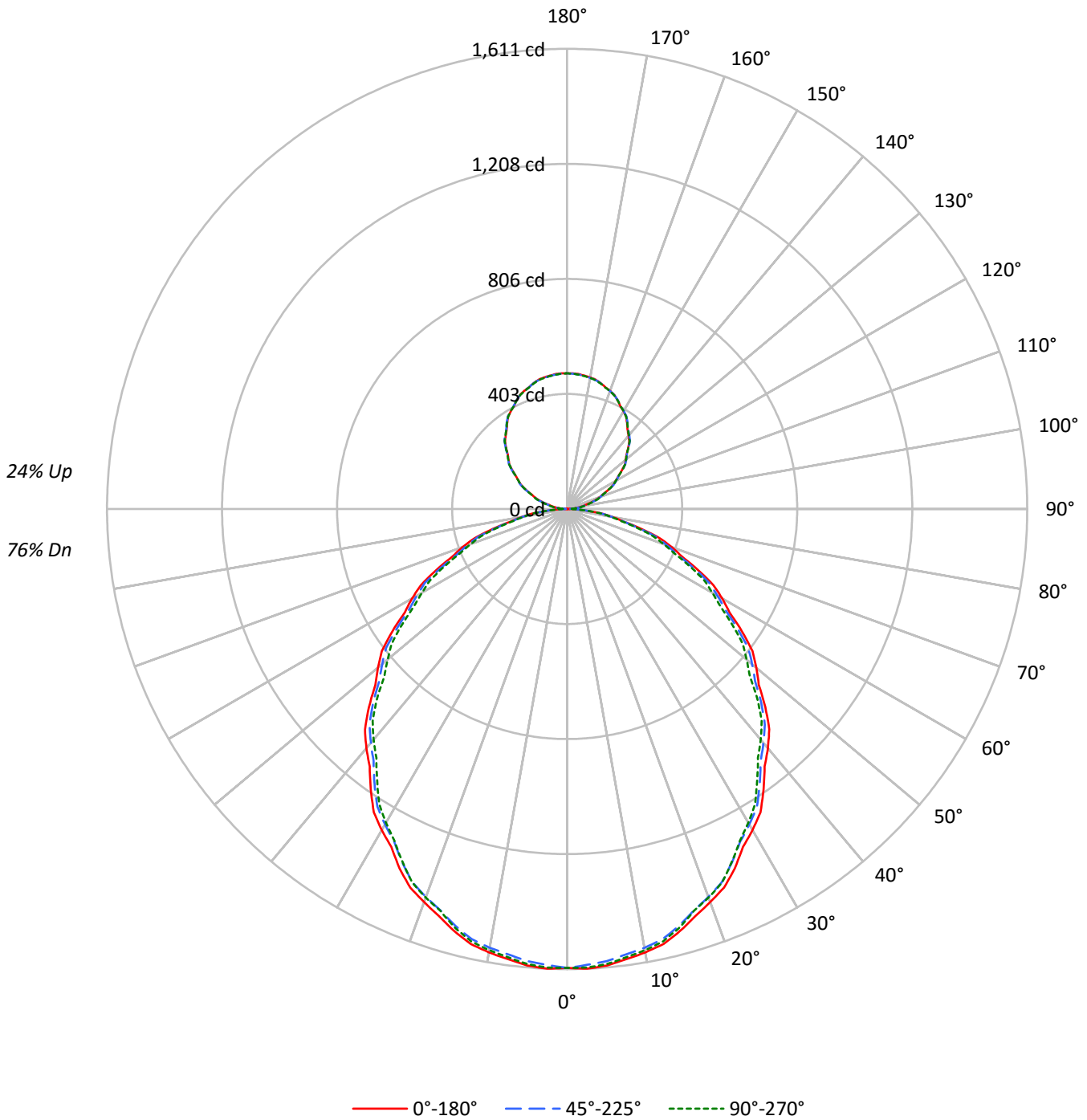
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	113	113	113	113	108	108	108	108	98	98	98	88	88	88	80	80	80	76
1	104	99	95	91	98	94	91	87	86	83	80	78	76	74	71	69	67	64
2	94	86	80	74	89	82	77	72	75	71	67	68	65	61	62	59	57	53
3	86	76	68	62	82	73	66	60	66	61	56	60	56	52	55	51	48	45
4	79	67	59	53	75	64	57	51	59	53	48	54	49	45	49	45	42	39
5	72	60	52	45	69	58	50	44	53	46	41	48	43	39	44	40	36	34
6	67	54	46	40	63	52	44	38	48	41	36	44	38	34	40	36	32	29
7	62	49	41	35	59	47	39	34	43	37	32	40	34	30	37	32	28	26
8	58	45	37	31	55	43	35	30	40	33	29	37	31	27	34	29	26	23
9	54	41	33	28	51	39	32	27	37	30	26	34	28	24	31	27	23	21
10	50	38	30	25	48	36	29	25	34	28	23	31	26	22	29	24	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10377	10377	10377
5°	10400	10301	10367
10°	10337	10228	10287
15°	10224	10105	10148
20°	10065	9933	9950
25°	9892	9728	9719
30°	9679	9508	9461
35°	9451	9270	9140
40°	9217	9012	8884
45°	8963	8777	8603
50°	8685	8493	8238
55°	8417	8173	7944
60°	8094	7848	7569
65°	7713	7459	7207
70°	7345	7009	6770
75°	6692	6470	6248
80°	5954	5861	5720
85°	5187	5276	4987



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.5	2.8
10°-20°	427.9	7.8
20°-30°	631.9	11.5
30°-40°	737.3	13.4
40°-50°	740.5	13.4
50°-60°	650.0	11.8
60°-70°	484.3	8.8
70°-80°	276.9	5.0
80°-90°	81.6	1.5
90°-100°	31.8	0.6
100°-110°	93.9	1.7
110°-120°	159.1	2.9
120°-130°	209.4	3.8
130°-140°	234.6	4.3
140°-150°	229.9	4.2
150°-160°	193.1	3.5
160°-170°	128.4	2.3
170°-180°	44.9	0.8
0°-30°	1211.3	22.0
0°-40°	1948.6	35.4
0°-60°	3339.1	60.6
0°-90°	4182.0	75.9
90°-120°	284.8	5.2
90°-150°	958.7	17.4
90°-180°	1325.0	24.1
0°-180°	5507.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1607	1607	1607	1607	1607	
5°	1604	1601	1589	1600	1599	152
15°	1529	1525	1511	1517	1518	431
25°	1388	1381	1365	1367	1364	638
35°	1199	1193	1176	1169	1159	749
45°	981	976	961	946	942	756
55°	748	743	726	715	706	667
65°	505	501	488	477	472	501
75°	268	266	259	255	250	286
85°	70	71	71	70	67	78
90°	0	3	6	8	9	5
95°	24	25	28	31	32	26
105°	84	86	88	90	92	90
115°	159	161	162	161	161	157
125°	232	235	235	234	234	208
135°	302	304	305	305	303	233
145°	366	368	369	369	368	229
155°	419	419	419	421	419	193
165°	456	455	455	457	454	128
175°	474	472	472	474	472	45
180°	475	475	475	475	475	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7
2.5°	1610.8	1610.1	1609.5	1608.7	1608.1	1606.6	1604.3	1602.1	1599.9	1597.6	1599.9
5°	1604.2	1603.6	1603.0	1602.5	1601.9	1600.3	1597.4	1594.6	1591.8	1588.9	1591.5
7.5°	1589.4	1588.9	1588.3	1587.7	1587.1	1585.3	1582.3	1579.2	1576.1	1573.0	1575.4
10°	1576.2	1575.6	1575.1	1574.5	1573.9	1572.1	1569.0	1565.9	1562.8	1559.7	1562.0
12.5°	1559.9	1558.9	1558.0	1556.9	1555.9	1554.0	1551.0	1548.2	1545.3	1542.4	1544.3
15°	1529.2	1528.4	1527.5	1526.6	1525.8	1523.8	1520.7	1517.6	1514.5	1511.4	1512.8
17.5°	1493.9	1492.6	1491.3	1490.1	1488.9	1486.6	1483.4	1480.2	1477.0	1473.7	1475.5
20°	1464.4	1463.8	1463.2	1462.6	1462.1	1460.0	1456.3	1452.6	1448.9	1445.3	1447.2
22.5°	1434.8	1433.9	1432.8	1431.8	1430.8	1428.6	1425.1	1421.7	1418.2	1414.8	1416.1
25°	1388.1	1386.7	1385.3	1383.9	1382.4	1379.9	1376.2	1372.6	1368.9	1365.2	1365.8
27.5°	1333.4	1332.6	1331.7	1330.9	1330.1	1327.7	1324.0	1320.1	1316.4	1312.6	1312.7
30°	1297.9	1297.0	1296.2	1295.3	1294.5	1291.9	1287.7	1283.4	1279.2	1275.0	1274.4
32.5°	1259.2	1257.9	1256.6	1255.3	1254.0	1251.5	1247.7	1243.9	1240.1	1236.3	1235.3
35°	1198.7	1197.6	1196.5	1195.3	1194.2	1191.6	1187.6	1183.7	1179.7	1175.8	1174.4
37.5°	1135.9	1134.5	1133.1	1131.6	1130.2	1127.6	1124.0	1120.2	1116.5	1112.8	1110.7
40°	1093.2	1091.8	1090.4	1088.9	1087.5	1084.8	1080.9	1076.9	1073.0	1069.0	1066.5
42.5°	1047.4	1046.3	1045.1	1043.8	1042.7	1040.1	1036.2	1032.2	1028.3	1024.3	1022.0
45°	981.3	980.2	979.1	978.0	976.8	974.5	971.2	967.8	964.4	961.0	957.6
47.5°	910.1	910.2	910.3	910.3	910.4	908.3	904.3	900.3	896.2	892.1	888.7
50°	864.4	863.6	862.7	861.9	861.0	858.8	855.5	852.1	848.7	845.3	841.6
52.5°	817.6	817.0	816.4	815.7	815.1	813.0	809.3	805.8	802.2	798.5	795.3
55°	747.5	746.6	745.8	744.9	744.0	741.7	737.7	733.8	729.8	725.9	723.3
57.5°	673.4	673.0	672.5	672.1	671.6	669.8	666.4	663.1	659.7	656.4	653.1
60°	626.6	625.6	624.4	623.3	622.2	620.0	616.9	613.8	610.7	607.6	604.8
62.5°	577.9	577.0	576.1	575.1	574.2	572.5	569.8	567.1	564.5	561.8	558.8
65°	504.7	504.1	503.5	503.0	502.4	500.5	497.4	494.3	491.2	488.1	485.6
67.5°	433.7	432.5	431.4	430.2	429.0	427.2	424.9	422.6	420.3	417.9	415.8
70°	389.0	387.6	386.1	384.7	383.4	381.3	378.8	376.3	373.7	371.2	369.5
72.5°	340.1	339.2	338.3	337.3	336.3	335.0	333.4	331.7	330.1	328.5	326.5
75°	268.2	267.7	267.1	266.5	266.0	265.0	263.6	262.1	260.7	259.3	258.4
77.5°	201.9	201.6	201.4	201.2	201.0	200.5	199.7	198.9	198.0	197.3	196.8
80°	160.1	160.1	160.1	160.1	160.1	159.9	159.3	158.7	158.2	157.6	157.4
82.5°	123.5	123.1	122.6	122.2	121.7	121.5	121.3	121.2	121.2	121.0	120.5
85°	70.0	70.2	70.4	70.8	71.0	71.2	71.2	71.2	71.2	71.2	70.9
87.5°	27.6	27.6	27.8	28.0	28.0	28.0	28.0	27.9	27.7	27.6	27.7
90°	0.4	1.1	1.7	2.4	3.0	3.6	4.2	4.7	5.3	6.0	6.4
92.5°	9.0	9.4	9.9	10.4	10.8	11.3	12.1	12.8	13.5	14.2	14.8
95°	24.1	24.2	24.4	24.5	24.7	25.2	26.0	26.8	27.6	28.5	29.0
97.5°	39.9	39.9	40.0	40.1	40.2	40.8	41.9	43.0	44.2	45.3	45.8
100°	51.8	51.8	51.8	51.8	51.8	52.3	53.3	54.4	55.4	56.5	57.3
102.5°	64.4	64.7	65.1	65.5	65.8	66.2	66.8	67.3	67.8	68.3	69.1
105°	84.2	84.6	85.0	85.4	85.9	86.3	86.8	87.3	87.8	88.3	88.8
107.5°	106.2	106.6	107.0	107.4	107.8	108.2	108.5	108.9	109.3	109.7	109.9
110°	121.2	121.6	122.1	122.5	122.9	123.2	123.4	123.7	123.9	124.2	124.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	136.6	136.8	137.0	137.2	137.5	137.7	138.0	138.4	138.6	138.9	139.1
115°	159.2	159.6	160.0	160.3	160.6	160.9	161.0	161.2	161.3	161.5	161.4
117.5°	182.1	182.1	182.3	182.5	182.6	182.8	183.0	183.0	183.2	183.4	183.4
120°	196.2	196.7	197.1	197.5	197.9	198.1	198.2	198.3	198.4	198.4	198.4
122.5°	211.6	211.7	211.9	212.1	212.1	212.4	212.5	212.8	213.0	213.2	213.1
125°	232.4	232.9	233.4	233.9	234.4	234.7	234.8	234.9	235.0	235.1	234.9
127.5°	254.6	254.9	255.2	255.4	255.8	255.9	256.0	256.1	256.2	256.3	256.2
130°	267.9	268.3	268.7	269.1	269.5	269.9	270.0	270.2	270.4	270.5	270.4
132.5°	281.2	281.8	282.6	283.2	283.9	284.2	284.2	284.1	284.1	284.1	284.0
135°	302.2	302.8	303.3	303.8	304.3	304.5	304.6	304.7	304.8	304.8	304.8
137.5°	322.0	322.5	323.0	323.5	324.0	324.3	324.5	324.7	324.8	325.1	325.1
140°	334.8	335.2	335.6	336.0	336.4	336.8	337.0	337.3	337.5	337.8	337.9
142.5°	347.5	347.8	348.2	348.5	348.9	349.2	349.5	349.8	350.2	350.5	350.6
145°	366.2	366.6	366.9	367.2	367.5	367.8	368.0	368.3	368.5	368.8	368.8
147.5°	383.5	383.7	383.8	384.0	384.3	384.4	384.6	384.8	385.0	385.2	385.4
150°	395.0	394.9	394.8	394.8	394.7	394.8	395.2	395.5	395.8	396.2	396.2
152.5°	404.5	404.6	404.7	404.8	405.0	405.0	405.2	405.4	405.4	405.6	405.8
155°	419.1	419.1	419.1	419.1	419.1	419.1	419.1	419.2	419.3	419.4	419.7
157.5°	432.0	431.9	431.7	431.5	431.3	431.3	431.4	431.5	431.5	431.6	431.9
160°	439.8	439.5	439.2	439.0	438.7	438.6	438.7	438.8	438.9	439.0	439.4
162.5°	446.5	446.4	446.2	446.0	445.8	445.7	445.7	445.7	445.8	445.8	446.2
165°	455.6	455.4	455.3	455.1	454.9	454.9	455.0	455.1	455.2	455.3	455.6
167.5°	463.3	463.0	462.7	462.4	462.0	461.9	461.9	461.9	461.9	461.9	462.4
170°	467.4	467.1	466.8	466.4	466.1	465.9	465.9	465.9	465.9	465.9	466.4
172.5°	470.4	470.1	469.8	469.4	469.1	469.0	469.0	469.0	469.0	469.0	469.4
175°	473.8	473.4	473.0	472.7	472.4	472.2	472.2	472.2	472.2	472.2	472.7
177.5°	475.4	475.2	474.9	474.7	474.3	474.2	474.2	474.1	474.0	473.9	474.3
180°	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7	1606.7
2.5°	1602.1	1604.3	1606.6	1607.6	1607.4	1607.2	1607.0	1606.7
5°	1594.0	1596.6	1599.1	1600.3	1599.9	1599.7	1599.4	1599.1
7.5°	1577.8	1580.4	1582.8	1584.0	1583.7	1583.4	1583.1	1582.8
10°	1564.2	1566.5	1568.7	1569.7	1569.5	1569.1	1568.9	1568.6
12.5°	1546.1	1547.8	1549.6	1550.5	1550.5	1550.4	1550.4	1550.3
15°	1514.3	1515.6	1517.0	1517.8	1517.8	1517.8	1517.8	1517.8
17.5°	1477.2	1479.0	1480.7	1480.9	1479.5	1478.1	1476.7	1475.3
20°	1449.3	1451.2	1453.2	1453.5	1452.0	1450.7	1449.3	1447.8
22.5°	1417.4	1418.7	1420.0	1420.2	1419.2	1418.2	1417.2	1416.3
25°	1366.4	1366.9	1367.5	1367.3	1366.5	1365.6	1364.8	1363.9
27.5°	1312.8	1313.0	1313.0	1312.6	1311.8	1311.0	1310.1	1309.3
30°	1273.8	1273.3	1272.7	1272.0	1271.1	1270.3	1269.4	1268.6
32.5°	1234.3	1233.3	1232.2	1230.9	1229.5	1227.9	1226.4	1224.9
35°	1173.0	1171.6	1170.2	1168.3	1166.0	1163.8	1161.6	1159.3
37.5°	1108.6	1106.5	1104.4	1102.7	1101.4	1100.1	1098.8	1097.5
40°	1064.0	1061.4	1058.8	1057.2	1056.3	1055.5	1054.6	1053.8
42.5°	1019.7	1017.3	1015.0	1013.3	1011.9	1010.6	1009.3	1008.0
45°	954.2	950.8	947.5	945.3	944.4	943.6	942.7	941.9
47.5°	885.2	881.7	878.3	875.6	873.6	871.6	869.7	867.7
50°	838.0	834.3	830.6	827.8	825.8	823.9	821.9	819.9
52.5°	792.1	788.9	785.6	782.9	780.7	778.5	776.3	774.1
55°	720.7	718.2	715.7	713.4	711.4	709.5	707.4	705.5
57.5°	649.9	646.6	643.4	641.2	640.1	639.0	637.9	636.8
60°	601.9	599.2	596.3	593.9	591.9	590.0	588.0	586.0
62.5°	555.7	552.7	549.7	547.4	545.8	544.3	542.7	541.3
65°	483.1	480.5	477.9	476.1	475.0	473.9	472.7	471.6
67.5°	413.7	411.5	409.4	408.0	407.2	406.6	405.9	405.2
70°	367.8	366.1	364.4	363.0	361.8	360.7	359.6	358.5
72.5°	324.7	322.7	320.8	319.3	318.1	317.0	315.8	314.7
75°	257.6	256.7	255.9	254.9	253.8	252.7	251.5	250.4
77.5°	196.2	195.8	195.3	194.6	193.8	193.0	192.2	191.4
80°	157.0	156.8	156.5	156.0	155.5	154.9	154.3	153.8
82.5°	120.0	119.5	119.0	118.7	118.5	118.5	118.3	118.2
85°	70.6	70.4	70.0	69.6	69.1	68.5	67.9	67.3
87.5°	27.8	27.9	28.0	27.8	27.4	27.0	26.6	26.2
90°	6.8	7.2	7.6	7.9	8.2	8.4	8.6	8.9
92.5°	15.2	15.8	16.4	16.7	16.9	17.0	17.3	17.4
95°	29.6	30.2	30.7	31.1	31.3	31.5	31.6	31.8
97.5°	46.4	47.0	47.5	47.8	47.9	48.0	48.1	48.2
100°	58.0	58.8	59.5	59.9	60.1	60.3	60.4	60.6
102.5°	70.0	70.8	71.6	72.1	72.3	72.6	72.8	73.1
105°	89.3	89.8	90.3	90.7	90.9	91.2	91.4	91.6
107.5°	110.1	110.4	110.6	110.8	110.8	110.7	110.7	110.7
110°	124.7	124.9	125.1	125.2	125.1	125.1	125.0	124.9



TEST NUMBER: P333465-930

CATALOG NUMBER: S125DIW-S1270D470U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	139.2	139.3	139.4	139.4	139.3	139.1	138.9	138.8
115°	161.3	161.3	161.2	161.1	161.0	160.9	160.9	160.8
117.5°	183.5	183.5	183.6	183.5	183.2	182.9	182.5	182.1
120°	198.4	198.4	198.4	198.3	198.0	197.6	197.3	197.0
122.5°	213.1	213.0	213.0	212.8	212.5	212.3	212.0	211.7
125°	234.7	234.6	234.4	234.2	234.2	234.1	234.0	233.9
127.5°	256.2	256.1	256.0	255.8	255.7	255.5	255.4	255.2
130°	270.4	270.3	270.2	270.0	269.9	269.7	269.5	269.4
132.5°	283.9	283.8	283.7	283.6	283.4	283.2	282.9	282.7
135°	304.8	304.8	304.8	304.7	304.4	304.0	303.7	303.4
137.5°	325.2	325.3	325.5	325.3	324.9	324.5	324.0	323.6
140°	338.1	338.3	338.4	338.3	337.9	337.5	337.0	336.6
142.5°	350.7	350.7	350.8	350.7	350.3	349.8	349.4	349.0
145°	368.8	368.8	368.8	368.7	368.4	368.2	367.9	367.7
147.5°	385.6	385.8	386.0	385.8	385.2	384.7	384.1	383.6
150°	396.2	396.2	396.2	396.1	395.9	395.7	395.6	395.4
152.5°	406.0	406.2	406.3	406.3	406.0	405.8	405.4	405.1
155°	420.0	420.4	420.7	420.7	420.3	419.9	419.5	419.1
157.5°	432.3	432.6	432.9	432.8	432.3	431.7	431.2	430.6
160°	439.7	440.0	440.3	440.3	439.9	439.4	439.0	438.6
162.5°	446.6	446.9	447.4	447.4	446.9	446.4	445.9	445.4
165°	455.9	456.2	456.6	456.5	456.0	455.5	455.0	454.5
167.5°	462.8	463.3	463.8	463.8	463.3	462.8	462.3	461.8
170°	466.9	467.4	468.0	467.9	467.3	466.8	466.2	465.6
172.5°	469.9	470.4	470.9	470.9	470.3	469.9	469.4	468.9
175°	473.2	473.8	474.3	474.2	473.6	473.0	472.5	471.9
177.5°	474.7	475.2	475.6	475.5	475.1	474.6	474.1	473.7
180°	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8

(END OF REPORT)