

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: P333463-830

Luminaire Tested: **S125DIW-S1270D470U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333463-830
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-S1270D470U830-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP 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: 6175.7 lumens
Efficiency: N/A
Efficacy: 117.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Direct

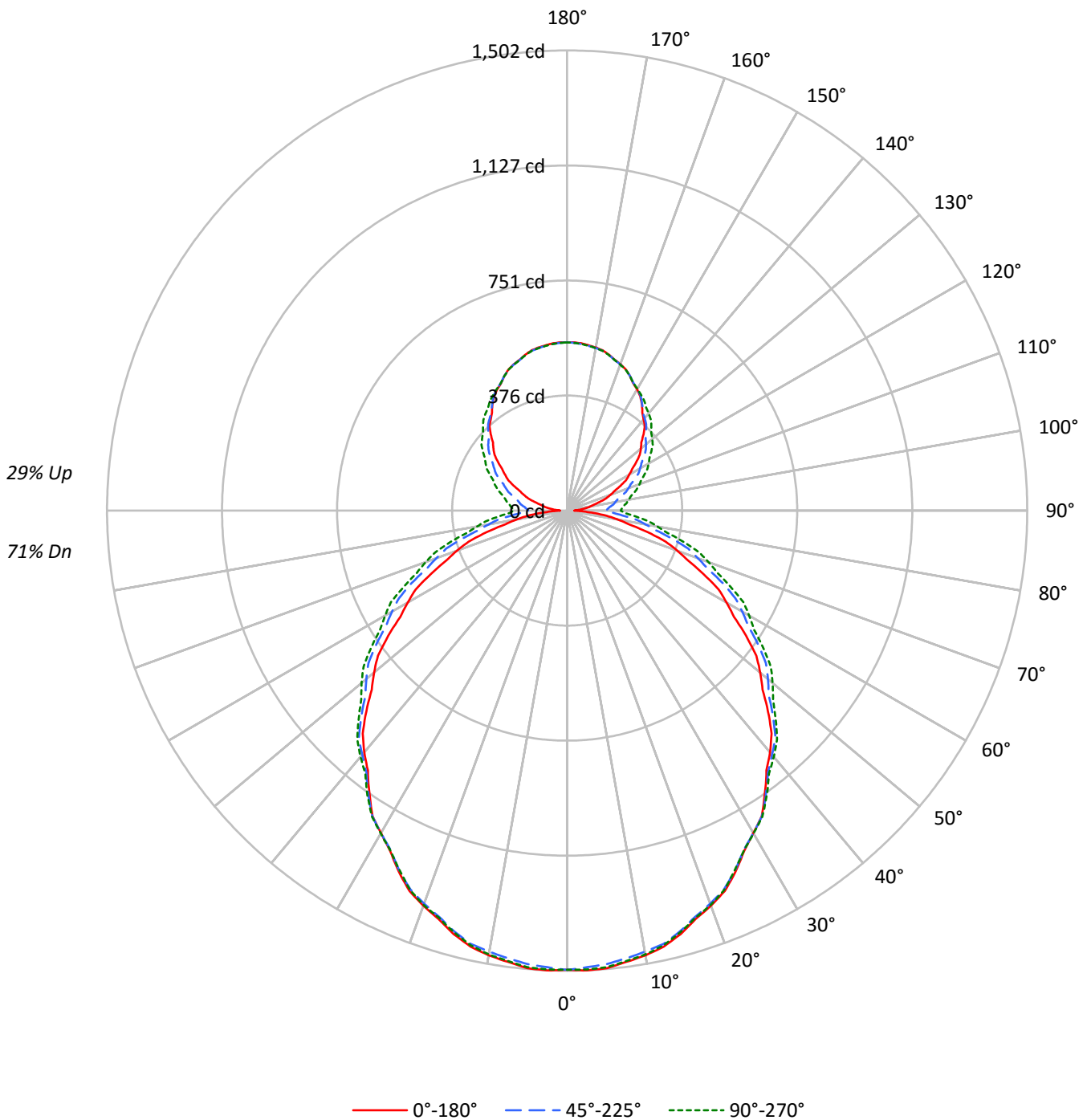
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75	71
1	101	96	92	88	96	91	87	84	82	79	76	73	71	68	65	63	61	57
2	92	84	77	71	87	79	73	68	71	66	62	63	60	56	56	53	51	47
3	84	73	65	59	79	69	62	56	62	57	52	56	51	47	50	46	43	39
4	76	65	56	50	72	61	54	48	55	49	44	50	44	40	44	40	37	34
5	70	58	49	42	66	55	47	41	49	43	38	44	39	35	40	35	32	29
6	65	52	43	37	61	49	41	36	45	38	33	40	35	30	36	31	28	25
7	60	47	38	32	56	45	37	31	40	34	29	36	31	27	33	28	25	22
8	56	43	34	29	52	41	33	28	37	30	26	33	28	24	30	26	22	20
9	52	39	31	26	49	37	30	25	34	28	23	31	25	22	28	23	20	18
10	48	36	28	23	46	34	27	22	31	25	21	28	23	20	26	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9680	9680	9680
5°	9700	9502	9532
10°	9630	9332	9318
15°	9517	9129	9046
20°	9362	8878	8774
25°	9178	8609	8439
30°	8955	8314	8134
35°	8748	8042	7856
40°	8535	7756	7574
45°	8297	7510	7326
50°	8068	7245	7106
55°	7794	6995	6847
60°	7494	6708	6584
65°	7180	6410	6286
70°	6825	6000	5981
75°	6261	5606	5607
80°	5525	5130	5198
85°	4842	4811	5069



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.7	2.3
10°-20°	402.4	6.5
20°-30°	598.4	9.7
30°-40°	708.8	11.5
40°-50°	732.8	11.9
50°-60°	675.1	10.9
60°-70°	545.7	8.8
70°-80°	365.5	5.9
80°-90°	190.7	3.1
90°-100°	143.1	2.3
100°-110°	187.0	3.0
110°-120°	236.4	3.8
120°-130°	271.9	4.4
130°-140°	284.2	4.6
140°-150°	268.4	4.3
150°-160°	223.3	3.6
160°-170°	148.4	2.4
170°-180°	51.9	0.8
0°-30°	1142.5	18.5
0°-40°	1851.2	30.0
0°-60°	3259.1	52.8
0°-90°	4361.0	70.6
90°-120°	566.5	9.2
90°-150°	1391.1	22.5
90°-180°	1815.0	29.4
0°-180°	6175.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1499	1499	1499	1499	1499	
5°	1499	1496	1486	1497	1496	142
15°	1431	1432	1422	1430	1425	403
25°	1300	1304	1296	1301	1295	598
35°	1126	1135	1132	1136	1136	704
45°	927	943	951	961	962	715
55°	713	736	760	775	782	637
65°	491	525	560	581	588	487
75°	270	309	356	384	392	287
85°	81	130	181	212	225	86
90°	24	75	127	162	175	17
95°	47	87	140	174	187	45
105°	111	138	183	214	226	118
115°	193	206	244	269	278	191
125°	275	277	306	327	335	246
135°	352	354	364	383	389	272
145°	425	425	426	434	438	265
155°	484	484	485	486	484	223
165°	527	526	526	528	526	149
175°	548	546	546	548	546	52
180°	549	549	549	549	549	



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CATALOG NUMBER: S125DIW-S1270D470U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1502.4	1501.9	1501.4	1500.9	1500.3	1499.2	1497.3	1495.5	1493.7	1491.9	1493.7
5°	1498.9	1498.3	1497.6	1496.9	1496.3	1494.9	1492.5	1490.3	1488.0	1485.7	1488.3
7.5°	1485.7	1485.4	1485.2	1484.9	1484.7	1483.4	1481.0	1478.7	1476.3	1473.9	1476.2
10°	1473.9	1473.9	1473.9	1473.9	1473.9	1472.6	1470.0	1467.4	1464.8	1462.2	1464.4
12.5°	1457.5	1457.7	1458.0	1458.3	1458.5	1457.6	1455.6	1453.4	1451.3	1449.3	1451.0
15°	1431.3	1431.6	1432.0	1432.3	1432.7	1431.6	1429.4	1427.1	1424.8	1422.5	1424.5
17.5°	1397.2	1397.9	1398.5	1399.2	1399.9	1399.0	1396.8	1394.5	1392.1	1389.9	1391.4
20°	1372.5	1373.2	1373.9	1374.5	1375.2	1374.3	1372.1	1369.8	1367.4	1365.2	1366.2
22.5°	1344.3	1345.5	1346.7	1347.8	1349.1	1348.3	1345.8	1343.2	1340.7	1338.1	1339.4
25°	1300.5	1301.6	1302.5	1303.4	1304.5	1304.0	1302.0	1300.0	1298.1	1296.1	1297.4
27.5°	1251.8	1253.2	1254.6	1256.0	1257.5	1257.1	1254.9	1252.6	1250.5	1248.2	1249.2
30°	1215.3	1217.3	1219.2	1221.2	1223.1	1223.1	1221.2	1219.2	1217.3	1215.3	1216.0
32.5°	1182.4	1184.1	1185.8	1187.5	1189.2	1189.3	1187.9	1186.5	1185.0	1183.6	1184.2
35°	1125.7	1127.9	1130.2	1132.6	1134.8	1135.5	1134.4	1133.5	1132.6	1131.5	1132.6
37.5°	1068.9	1071.0	1073.1	1075.3	1077.3	1078.2	1077.9	1077.5	1077.2	1076.9	1078.2
40°	1030.1	1032.7	1035.4	1038.0	1040.6	1041.7	1041.4	1041.0	1040.8	1040.5	1041.7
42.5°	987.8	991.2	994.6	998.0	1001.5	1003.4	1004.2	1004.9	1005.6	1006.4	1007.9
45°	927.3	930.9	934.4	938.0	941.6	944.2	945.9	947.5	949.1	950.7	953.1
47.5°	865.3	868.6	871.9	875.2	878.5	881.7	884.5	887.3	890.0	892.9	896.3
50°	822.9	826.5	830.1	833.7	837.4	840.9	844.5	848.1	851.7	855.3	858.8
52.5°	778.3	782.7	787.0	791.4	795.8	800.1	804.6	808.9	813.2	817.7	821.5
55°	712.8	717.9	723.2	728.4	733.6	738.9	744.0	749.3	754.5	759.8	763.4
57.5°	645.7	652.0	658.3	664.5	670.8	676.9	683.0	688.9	694.9	701.0	705.1
60°	601.1	607.6	614.1	620.7	627.2	633.7	640.3	646.8	653.3	659.8	664.7
62.5°	557.5	564.1	570.6	577.1	583.6	590.5	597.5	604.5	611.6	618.7	624.1
65°	490.8	498.3	505.9	513.4	520.8	528.6	536.4	544.2	552.0	559.9	564.8
67.5°	427.9	435.2	442.4	449.7	456.9	464.6	472.5	480.5	488.4	496.4	502.4
70°	382.1	389.6	397.1	404.6	412.1	420.1	428.6	437.2	445.6	454.1	460.3
72.5°	337.4	345.2	353.0	360.7	368.5	377.0	386.3	395.6	404.8	414.2	420.8
75°	270.4	278.9	287.4	295.9	304.3	313.9	324.2	334.7	345.2	355.6	362.1
77.5°	206.0	215.8	225.6	235.4	245.2	255.1	265.2	275.2	285.3	295.4	302.6
80°	166.1	175.9	185.7	195.5	205.3	215.7	226.8	237.9	249.0	260.1	267.3
82.5°	129.6	140.0	150.2	160.6	170.9	181.7	193.1	204.4	215.8	227.2	234.1
85°	80.9	91.6	102.4	113.2	123.9	135.1	146.5	157.9	169.3	180.8	187.9
87.5°	45.9	56.6	67.1	77.8	88.3	99.2	110.5	121.8	133.0	144.2	151.8
90°	23.9	35.2	46.4	57.6	68.8	80.3	92.0	103.8	115.6	127.3	135.3
92.5°	31.5	41.7	51.9	62.1	72.3	83.5	95.7	107.8	120.0	132.2	140.1
95°	46.8	55.5	64.2	73.0	81.6	92.0	104.1	116.0	128.1	140.2	148.0
97.5°	63.4	71.2	78.9	86.6	94.3	104.2	116.2	128.3	140.3	152.3	159.8
100°	76.0	82.8	89.7	96.5	103.4	112.6	124.3	136.0	147.7	159.4	167.1
102.5°	89.4	96.2	102.9	109.6	116.3	125.1	135.9	146.8	157.6	168.3	175.9
105°	110.7	116.3	122.1	127.7	133.5	141.5	151.8	162.2	172.6	182.9	190.0
107.5°	134.1	139.0	144.0	148.9	153.8	161.2	171.1	180.9	190.7	200.6	207.4
110°	150.4	154.8	159.2	163.6	168.0	174.9	184.4	193.8	203.2	212.6	219.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	168.1	171.5	174.9	178.3	181.7	188.0	197.3	206.5	215.7	225.0	231.1
115°	192.9	195.6	198.3	201.0	203.6	209.2	217.9	226.7	235.4	244.0	249.8
117.5°	217.8	219.4	221.1	222.8	224.5	229.4	237.6	245.8	254.0	262.2	267.9
120°	234.2	235.6	237.1	238.6	240.0	244.5	252.1	259.8	267.4	274.9	280.5
122.5°	250.8	251.4	252.0	252.7	253.3	257.3	264.9	272.4	279.8	287.4	292.6
125°	274.6	274.8	275.0	275.3	275.6	279.0	285.6	292.3	298.9	305.5	310.6
127.5°	298.8	298.8	298.8	298.7	298.7	301.4	306.9	312.4	317.9	323.4	328.1
130°	314.1	314.2	314.4	314.5	314.7	317.2	322.0	326.7	331.5	336.2	340.7
132.5°	328.3	329.0	329.8	330.5	331.2	333.3	336.8	340.3	343.7	347.2	351.8
135°	352.4	352.6	352.9	353.1	353.4	354.7	357.0	359.4	361.8	364.2	368.4
137.5°	374.9	375.3	375.6	375.9	376.2	376.9	378.2	379.6	380.9	382.2	386.2
140°	388.5	389.0	389.5	389.9	390.4	391.0	391.5	392.2	392.8	393.4	397.2
142.5°	403.2	403.3	403.5	403.6	403.8	404.1	404.4	404.9	405.3	405.8	409.0
145°	424.8	424.9	424.9	425.0	425.0	425.2	425.5	425.7	426.0	426.3	428.0
147.5°	443.4	443.6	443.7	443.9	444.2	444.4	444.6	444.9	445.1	445.4	446.1
150°	456.7	456.6	456.5	456.4	456.3	456.5	456.9	457.2	457.6	458.0	458.0
152.5°	467.6	467.8	467.9	468.0	468.2	468.3	468.4	468.6	468.7	468.9	469.1
155°	484.5	484.5	484.5	484.5	484.5	484.5	484.6	484.7	484.7	484.8	485.2
157.5°	499.5	499.3	499.1	498.9	498.6	498.6	498.7	498.8	498.9	499.0	499.4
160°	508.4	508.1	507.7	507.5	507.2	507.1	507.2	507.3	507.4	507.5	507.9
162.5°	516.2	516.0	515.9	515.6	515.4	515.3	515.3	515.3	515.4	515.4	515.9
165°	526.7	526.5	526.3	526.1	525.9	525.9	526.0	526.1	526.2	526.3	526.7
167.5°	535.6	535.3	534.9	534.5	534.1	534.0	534.0	534.0	534.0	534.0	534.5
170°	540.4	540.0	539.6	539.2	538.9	538.7	538.7	538.7	538.7	538.7	539.2
172.5°	543.8	543.5	543.1	542.7	542.3	542.2	542.2	542.2	542.2	542.2	542.7
175°	547.7	547.2	546.9	546.5	546.1	545.9	545.9	545.9	545.9	545.9	546.5
177.5°	549.6	549.3	549.0	548.7	548.4	548.2	548.2	548.1	548.0	547.9	548.4
180°	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1495.5	1497.3	1499.2	1500.0	1499.7	1499.5	1499.2	1498.9
5°	1490.9	1493.6	1496.2	1497.3	1496.9	1496.7	1496.3	1496.0
7.5°	1478.5	1480.8	1483.1	1484.0	1483.8	1483.4	1483.1	1482.7
10°	1466.8	1469.0	1471.3	1472.3	1472.0	1471.7	1471.3	1471.0
12.5°	1452.7	1454.5	1456.3	1456.8	1455.9	1455.1	1454.2	1453.4
15°	1426.4	1428.4	1430.3	1430.7	1429.4	1428.0	1426.7	1425.4
17.5°	1392.9	1394.4	1395.9	1396.3	1395.4	1394.7	1393.9	1393.1
20°	1367.2	1368.1	1369.1	1369.6	1369.6	1369.6	1369.6	1369.6
22.5°	1340.7	1341.9	1343.1	1343.3	1342.6	1341.8	1341.0	1340.2
25°	1298.7	1300.0	1301.4	1301.2	1299.6	1297.9	1296.3	1294.7
27.5°	1250.1	1250.9	1251.9	1252.1	1251.4	1250.8	1250.3	1249.7
30°	1216.6	1217.3	1218.0	1218.0	1217.8	1217.4	1217.1	1216.7
32.5°	1184.9	1185.5	1186.2	1186.4	1186.0	1185.7	1185.3	1185.1
35°	1133.5	1134.4	1135.5	1136.0	1136.0	1136.0	1136.0	1136.0
37.5°	1079.5	1080.8	1082.1	1082.7	1082.5	1082.4	1082.3	1082.1
40°	1043.0	1044.3	1045.7	1046.6	1047.3	1047.9	1048.6	1049.2
42.5°	1009.5	1011.1	1012.6	1013.4	1013.6	1013.7	1013.9	1014.0
45°	955.4	957.6	959.9	961.2	961.6	961.9	962.2	962.5
47.5°	899.6	902.9	906.3	908.2	909.0	909.6	910.4	911.2
50°	862.4	866.0	869.7	871.9	872.9	873.9	874.9	875.8
52.5°	825.4	829.2	833.0	835.4	836.0	836.8	837.5	838.2
55°	766.9	770.5	774.1	776.6	777.9	779.2	780.5	781.8
57.5°	709.2	713.3	717.5	720.0	721.0	721.9	722.9	723.9
60°	669.6	674.5	679.4	682.3	683.3	684.3	685.3	686.3
62.5°	629.5	634.9	640.4	643.7	644.9	646.2	647.4	648.7
65°	569.7	574.6	579.5	582.6	583.9	585.2	586.5	587.8
67.5°	508.3	514.3	520.2	524.0	525.7	527.4	529.1	530.8
70°	466.5	472.7	478.9	483.0	484.9	486.9	488.9	490.8
72.5°	427.5	434.3	441.0	445.1	446.6	448.0	449.4	450.8
75°	368.7	375.2	381.7	385.9	387.5	389.1	390.8	392.4
77.5°	309.7	316.9	324.1	328.4	329.7	330.9	332.2	333.6
80°	274.5	281.6	288.9	293.1	294.4	295.7	297.0	298.3
82.5°	241.0	248.0	254.9	259.5	261.8	264.2	266.6	268.9
85°	195.1	202.3	209.5	214.4	217.0	219.6	222.3	224.8
87.5°	159.4	167.0	174.7	179.6	181.9	184.3	186.6	189.0
90°	143.3	151.3	159.3	164.6	167.1	169.7	172.3	174.8
92.5°	148.0	155.8	163.7	168.9	171.4	173.9	176.3	178.9
95°	155.9	163.7	171.5	176.7	179.2	181.7	184.2	186.6
97.5°	167.3	174.7	182.2	187.2	189.5	191.8	194.2	196.5
100°	174.8	182.6	190.3	195.2	197.4	199.5	201.6	203.8
102.5°	183.4	191.0	198.5	203.4	205.6	207.8	210.0	212.3
105°	197.1	204.2	211.3	216.1	218.8	221.3	223.9	226.5
107.5°	214.1	220.8	227.5	232.0	233.9	235.9	238.0	240.0
110°	225.6	232.1	238.6	242.9	245.1	247.3	249.5	251.7



TEST NUMBER: P333463-830

CATALOG NUMBER: S125DIW-S1270D470U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	237.1	243.2	249.3	253.4	255.5	257.6	259.8	261.8
115°	255.5	261.4	267.1	271.0	272.8	274.7	276.5	278.4
117.5°	273.5	279.1	284.7	288.5	290.3	292.2	294.0	295.9
120°	286.1	291.6	297.2	300.8	302.3	303.9	305.5	307.1
122.5°	297.7	303.0	308.2	311.6	313.3	314.9	316.6	318.3
125°	315.6	320.6	325.6	328.9	330.5	332.0	333.6	335.1
127.5°	332.8	337.5	342.3	345.5	347.2	348.9	350.6	352.3
130°	345.2	349.7	354.1	357.1	358.5	360.0	361.4	362.9
132.5°	356.2	360.7	365.1	368.0	369.0	370.1	371.3	372.4
135°	372.7	376.9	381.2	383.9	385.2	386.4	387.7	388.9
137.5°	390.1	394.2	398.1	400.5	401.3	402.2	403.0	403.8
140°	401.0	404.7	408.5	410.9	411.7	412.5	413.3	414.2
142.5°	412.1	415.3	418.5	420.5	421.3	422.2	423.0	423.8
145°	429.6	431.2	432.9	434.2	435.3	436.2	437.2	438.3
147.5°	446.8	447.5	448.3	448.7	448.6	448.6	448.5	448.5
150°	458.0	458.0	458.0	458.0	458.2	458.3	458.5	458.5
152.5°	469.4	469.6	469.8	469.8	469.5	469.2	468.9	468.6
155°	485.6	486.0	486.4	486.4	485.9	485.4	484.9	484.5
157.5°	499.7	500.1	500.5	500.4	499.7	499.1	498.5	497.9
160°	508.3	508.7	509.1	509.0	508.5	508.0	507.6	507.1
162.5°	516.3	516.7	517.2	517.2	516.6	516.0	515.5	514.9
165°	527.1	527.4	527.8	527.7	527.2	526.6	526.0	525.5
167.5°	535.1	535.6	536.2	536.2	535.6	535.0	534.4	533.9
170°	539.8	540.4	541.0	540.9	540.3	539.6	538.9	538.3
172.5°	543.3	543.8	544.4	544.4	543.8	543.2	542.6	542.1
175°	547.1	547.7	548.3	548.2	547.5	546.9	546.2	545.5
177.5°	548.8	549.3	549.8	549.7	549.2	548.7	548.1	547.6
180°	548.9	548.9	548.9	548.9	548.9	548.9	548.9	548.9

(END OF REPORT)