

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: P333462

Luminaire Tested: **S125DIW-S1270D470U835-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333462
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIW-S1270D470U835-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6801.0 lumens
Efficiency: N/A
Efficacy: 129.8 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

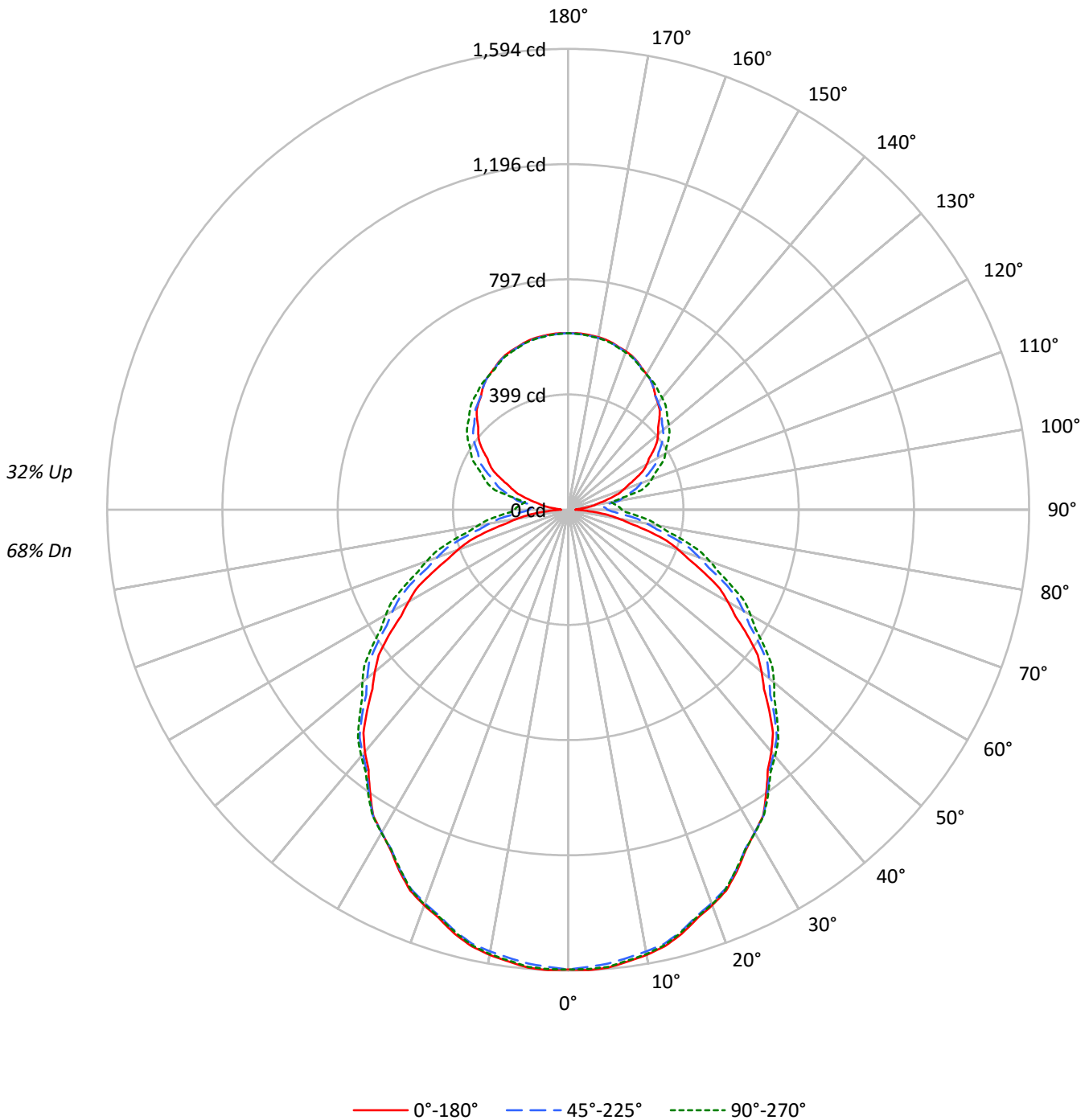
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	111	111	111	111	105	105	105	105	93	93	93	83	83	83	73	73	73	68																				
1	101	96	92	88	95	91	87	83	80	77	75	71	69	67	63	61	59	55																				
2	91	83	76	71	86	79	73	67	70	65	61	62	58	55	55	52	49	45																				
3	83	73	65	59	78	69	62	56	61	56	51	54	50	46	48	45	42	38																				
4	76	64	56	49	71	61	53	47	54	48	43	48	43	39	43	39	36	32																				
5	70	57	49	42	65	54	46	41	49	42	37	43	38	34	38	34	31	28																				
6	64	51	43	37	60	49	41	35	44	37	32	39	34	30	35	30	27	24																				
7	59	46	38	32	56	44	36	31	40	33	29	36	30	26	32	27	24	22																				
8	55	42	34	28	52	40	33	27	36	30	25	33	27	23	29	25	21	19																				
9	52	39	31	25	48	37	30	25	33	27	23	30	25	21	27	23	19	17																				
10	48	36	28	23	45	34	27	22	31	25	21	28	23	19	25	21	18	16																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10271	10271	10271
5°	10291	10081	10113
10°	10218	9901	9886
15°	10097	9686	9597
20°	9933	9419	9309
25°	9738	9134	8953
30°	9501	8820	8630
35°	9281	8532	8335
40°	9056	8229	8036
45°	8802	7969	7773
50°	8560	7687	7539
55°	8269	7421	7265
60°	7950	7117	6985
65°	7617	6800	6669
70°	7241	6366	6346
75°	6643	5948	5948
80°	5861	5444	5515
85°	5135	5104	5378



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.4	2.2
10°-20°	426.9	6.3
20°-30°	634.8	9.3
30°-40°	752.0	11.1
40°-50°	777.5	11.4
50°-60°	716.2	10.5
60°-70°	579.0	8.5
70°-80°	387.7	5.7
80°-90°	202.4	3.0
90°-100°	135.0	2.0
100°-110°	219.9	3.2
110°-120°	303.6	4.5
120°-130°	349.8	5.1
130°-140°	356.0	5.2
140°-150°	324.0	4.8
150°-160°	259.8	3.8
160°-170°	168.0	2.5
170°-180°	58.0	0.9
0°-30°	1212.1	17.8
0°-40°	1964.1	28.9
0°-60°	3457.8	50.8
0°-90°	4626.9	68.0
90°-120°	658.5	9.7
90°-150°	1688.3	24.8
90°-180°	2174.0	32.0
0°-180°	6801.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1590	1590	1590	1590	1590	
5°	1590	1587	1576	1588	1587	151
15°	1519	1519	1509	1518	1512	428
25°	1380	1384	1375	1381	1374	635
35°	1194	1204	1200	1205	1205	747
45°	984	1000	1009	1019	1021	759
55°	756	781	806	823	830	676
65°	521	557	594	616	624	517
75°	287	328	377	407	416	304
85°	86	137	192	225	238	91
90°	25	79	135	172	186	18
95°	46	85	121	156	168	49
105°	147	175	221	251	262	156
115°	259	274	313	338	346	257
125°	361	365	394	416	424	322
135°	446	448	457	476	482	344
145°	515	514	514	522	526	322
155°	566	563	564	565	561	260
165°	597	594	594	597	594	168
175°	610	608	608	611	608	58
180°	610	610	610	610	610	



TEST NUMBER: P333462

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3
2.5°	1594.0	1593.5	1592.9	1592.4	1591.8	1590.6	1588.6	1586.7	1584.8	1582.8	1584.8
5°	1590.3	1589.6	1588.9	1588.2	1587.5	1586.0	1583.5	1581.1	1578.7	1576.3	1579.0
7.5°	1576.3	1576.0	1575.7	1575.4	1575.2	1573.8	1571.3	1568.8	1566.3	1563.8	1566.2
10°	1563.8	1563.8	1563.8	1563.8	1563.8	1562.4	1559.6	1556.9	1554.1	1551.3	1553.7
12.5°	1546.3	1546.6	1546.9	1547.2	1547.4	1546.5	1544.3	1542.0	1539.8	1537.6	1539.5
15°	1518.6	1518.9	1519.3	1519.6	1520.0	1518.9	1516.5	1514.1	1511.7	1509.2	1511.3
17.5°	1482.4	1483.1	1483.8	1484.5	1485.2	1484.3	1481.9	1479.5	1477.0	1474.6	1476.2
20°	1456.2	1456.9	1457.6	1458.3	1459.0	1458.1	1455.7	1453.3	1450.8	1448.4	1449.5
22.5°	1426.3	1427.5	1428.8	1430.0	1431.3	1430.5	1427.8	1425.1	1422.4	1419.7	1421.0
25°	1379.8	1380.9	1381.9	1382.9	1384.0	1383.5	1381.4	1379.3	1377.2	1375.1	1376.5
27.5°	1328.1	1329.6	1331.1	1332.6	1334.2	1333.7	1331.4	1329.0	1326.7	1324.3	1325.3
30°	1289.4	1291.5	1293.5	1295.6	1297.7	1297.7	1295.6	1293.5	1291.5	1289.4	1290.1
32.5°	1254.5	1256.3	1258.1	1259.9	1261.7	1261.8	1260.3	1258.8	1257.2	1255.7	1256.4
35°	1194.3	1196.7	1199.1	1201.6	1204.0	1204.7	1203.6	1202.6	1201.6	1200.5	1201.6
37.5°	1134.1	1136.3	1138.5	1140.8	1143.0	1143.9	1143.6	1143.2	1142.9	1142.5	1143.9
40°	1092.9	1095.7	1098.5	1101.3	1104.0	1105.2	1104.9	1104.5	1104.2	1103.9	1105.2
42.5°	1048.0	1051.6	1055.2	1058.8	1062.5	1064.6	1065.4	1066.2	1066.9	1067.7	1069.3
45°	983.8	987.6	991.4	995.2	999.0	1001.8	1003.6	1005.3	1007.0	1008.7	1011.2
47.5°	918.0	921.5	925.1	928.6	932.1	935.4	938.4	941.4	944.3	947.3	950.9
50°	873.1	876.9	880.7	884.5	888.4	892.2	896.0	899.8	903.6	907.4	911.2
52.5°	825.7	830.4	835.0	839.6	844.3	848.9	853.6	858.2	862.8	867.5	871.6
55°	756.2	761.7	767.3	772.8	778.3	783.9	789.4	795.0	800.5	806.1	809.9
57.5°	685.1	691.7	698.4	705.0	711.7	718.2	724.6	730.9	737.3	743.7	748.1
60°	637.7	644.6	651.5	658.5	665.4	672.3	679.3	686.2	693.1	700.0	705.2
62.5°	591.5	598.5	605.4	612.3	619.2	626.5	633.9	641.4	648.9	656.4	662.1
65°	520.7	528.7	536.7	544.7	552.6	560.8	569.1	577.4	585.7	594.0	599.2
67.5°	454.0	461.7	469.4	477.1	484.8	492.9	501.3	509.8	518.2	526.7	533.0
70°	405.4	413.3	421.3	429.3	437.2	445.7	454.7	463.8	472.8	481.8	488.4
72.5°	358.0	366.2	374.5	382.7	391.0	400.0	409.8	419.7	429.5	439.4	446.5
75°	286.9	295.9	304.9	313.9	322.9	333.0	344.0	355.1	366.2	377.3	384.2
77.5°	218.6	229.0	239.4	249.8	260.2	270.7	281.4	292.0	302.7	313.4	321.0
80°	176.2	186.6	197.0	207.4	217.8	228.8	240.6	252.4	264.2	276.0	283.6
82.5°	137.5	148.5	159.4	170.4	181.3	192.8	204.9	216.9	229.0	241.0	248.4
85°	85.8	97.2	108.6	120.1	131.5	143.3	155.4	167.5	179.6	191.8	199.4
87.5°	48.7	60.0	71.2	82.5	93.7	105.3	117.2	129.2	141.1	153.0	161.1
90°	25.4	37.3	49.2	61.1	73.0	85.2	97.6	110.1	122.6	135.1	143.6
92.5°	29.4	39.1	48.8	58.5	68.2	79.4	92.1	104.7	117.4	130.1	138.3
95°	46.1	54.8	63.5	72.2	80.9	89.2	97.2	105.1	113.1	121.1	129.2
97.5°	72.2	80.9	89.5	98.2	106.8	113.1	116.9	120.7	124.5	128.3	132.7
100°	92.7	100.3	107.9	115.4	123.0	132.5	144.0	155.5	167.0	178.5	170.8
102.5°	113.5	120.6	127.7	134.8	141.9	151.0	162.1	173.1	184.2	195.2	199.4
105°	147.0	153.0	158.9	164.9	170.8	179.0	189.4	199.8	210.2	220.6	227.5
107.5°	181.9	186.6	191.3	196.0	200.7	208.2	218.4	228.6	238.7	248.9	255.8
110°	204.5	208.7	212.9	217.0	221.2	228.2	238.1	248.0	257.9	267.8	274.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	227.0	230.5	234.1	237.7	241.2	247.8	257.3	266.9	276.4	286.0	291.9
115°	259.1	262.0	264.9	267.9	270.8	276.8	285.9	295.0	304.1	313.2	319.1
117.5°	292.4	293.9	295.5	297.1	298.6	303.9	312.8	321.7	330.6	339.5	344.9
120°	314.1	315.0	315.9	316.9	317.8	322.4	330.7	339.0	347.2	355.5	361.2
122.5°	332.0	332.9	333.7	334.6	335.5	339.8	347.7	355.5	363.3	371.1	376.6
125°	361.4	361.7	362.1	362.4	362.8	366.4	373.4	380.3	387.2	394.2	399.3
127.5°	388.1	388.3	388.4	388.6	388.8	391.6	397.3	402.9	408.5	414.1	419.0
130°	405.5	405.7	405.8	406.0	406.1	408.7	413.6	418.6	423.5	428.5	433.0
132.5°	421.6	422.1	422.7	423.2	423.7	425.7	429.2	432.7	436.3	439.8	444.6
135°	446.0	446.3	446.5	446.8	447.0	448.3	450.5	452.7	455.0	457.2	461.5
137.5°	468.4	468.7	468.9	469.1	469.4	470.0	471.0	472.0	473.0	474.0	478.1
140°	482.0	482.2	482.4	482.6	482.8	483.0	483.3	483.5	483.8	484.0	488.0
142.5°	495.4	495.2	495.1	494.9	494.8	494.8	495.0	495.2	495.4	495.6	498.9
145°	515.0	514.9	514.7	514.6	514.4	514.4	514.4	514.4	514.4	514.4	516.2
147.5°	530.7	530.6	530.6	530.5	530.5	530.5	530.7	530.8	530.9	531.0	531.7
150°	541.5	541.3	541.1	540.9	540.7	540.7	540.9	541.1	541.3	541.5	541.7
152.5°	552.0	551.6	551.1	550.7	550.2	550.1	550.3	550.5	550.7	550.9	551.1
155°	565.5	564.9	564.3	563.7	563.1	562.9	563.1	563.3	563.5	563.7	564.0
157.5°	575.9	575.5	575.2	574.8	574.4	574.3	574.3	574.3	574.3	574.4	574.7
160°	583.1	582.5	581.9	581.3	580.7	580.5	580.6	580.7	580.8	580.9	581.3
162.5°	588.9	588.3	587.7	587.1	586.5	586.3	586.4	586.5	586.6	586.7	587.2
165°	596.7	596.1	595.5	594.9	594.3	594.0	594.1	594.2	594.3	594.4	595.0
167.5°	602.5	601.9	601.3	600.6	600.0	599.7	599.8	599.9	600.0	600.1	600.9
170°	605.8	605.1	604.3	603.6	602.9	602.6	602.7	602.8	602.9	603.0	603.8
172.5°	607.9	607.2	606.5	605.8	605.1	604.9	605.0	605.2	605.4	605.6	606.3
175°	610.3	609.7	609.1	608.5	607.9	607.6	607.7	607.8	607.9	608.0	608.8
177.5°	611.4	610.9	610.4	609.9	609.4	609.2	609.3	609.4	609.5	609.6	610.1
180°	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3
2.5°	1586.7	1588.6	1590.6	1591.4	1591.1	1590.9	1590.6	1590.3
5°	1581.8	1584.6	1587.4	1588.6	1588.2	1587.9	1587.5	1587.2
7.5°	1568.6	1571.1	1573.5	1574.5	1574.2	1573.8	1573.5	1573.1
10°	1556.2	1558.6	1561.0	1562.1	1561.7	1561.4	1561.0	1560.7
12.5°	1541.3	1543.2	1545.1	1545.6	1544.7	1543.8	1542.9	1542.0
15°	1513.4	1515.5	1517.5	1517.9	1516.5	1515.1	1513.7	1512.3
17.5°	1477.8	1479.4	1481.0	1481.4	1480.5	1479.7	1478.9	1478.0
20°	1450.5	1451.5	1452.6	1453.1	1453.1	1453.1	1453.1	1453.1
22.5°	1422.4	1423.7	1425.0	1425.2	1424.4	1423.6	1422.7	1421.9
25°	1377.9	1379.3	1380.7	1380.5	1378.8	1377.0	1375.3	1373.6
27.5°	1326.3	1327.2	1328.2	1328.4	1327.7	1327.1	1326.5	1325.9
30°	1290.8	1291.5	1292.2	1292.3	1292.0	1291.6	1291.3	1290.9
32.5°	1257.1	1257.8	1258.5	1258.7	1258.3	1258.0	1257.6	1257.3
35°	1202.6	1203.6	1204.7	1205.2	1205.2	1205.2	1205.2	1205.2
37.5°	1145.3	1146.7	1148.1	1148.7	1148.5	1148.4	1148.3	1148.1
40°	1106.6	1108.0	1109.4	1110.4	1111.1	1111.8	1112.5	1113.2
42.5°	1071.0	1072.7	1074.3	1075.2	1075.4	1075.5	1075.7	1075.8
45°	1013.6	1016.0	1018.4	1019.8	1020.2	1020.5	1020.9	1021.2
47.5°	954.4	957.9	961.5	963.6	964.4	965.1	965.9	966.7
50°	915.0	918.8	922.7	925.1	926.1	927.2	928.2	929.2
52.5°	875.7	879.8	883.8	886.3	887.0	887.8	888.6	889.3
55°	813.7	817.5	821.3	823.9	825.3	826.7	828.1	829.5
57.5°	752.4	756.8	761.2	763.9	764.9	765.9	767.0	768.0
60°	710.4	715.6	720.8	723.9	725.0	726.0	727.1	728.1
62.5°	667.9	673.6	679.4	682.9	684.2	685.6	686.9	688.2
65°	604.4	609.6	614.8	618.1	619.5	620.9	622.3	623.6
67.5°	539.3	545.6	551.9	555.9	557.7	559.5	561.4	563.2
70°	494.9	501.5	508.1	512.4	514.5	516.6	518.7	520.7
72.5°	453.6	460.8	467.9	472.2	473.8	475.3	476.8	478.3
75°	391.2	398.1	405.0	409.4	411.1	412.8	414.6	416.3
77.5°	328.6	336.2	343.9	348.4	349.8	351.1	352.5	353.9
80°	291.2	298.8	306.5	311.0	312.3	313.7	315.1	316.5
82.5°	255.7	263.1	270.4	275.3	277.8	280.3	282.8	285.3
85°	207.0	214.6	222.3	227.5	230.2	233.0	235.8	238.5
87.5°	169.1	177.2	185.3	190.5	193.0	195.5	198.0	200.5
90°	152.0	160.5	169.0	174.6	177.3	180.0	182.8	185.5
92.5°	146.5	154.7	162.9	168.3	170.8	173.4	176.0	178.5
95°	137.3	145.4	153.6	158.8	161.3	163.7	166.1	168.5
97.5°	137.2	141.6	146.0	149.4	151.8	154.2	156.5	158.9
100°	163.1	155.4	147.7	144.7	146.3	148.0	149.7	151.4
102.5°	203.6	207.7	211.9	211.6	206.8	202.1	197.3	192.6
105°	234.4	241.4	248.3	252.9	255.2	257.6	259.9	262.2
107.5°	262.7	269.6	276.4	280.8	282.6	284.5	286.3	288.2
110°	280.4	286.7	292.9	297.3	299.9	302.4	304.9	307.4



TEST NUMBER: P333462

CATALOG NUMBER: S125DIW-S1270D470U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	297.8	303.8	309.7	313.8	316.1	318.3	320.6	322.9
115°	324.9	330.7	336.6	340.2	341.7	343.2	344.7	346.1
117.5°	350.2	355.6	361.0	364.7	366.8	368.9	371.0	373.1
120°	366.9	372.6	378.3	381.9	383.5	385.0	386.6	388.2
122.5°	382.0	387.4	392.8	396.2	397.7	399.2	400.7	402.2
125°	404.4	409.6	414.7	418.0	419.4	420.9	422.3	423.7
127.5°	423.9	428.8	433.8	436.8	438.1	439.4	440.6	441.9
130°	437.6	442.1	446.7	449.6	450.8	452.0	453.3	454.5
132.5°	449.4	454.1	458.9	461.8	462.8	463.7	464.7	465.6
135°	465.8	470.1	474.4	477.1	478.2	479.4	480.5	481.6
137.5°	482.3	486.4	490.5	493.0	493.9	494.7	495.6	496.5
140°	492.0	496.0	500.1	502.5	503.2	504.0	504.8	505.6
142.5°	502.2	505.5	508.8	510.9	511.6	512.4	513.2	514.0
145°	518.0	519.9	521.7	523.0	523.8	524.6	525.4	526.1
147.5°	532.4	533.0	533.7	534.0	533.9	533.8	533.7	533.6
150°	541.9	542.1	542.3	542.2	541.7	541.3	540.8	540.4
152.5°	551.3	551.5	551.7	551.5	550.8	550.2	549.5	548.9
155°	564.3	564.6	564.9	564.6	563.8	563.0	562.2	561.4
157.5°	575.0	575.3	575.6	575.4	574.6	573.8	573.0	572.2
160°	581.7	582.1	582.5	582.3	581.5	580.7	579.9	579.1
162.5°	587.8	588.4	588.9	588.8	587.9	587.0	586.1	585.2
165°	595.7	596.3	596.9	596.8	596.0	595.1	594.3	593.5
167.5°	601.6	602.3	603.0	603.0	602.0	601.1	600.2	599.3
170°	604.6	605.5	606.3	606.2	605.3	604.4	603.5	602.6
172.5°	607.0	607.7	608.5	608.4	607.5	606.6	605.7	604.8
175°	609.6	610.4	611.2	611.2	610.3	609.4	608.5	607.6
177.5°	610.7	611.2	611.8	611.8	611.1	610.5	609.8	609.2
180°	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3

(END OF REPORT)