

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: P333462-840

Luminaire Tested: **S125DIW-S1270D470U840-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333462-840
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-S1270D470U840-4F0-1E-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: 6868.1 lumens
Efficiency: N/A
Efficacy: 131.1 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

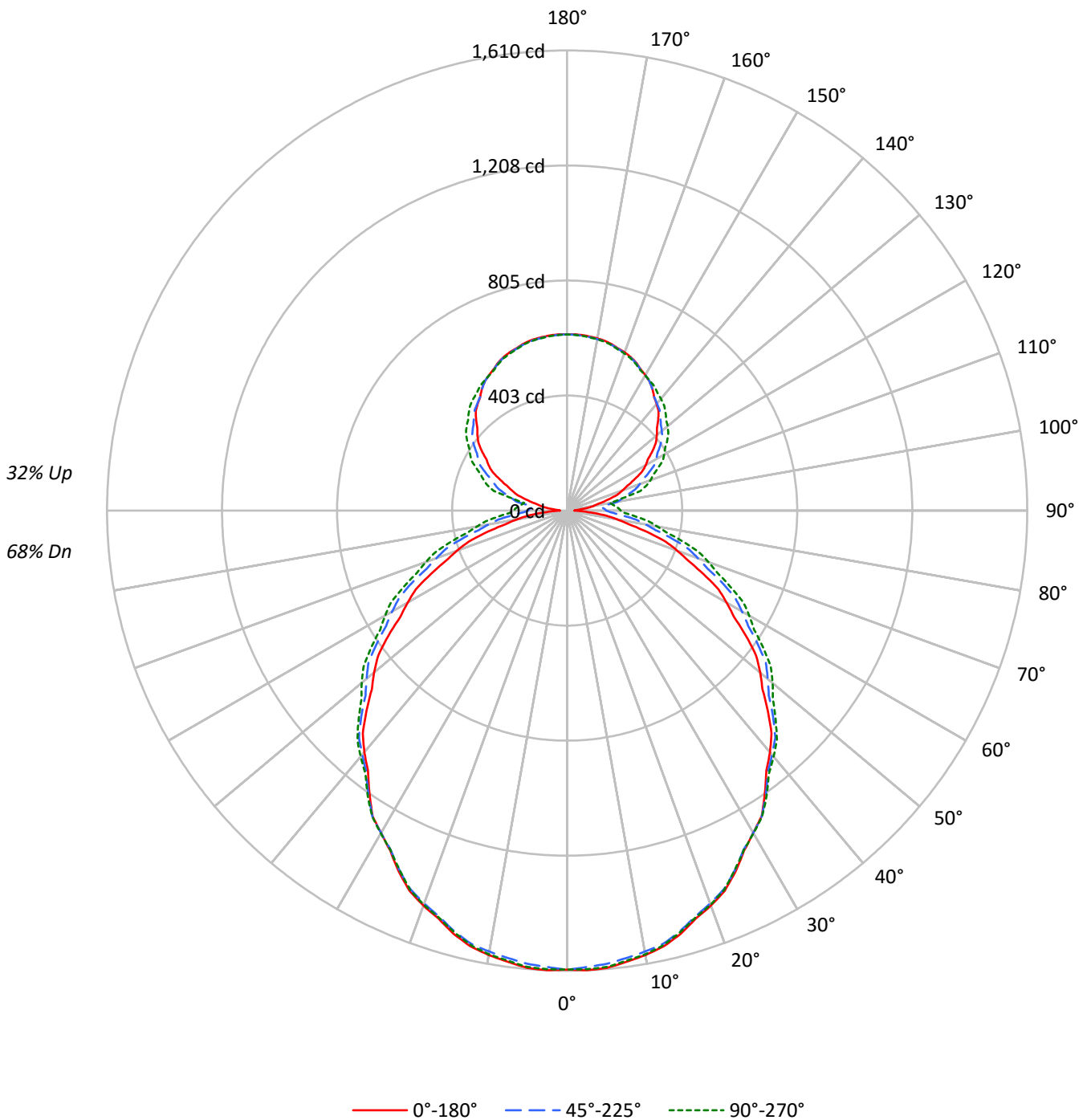
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333462-840

CATALOG NUMBER: S125DIW-S1270D470U840-4F0-1E-UDD-D

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	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°	10372	10372	10372
5°	10393	10181	10213
10°	10318	9998	9984
15°	10197	9781	9692
20°	10031	9512	9401
25°	9834	9224	9042
30°	9595	8907	8715
35°	9372	8616	8417
40°	9145	8310	8116
45°	8889	8048	7849
50°	8644	7763	7614
55°	8351	7495	7337
60°	8029	7187	7054
65°	7692	6868	6736
70°	7312	6430	6408
75°	6707	6007	6007
80°	5917	5497	5569
85°	5183	5154	5432



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.9	2.2
10°-20°	431.1	6.3
20°-30°	641.1	9.3
30°-40°	759.4	11.1
40°-50°	785.2	11.4
50°-60°	723.3	10.5
60°-70°	584.7	8.5
70°-80°	391.6	5.7
80°-90°	204.3	3.0
90°-100°	136.3	2.0
100°-110°	222.0	3.2
110°-120°	306.6	4.5
120°-130°	353.2	5.1
130°-140°	359.5	5.2
140°-150°	327.2	4.8
150°-160°	262.4	3.8
160°-170°	169.7	2.5
170°-180°	58.5	0.9
0°-30°	1224.1	17.8
0°-40°	1983.5	28.9
0°-60°	3491.9	50.8
0°-90°	4672.5	68.0
90°-120°	665.0	9.7
90°-150°	1705.0	24.8
90°-180°	2196.0	32.0
0°-180°	6868.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1606	1606	1606	1606	1606	
5°	1606	1602	1592	1604	1603	152
15°	1534	1534	1524	1533	1527	432
25°	1393	1397	1389	1394	1387	641
35°	1206	1216	1212	1217	1217	755
45°	994	1010	1019	1029	1031	766
55°	764	789	814	831	838	682
65°	526	562	600	623	630	522
75°	290	331	381	411	420	307
85°	87	139	194	227	241	92
90°	26	80	136	174	187	18
95°	47	86	122	158	170	49
105°	148	177	223	253	265	157
115°	262	276	316	342	350	259
125°	365	368	398	420	428	326
135°	450	452	462	480	486	347
145°	520	520	520	528	531	325
155°	571	569	569	570	567	263
165°	603	600	600	603	599	170
175°	616	614	614	617	614	59
180°	616	616	616	616	616	



TEST NUMBER: P333462-840

CATALOG NUMBER: S125DIW-S1270D470U840-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0
2.5°	1609.7	1609.2	1608.6	1608.1	1607.5	1606.3	1604.3	1602.4	1600.4	1598.4	1600.4
5°	1606.0	1605.3	1604.6	1603.9	1603.2	1601.6	1599.1	1596.7	1594.3	1591.9	1594.6
7.5°	1591.9	1591.5	1591.2	1590.9	1590.7	1589.3	1586.8	1584.3	1581.8	1579.2	1581.7
10°	1579.2	1579.2	1579.2	1579.2	1579.2	1577.8	1575.0	1572.3	1569.4	1566.6	1569.0
12.5°	1561.6	1561.9	1562.2	1562.5	1562.7	1561.8	1559.5	1557.2	1555.0	1552.8	1554.7
15°	1533.6	1533.9	1534.3	1534.6	1535.0	1533.9	1531.5	1529.0	1526.6	1524.1	1526.2
17.5°	1497.0	1497.7	1498.4	1499.1	1499.9	1498.9	1496.5	1494.1	1491.6	1489.1	1490.8
20°	1470.6	1471.3	1472.0	1472.7	1473.4	1472.5	1470.1	1467.6	1465.1	1462.7	1463.8
22.5°	1440.4	1441.6	1442.9	1444.1	1445.4	1444.6	1441.9	1439.2	1436.4	1433.7	1435.0
25°	1393.4	1394.5	1395.5	1396.5	1397.7	1397.1	1395.0	1392.9	1390.8	1388.7	1390.1
27.5°	1341.2	1342.7	1344.2	1345.7	1347.4	1346.9	1344.5	1342.1	1339.8	1337.4	1338.4
30°	1302.1	1304.2	1306.3	1308.4	1310.5	1310.5	1308.4	1306.3	1304.2	1302.1	1302.8
32.5°	1266.9	1268.7	1270.5	1272.3	1274.1	1274.2	1272.7	1271.2	1269.6	1268.1	1268.8
35°	1206.1	1208.5	1210.9	1213.5	1215.9	1216.6	1215.5	1214.5	1213.5	1212.3	1213.5
37.5°	1145.3	1147.5	1149.7	1152.1	1154.3	1155.2	1154.9	1154.5	1154.2	1153.8	1155.2
40°	1103.7	1106.5	1109.3	1112.2	1114.9	1116.1	1115.8	1115.4	1115.1	1114.8	1116.1
42.5°	1058.3	1062.0	1065.6	1069.2	1073.0	1075.1	1075.9	1076.7	1077.4	1078.2	1079.8
45°	993.5	997.3	1001.2	1005.0	1008.9	1011.7	1013.5	1015.2	1016.9	1018.7	1021.2
47.5°	927.1	930.6	934.2	937.8	941.3	944.6	947.7	950.7	953.6	956.6	960.3
50°	881.7	885.6	889.4	893.2	897.2	901.0	904.8	908.7	912.5	916.4	920.2
52.5°	833.8	838.6	843.2	847.9	852.6	857.3	862.0	866.7	871.3	876.1	880.2
55°	763.7	769.2	774.9	780.4	786.0	791.6	797.2	802.8	808.4	814.1	817.9
57.5°	691.9	698.5	705.3	712.0	718.7	725.3	731.7	738.1	744.6	751.0	755.5
60°	644.0	651.0	657.9	665.0	672.0	678.9	686.0	693.0	699.9	706.9	712.2
62.5°	597.3	604.4	611.4	618.3	625.3	632.7	640.2	647.7	655.3	662.9	668.6
65°	525.8	533.9	542.0	550.1	558.1	566.3	574.7	583.1	591.5	599.9	605.1
67.5°	458.5	466.3	474.0	481.8	489.6	497.8	506.2	514.8	523.3	531.9	538.3
70°	409.4	417.4	425.5	433.5	441.5	450.1	459.2	468.4	477.5	486.6	493.2
72.5°	361.5	369.8	378.2	386.5	394.9	403.9	413.8	423.8	433.7	443.7	450.9
75°	289.7	298.8	307.9	317.0	326.1	336.3	347.4	358.6	369.8	381.0	388.0
77.5°	220.8	231.3	241.8	252.3	262.8	273.4	284.2	294.9	305.7	316.5	324.2
80°	177.9	188.4	198.9	209.4	219.9	231.1	243.0	254.9	266.8	278.7	286.4
82.5°	138.9	150.0	161.0	172.1	183.1	194.7	206.9	219.0	231.3	243.4	250.9
85°	86.6	98.2	109.7	121.3	132.8	144.7	156.9	169.2	181.4	193.7	201.4
87.5°	49.2	60.6	71.9	83.3	94.6	106.3	118.4	130.5	142.5	154.5	162.7
90°	25.7	37.7	49.7	61.7	73.7	86.0	98.6	111.2	123.8	136.4	145.0
92.5°	29.7	39.5	49.3	59.1	68.9	80.2	93.0	105.7	118.6	131.4	139.7
95°	46.6	55.3	64.1	72.9	81.7	90.1	98.2	106.1	114.2	122.3	130.5
97.5°	72.9	81.7	90.4	99.2	107.9	114.2	118.1	121.9	125.7	129.6	134.0
100°	93.6	101.3	109.0	116.5	124.2	133.8	145.4	157.0	168.6	180.3	172.5
102.5°	114.6	121.8	129.0	136.1	143.3	152.5	163.7	174.8	186.0	197.1	201.4
105°	148.5	154.5	160.5	166.5	172.5	180.8	191.3	201.8	212.3	222.8	229.7
107.5°	183.7	188.4	193.2	197.9	202.7	210.3	220.6	230.9	241.1	251.4	258.3
110°	206.5	210.8	215.0	219.1	223.4	230.5	240.4	250.4	260.4	270.4	276.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	229.2	232.8	236.4	240.0	243.6	250.2	259.8	269.5	279.1	288.8	294.8
115°	261.7	264.6	267.5	270.5	273.5	279.5	288.7	297.9	307.1	316.3	322.2
117.5°	295.3	296.8	298.4	300.0	301.5	306.9	315.9	324.9	333.9	342.8	348.3
120°	317.2	318.1	319.0	320.0	320.9	325.6	334.0	342.3	350.6	359.0	364.8
122.5°	335.3	336.2	337.0	337.9	338.8	343.2	351.1	359.0	366.9	374.8	380.3
125°	365.0	365.3	365.7	366.0	366.4	370.0	377.1	384.1	391.0	398.1	403.2
127.5°	391.9	392.1	392.2	392.4	392.6	395.5	401.2	406.9	412.5	418.2	423.1
130°	409.5	409.7	409.8	410.0	410.1	412.7	417.7	422.7	427.7	432.7	437.3
132.5°	425.8	426.3	426.9	427.4	427.9	429.9	433.4	437.0	440.6	444.1	449.0
135°	450.4	450.7	450.9	451.2	451.4	452.7	454.9	457.2	459.5	461.7	466.1
137.5°	473.0	473.3	473.5	473.7	474.0	474.6	475.6	476.7	477.7	478.7	482.8
140°	486.8	487.0	487.2	487.4	487.6	487.8	488.1	488.3	488.6	488.8	492.8
142.5°	500.3	500.1	500.0	499.8	499.7	499.7	499.9	500.1	500.3	500.5	503.8
145°	520.1	520.0	519.8	519.7	519.5	519.5	519.5	519.5	519.5	519.5	521.3
147.5°	535.9	535.8	535.8	535.7	535.7	535.7	535.9	536.0	536.1	536.2	536.9
150°	546.8	546.6	546.4	546.2	546.0	546.0	546.2	546.4	546.6	546.8	547.0
152.5°	557.4	557.0	556.5	556.1	555.6	555.5	555.7	555.9	556.1	556.3	556.5
155°	571.1	570.5	569.9	569.3	568.7	568.5	568.7	568.9	569.1	569.3	569.6
157.5°	581.6	581.2	580.9	580.5	580.1	580.0	580.0	580.0	580.0	580.1	580.4
160°	588.9	588.2	587.6	587.0	586.4	586.2	586.3	586.4	586.5	586.6	587.0
162.5°	594.7	594.1	593.5	592.9	592.3	592.1	592.2	592.3	592.4	592.5	593.0
165°	602.6	602.0	601.4	600.8	600.2	599.9	600.0	600.1	600.2	600.3	600.9
167.5°	608.4	607.8	607.2	606.5	605.9	605.6	605.7	605.8	605.9	606.0	606.8
170°	611.8	611.1	610.3	609.6	608.8	608.5	608.6	608.7	608.8	608.9	609.8
172.5°	613.9	613.2	612.5	611.8	611.1	610.9	611.0	611.2	611.4	611.6	612.3
175°	616.3	615.7	615.1	614.5	613.9	613.6	613.7	613.8	613.9	614.0	614.8
177.5°	617.4	616.9	616.4	615.9	615.4	615.2	615.3	615.4	615.5	615.6	616.1
180°	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0
2.5°	1602.4	1604.3	1606.3	1607.1	1606.8	1606.6	1606.3	1606.0
5°	1597.4	1600.2	1603.1	1604.3	1603.9	1603.6	1603.2	1602.9
7.5°	1584.1	1586.6	1589.0	1590.0	1589.7	1589.3	1589.0	1588.6
10°	1571.6	1574.0	1576.4	1577.5	1577.1	1576.8	1576.4	1576.1
12.5°	1556.5	1558.4	1560.3	1560.8	1559.9	1559.0	1558.1	1557.2
15°	1528.3	1530.5	1532.5	1532.9	1531.5	1530.0	1528.6	1527.2
17.5°	1492.4	1494.0	1495.6	1496.0	1495.1	1494.3	1493.5	1492.6
20°	1464.8	1465.8	1466.9	1467.4	1467.4	1467.4	1467.4	1467.4
22.5°	1436.4	1437.7	1439.1	1439.3	1438.5	1437.6	1436.7	1435.9
25°	1391.5	1392.9	1394.3	1394.1	1392.4	1390.6	1388.9	1387.2
27.5°	1339.4	1340.3	1341.3	1341.5	1340.8	1340.2	1339.6	1339.0
30°	1303.5	1304.2	1304.9	1305.0	1304.7	1304.3	1304.0	1303.6
32.5°	1269.5	1270.2	1270.9	1271.1	1270.7	1270.4	1270.0	1269.7
35°	1214.5	1215.5	1216.6	1217.1	1217.1	1217.1	1217.1	1217.1
37.5°	1156.6	1158.0	1159.4	1160.0	1159.8	1159.7	1159.6	1159.4
40°	1117.5	1118.9	1120.3	1121.4	1122.1	1122.8	1123.5	1124.2
42.5°	1081.6	1083.3	1084.9	1085.8	1086.0	1086.1	1086.3	1086.4
45°	1023.6	1026.0	1028.4	1029.9	1030.3	1030.6	1031.0	1031.3
47.5°	963.8	967.3	971.0	973.1	973.9	974.6	975.4	976.2
50°	924.0	927.9	931.8	934.2	935.2	936.3	937.4	938.4
52.5°	884.3	888.5	892.5	895.0	895.8	896.6	897.4	898.1
55°	821.7	825.6	829.4	832.0	833.4	834.9	836.3	837.7
57.5°	759.8	764.3	768.7	771.4	772.4	773.5	774.6	775.6
60°	717.4	722.7	727.9	731.0	732.2	733.2	734.3	735.3
62.5°	674.5	680.2	686.1	689.6	690.9	692.4	693.7	695.0
65°	610.4	615.6	620.9	624.2	625.6	627.0	628.4	629.8
67.5°	544.6	551.0	557.3	561.4	563.2	565.0	566.9	568.8
70°	499.8	506.4	513.1	517.5	519.6	521.7	523.8	525.8
72.5°	458.1	465.3	472.5	476.9	478.5	480.0	481.5	483.0
75°	395.1	402.0	409.0	413.4	415.2	416.9	418.7	420.4
77.5°	331.8	339.5	347.3	351.8	353.3	354.6	356.0	357.4
80°	294.1	301.7	309.5	314.1	315.4	316.8	318.2	319.6
82.5°	258.2	265.7	273.1	278.0	280.5	283.1	285.6	288.1
85°	209.0	216.7	224.5	229.7	232.5	235.3	238.1	240.9
87.5°	170.8	178.9	187.1	192.4	194.9	197.4	200.0	202.5
90°	153.5	162.1	170.7	176.3	179.0	181.8	184.6	187.3
92.5°	147.9	156.2	164.5	170.0	172.5	175.1	177.7	180.3
95°	138.7	146.8	155.1	160.4	162.9	165.3	167.7	170.2
97.5°	138.6	143.0	147.4	150.9	153.3	155.7	158.0	160.5
100°	164.7	156.9	149.2	146.1	147.7	149.5	151.2	152.9
102.5°	205.6	209.7	214.0	213.7	208.8	204.1	199.2	194.5
105°	236.7	243.8	250.7	255.4	257.7	260.1	262.5	264.8
107.5°	265.3	272.3	279.1	283.6	285.4	287.3	289.1	291.0
110°	283.2	289.5	295.8	300.2	302.9	305.4	307.9	310.4



TEST NUMBER: P333462-840

CATALOG NUMBER: S125DIW-S1270D470U840-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	300.7	306.8	312.8	316.9	319.2	321.4	323.8	326.1
115°	328.1	334.0	339.9	343.6	345.1	346.6	348.1	349.5
117.5°	353.7	359.1	364.6	368.3	370.4	372.5	374.7	376.8
120°	370.5	376.3	382.0	385.7	387.3	388.8	390.4	392.0
122.5°	385.8	391.2	396.7	400.1	401.6	403.1	404.7	406.2
125°	408.4	413.6	418.8	422.1	423.5	425.1	426.5	427.9
127.5°	428.1	433.0	438.1	441.1	442.4	443.7	444.9	446.3
130°	441.9	446.5	451.1	454.0	455.2	456.5	457.8	459.0
132.5°	453.8	458.6	463.4	466.4	467.4	468.3	469.3	470.2
135°	470.4	474.7	479.1	481.8	482.9	484.1	485.2	486.4
137.5°	487.1	491.2	495.3	497.9	498.8	499.6	500.5	501.4
140°	496.9	500.9	505.0	507.5	508.2	509.0	509.8	510.6
142.5°	507.2	510.5	513.8	515.9	516.6	517.5	518.3	519.1
145°	523.1	525.0	526.8	528.2	529.0	529.8	530.6	531.3
147.5°	537.7	538.3	539.0	539.3	539.2	539.1	539.0	538.9
150°	547.2	547.4	547.6	547.5	547.0	546.6	546.1	545.7
152.5°	556.7	556.9	557.1	556.9	556.2	555.6	554.9	554.3
155°	569.9	570.2	570.5	570.2	569.4	568.6	567.7	566.9
157.5°	580.7	581.0	581.3	581.1	580.3	579.5	578.7	577.8
160°	587.4	587.8	588.2	588.0	587.2	586.4	585.6	584.8
162.5°	593.6	594.2	594.7	594.6	593.7	592.8	591.9	591.0
165°	601.6	602.2	602.8	602.7	601.9	601.0	600.2	599.4
167.5°	607.5	608.2	608.9	608.9	607.9	607.0	606.1	605.2
170°	610.6	611.5	612.3	612.2	611.3	610.4	609.5	608.5
172.5°	613.0	613.7	614.5	614.4	613.5	612.6	611.7	610.8
175°	615.6	616.4	617.2	617.2	616.3	615.4	614.5	613.6
177.5°	616.7	617.2	617.8	617.8	617.1	616.5	615.8	615.2
180°	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3

(END OF REPORT)