

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: P333475-840

Luminaire Tested: **S125DIW-S1270D1050U840-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333475-840  
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-S1270D1050U840-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1050 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8646.2 lumens  
Efficiency: N/A  
Efficacy: 128.3 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: General Diffuse

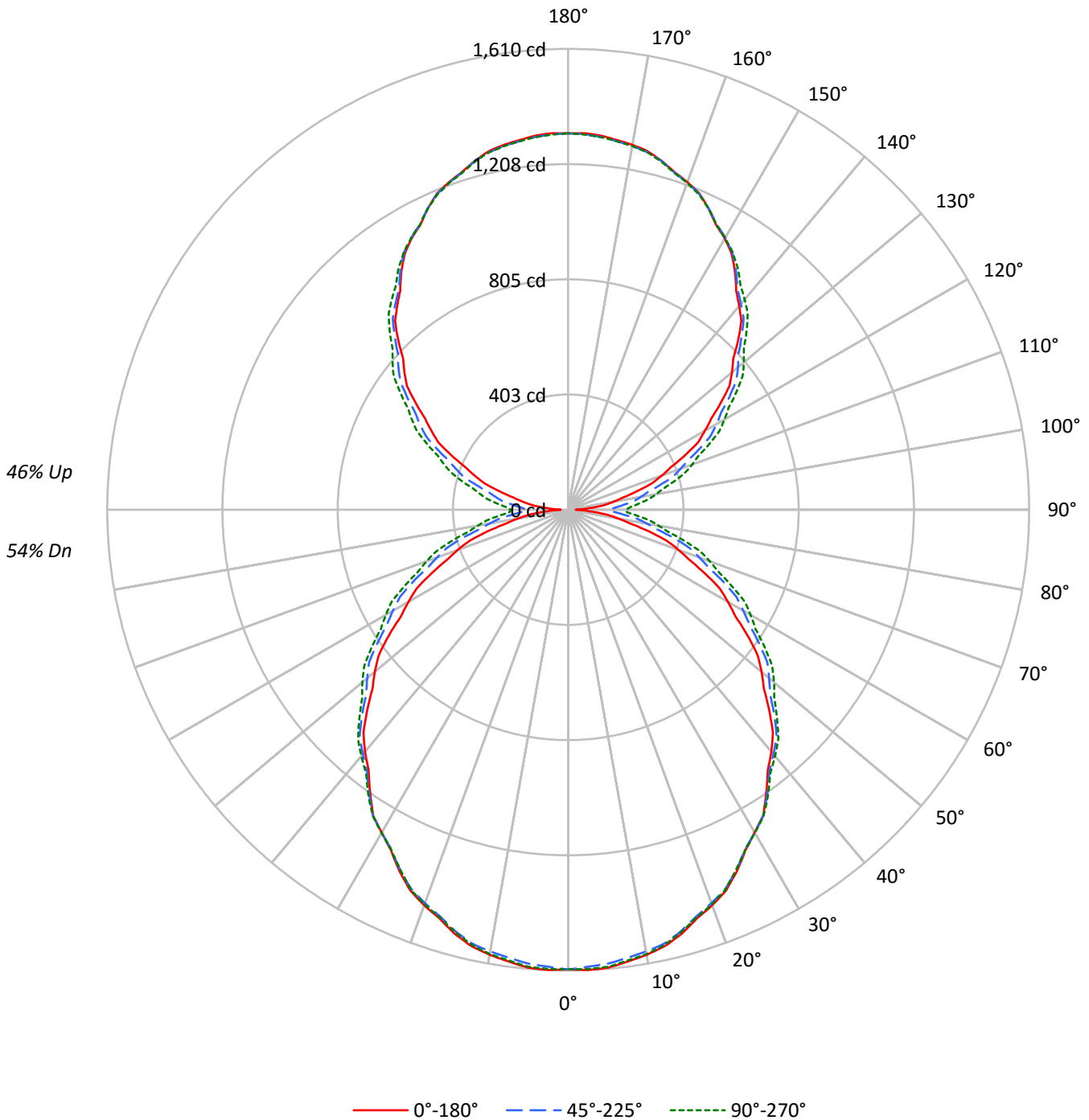
Input Watts (W): 67.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60	54
1	98	93	89	85	91	86	83	79	74	71	69	62	60	58	52	50	49	44
2	89	81	74	69	82	75	69	65	64	60	56	54	51	48	45	43	41	36
3	81	71	63	57	75	66	59	54	56	51	47	48	44	40	40	37	34	30
4	74	63	54	48	68	58	51	45	50	44	40	42	38	34	35	32	29	26
5	68	56	47	41	62	52	44	39	45	39	34	38	33	30	32	28	25	22
6	62	50	42	35	58	47	39	34	40	34	30	34	30	26	29	25	22	19
7	58	45	37	31	53	42	35	29	36	30	26	31	26	23	26	23	20	17
8	53	41	33	27	49	38	31	26	33	27	23	28	24	20	24	20	18	15
9	50	37	30	24	46	35	28	23	30	25	21	26	22	18	22	19	16	14
10	47	34	27	22	43	32	25	21	28	22	19	24	20	17	21	17	14	12

**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



TEST NUMBER: P333475-840

CATALOG NUMBER: S125DIW-S1270D1050U840-4F0-1E-UDD-D1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.9	1.8
10°-20°	431.1	5.0
20°-30°	641.1	7.4
30°-40°	759.4	8.8
40°-50°	785.2	9.1
50°-60°	723.3	8.4
60°-70°	584.7	6.8
70°-80°	391.6	4.5
80°-90°	205.9	2.4
90°-100°	202.0	2.3
100°-110°	344.1	4.0
110°-120°	496.8	5.7
120°-130°	611.7	7.1
130°-140°	663.5	7.7
140°-150°	639.5	7.4
150°-160°	534.7	6.2
160°-170°	355.4	4.1
170°-180°	124.4	1.4
0°-30°	1224.1	14.2
0°-40°	1983.5	22.9
0°-60°	3491.9	40.4
0°-90°	4674.1	54.1
90°-120°	1042.9	12.1
90°-150°	2957.6	34.2
90°-180°	3972.0	45.9
0°-180°	8646.2	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	85	146	185	201	20
95°	87	131	194	234	249	87
105°	248	279	331	367	383	264
115°	450	467	509	535	544	445
125°	650	656	687	709	717	582
135°	840	845	857	876	881	647
145°	1016	1018	1021	1029	1032	634
155°	1160	1160	1161	1165	1160	534
165°	1262	1260	1261	1264	1259	356
175°	1312	1308	1308	1313	1307	125
180°	1315	1315	1315	1315	1315	



TEST NUMBER: P333475-840

CATALOG NUMBER: S125DIW-S1270D1050U840-4F0-1E-UDD-D1

**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°	49.3	60.9	72.4	84.0	95.5	107.4	119.7	131.9	144.1	156.3	164.6
90°	26.3	39.2	52.2	65.2	78.3	91.5	105.0	118.5	132.0	145.5	154.7
92.5°	47.5	59.1	70.7	82.3	93.9	106.8	121.0	135.1	149.3	163.4	172.6
95°	86.9	96.5	106.0	115.6	125.2	137.0	151.2	165.4	179.6	193.7	203.0
97.5°	129.1	137.4	145.8	154.2	162.6	174.1	188.6	203.3	217.9	232.5	241.4
100°	160.6	167.9	175.3	182.6	190.0	200.8	214.9	229.0	243.2	257.3	266.7
102.5°	194.5	202.2	210.0	217.6	225.3	235.4	247.8	260.2	272.7	285.0	294.4
105°	247.5	254.2	260.9	267.7	274.4	283.7	295.6	307.4	319.3	331.1	339.5
107.5°	306.2	312.0	317.9	323.9	329.7	338.2	349.4	360.5	371.6	382.7	390.3
110°	346.7	351.9	357.3	362.6	368.0	375.9	386.4	396.9	407.4	417.8	425.2



TEST NUMBER: P333475-840

CATALOG NUMBER: S125DIW-S1270D1050U840-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	389.2	393.1	397.1	401.0	405.1	412.2	422.5	432.9	443.3	453.7	460.4
115°	450.5	453.8	457.2	460.5	463.9	470.4	479.9	489.5	499.0	508.6	514.6
117.5°	511.9	513.9	515.9	518.0	520.0	525.5	534.5	543.5	552.6	561.6	567.7
120°	551.2	553.4	555.6	557.7	560.0	565.2	573.5	581.8	590.1	598.3	604.2
122.5°	592.5	593.4	594.3	595.2	596.1	600.8	609.2	617.4	625.8	634.2	639.6
125°	649.9	651.0	652.0	653.0	654.0	658.1	665.3	672.6	679.7	687.0	692.2
127.5°	709.7	710.1	710.6	711.0	711.4	714.7	720.6	726.7	732.7	738.7	743.7
130°	746.6	747.4	748.1	748.9	749.7	752.8	758.1	763.6	768.9	774.3	778.9
132.5°	782.1	784.0	785.8	787.6	789.3	792.0	795.8	799.4	803.1	806.9	811.5
135°	840.2	841.2	842.2	843.2	844.2	846.1	848.8	851.4	854.1	856.8	861.3
137.5°	894.7	895.8	896.8	897.9	898.9	900.2	901.9	903.6	905.3	907.0	911.4
140°	928.7	929.8	930.9	932.1	933.2	934.3	935.3	936.3	937.4	938.4	942.7
142.5°	963.8	964.5	965.2	965.8	966.5	967.3	968.3	969.2	970.2	971.1	974.6
145°	1015.6	1016.2	1016.7	1017.3	1017.8	1018.4	1019.2	1019.9	1020.6	1021.2	1023.0
147.5°	1062.0	1062.5	1063.0	1063.4	1063.9	1064.5	1065.0	1065.5	1066.1	1066.6	1067.7
150°	1093.9	1093.7	1093.4	1093.2	1093.0	1093.3	1094.2	1095.1	1096.0	1096.9	1096.9
152.5°	1120.0	1120.3	1120.6	1121.1	1121.4	1121.7	1122.1	1122.4	1122.8	1123.2	1123.7
155°	1160.3	1160.3	1160.3	1160.3	1160.3	1160.4	1160.7	1160.9	1161.1	1161.4	1162.4
157.5°	1196.4	1195.9	1195.4	1194.9	1194.4	1194.3	1194.5	1194.7	1195.0	1195.2	1196.1
160°	1217.7	1217.0	1216.3	1215.7	1215.0	1214.8	1215.0	1215.2	1215.4	1215.7	1216.6
162.5°	1236.5	1236.0	1235.5	1235.0	1234.5	1234.3	1234.4	1234.4	1234.5	1234.5	1235.6
165°	1261.7	1261.2	1260.7	1260.3	1259.8	1259.7	1260.0	1260.2	1260.4	1260.6	1261.5
167.5°	1282.9	1282.0	1281.1	1280.2	1279.3	1278.9	1278.9	1278.9	1278.9	1278.9	1280.2
170°	1294.4	1293.5	1292.6	1291.7	1290.8	1290.3	1290.3	1290.3	1290.3	1290.3	1291.7
172.5°	1302.6	1301.7	1300.8	1299.9	1299.0	1298.5	1298.5	1298.5	1298.5	1298.5	1299.9
175°	1311.8	1310.9	1310.0	1309.1	1308.2	1307.7	1307.7	1307.7	1307.7	1307.7	1309.1
177.5°	1316.6	1315.8	1315.0	1314.3	1313.6	1313.1	1312.9	1312.8	1312.6	1312.4	1313.5
180°	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8



TEST NUMBER: P333475-840

CATALOG NUMBER: S125DIW-S1270D1050U840-4F0-1E-UDD-D1

**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°	172.9	181.2	189.5	194.8	197.4	200.1	202.6	205.2
90°	163.8	173.0	182.2	188.3	191.5	194.6	197.7	200.9
92.5°	181.9	191.2	200.5	206.5	209.4	212.5	215.4	218.3
95°	212.3	221.6	230.9	237.0	239.8	242.8	245.7	248.6
97.5°	250.2	259.0	267.9	273.7	276.3	278.9	281.7	284.3
100°	276.1	285.5	294.9	300.8	303.5	306.0	308.5	311.1
102.5°	303.7	313.0	322.2	328.2	330.9	333.7	336.5	339.2
105°	347.9	356.3	364.6	370.3	373.4	376.6	379.7	382.8
107.5°	398.0	405.6	413.1	418.1	420.2	422.3	424.4	426.6
110°	432.5	439.8	447.2	451.9	454.1	456.4	458.6	460.8





TEST NUMBER: P333475-840

CATALOG NUMBER: S125DIW-S1270D1050U840-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	467.1	473.7	480.5	484.8	486.9	488.9	490.9	493.0
115°	520.7	526.7	532.8	536.8	538.7	540.6	542.4	544.3
117.5°	573.8	580.0	586.1	589.9	591.4	592.9	594.3	595.8
120°	610.2	616.1	622.1	625.6	626.8	628.0	629.2	630.5
122.5°	645.2	650.7	656.1	659.5	661.0	662.3	663.7	665.1
125°	697.3	702.5	707.6	710.9	712.5	714.0	715.5	717.0
127.5°	748.6	753.6	758.5	761.7	763.4	764.9	766.5	768.1
130°	783.6	788.2	792.9	795.9	797.2	798.5	799.8	801.0
132.5°	816.2	820.8	825.6	828.3	829.1	829.9	830.8	831.6
135°	865.9	870.4	874.9	877.7	878.5	879.4	880.2	881.0
137.5°	915.7	920.2	924.6	927.0	927.2	927.5	927.7	928.0
140°	947.1	951.3	955.6	957.9	958.2	958.5	958.7	959.0
142.5°	978.3	981.8	985.3	987.2	987.5	987.7	988.1	988.3
145°	1024.7	1026.4	1028.2	1029.5	1030.2	1030.9	1031.6	1032.3
147.5°	1068.8	1070.0	1071.1	1071.2	1070.3	1069.3	1068.4	1067.5
150°	1096.9	1096.9	1096.9	1096.9	1096.8	1096.7	1096.6	1096.4
152.5°	1124.2	1124.8	1125.3	1125.2	1124.5	1123.7	1123.0	1122.3
155°	1163.3	1164.2	1165.1	1164.9	1163.8	1162.7	1161.5	1160.3
157.5°	1197.0	1197.9	1198.8	1198.5	1197.0	1195.5	1194.0	1192.5
160°	1217.5	1218.4	1219.3	1219.1	1218.0	1216.9	1215.8	1214.6
162.5°	1236.7	1237.7	1238.8	1238.7	1237.4	1236.1	1234.8	1233.4
165°	1262.4	1263.3	1264.3	1264.0	1262.7	1261.3	1260.0	1258.6
167.5°	1281.6	1282.9	1284.3	1284.3	1282.9	1281.5	1280.1	1278.7
170°	1293.0	1294.4	1295.8	1295.7	1294.0	1292.5	1290.9	1289.3
172.5°	1301.2	1302.6	1303.9	1303.9	1302.5	1301.1	1299.7	1298.3
175°	1310.4	1311.8	1313.2	1313.0	1311.5	1309.9	1308.3	1306.7
177.5°	1314.6	1315.8	1316.8	1316.7	1315.5	1314.1	1312.9	1311.6
180°	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8

(END OF REPORT)