

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: P333468-927

Luminaire Tested: **S125DIW-S1270D770U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333468-927
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-S1270D770U927-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6335.3 lumens
Efficiency: N/A
Efficacy: 105.9 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: General Diffuse

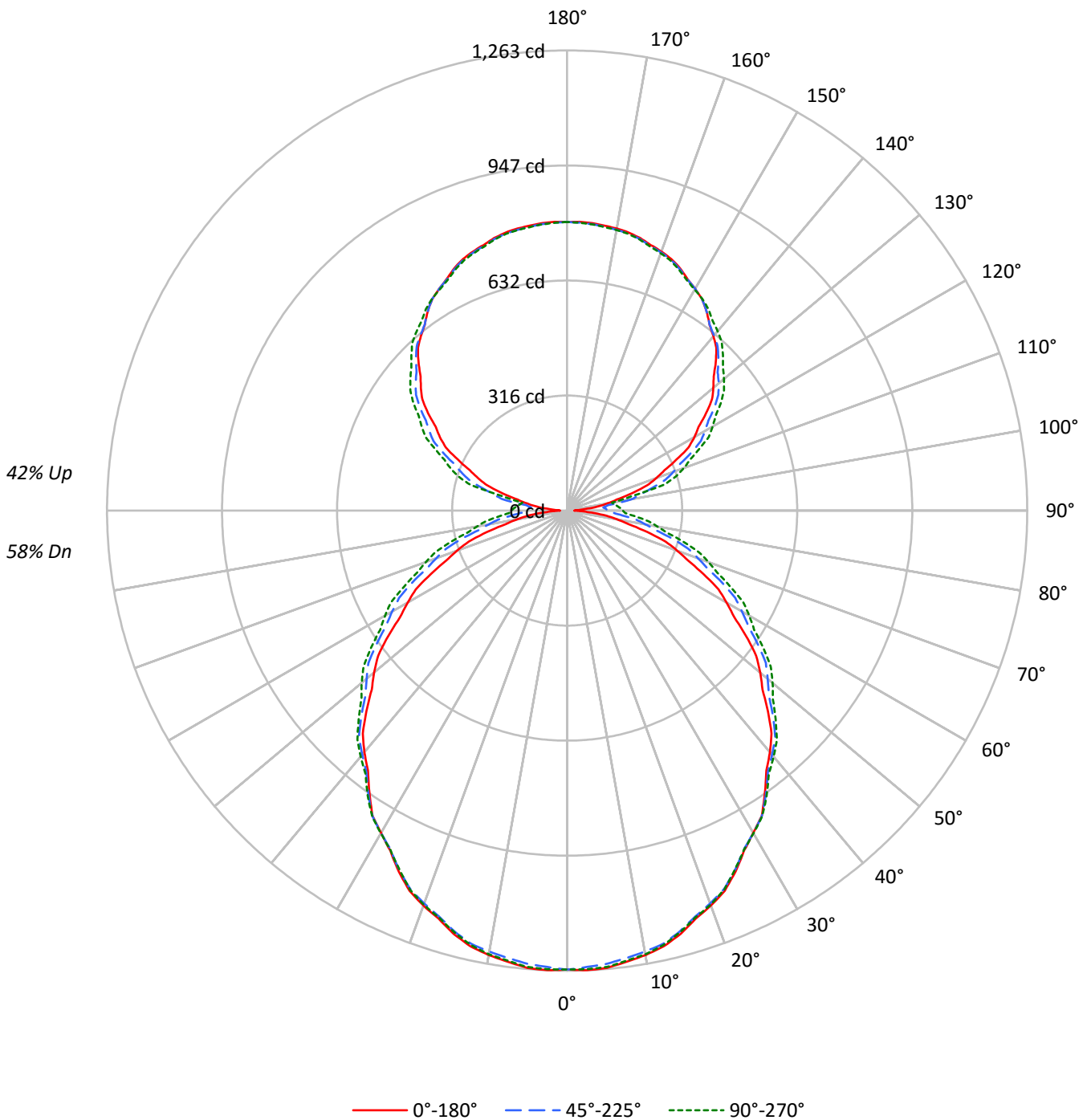
Input Watts (W): 59.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333468-927

CATALOG NUMBER: S125DIW-S1270D770U927-4F0-1E-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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58
1	99	94	90	86	92	88	84	80	76	73	70	65	63	61	55	53	52	47
2	90	82	75	69	83	76	70	65	66	61	58	56	53	50	48	45	43	39
3	81	71	64	57	75	67	60	54	58	52	48	50	45	42	42	39	36	32
4	74	63	55	48	69	59	52	46	51	45	41	44	39	36	37	34	31	28
5	68	56	48	41	63	53	45	39	46	40	35	39	35	31	34	30	27	24
6	63	50	42	36	58	47	40	34	41	35	30	36	31	27	30	27	24	21
7	58	45	37	31	54	43	35	30	37	31	27	32	27	24	28	24	21	18
8	54	41	33	28	50	39	31	26	34	28	24	30	25	21	25	22	19	16
9	50	38	30	25	47	35	28	24	31	25	21	27	22	19	23	20	17	15
10	47	35	27	22	44	33	26	21	29	23	19	25	21	17	22	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8136	8136	8136
5°	8152	7986	8012
10°	8094	7843	7832
15°	7999	7673	7603
20°	7869	7462	7374
25°	7714	7235	7092
30°	7527	6987	6837
35°	7352	6759	6602
40°	7174	6519	6367
45°	6972	6313	6157
50°	6781	6089	5972
55°	6550	5879	5755
60°	6298	5638	5533
65°	6034	5387	5283
70°	5737	5044	5027
75°	5263	4712	4712
80°	4643	4312	4369
85°	4070	4042	4260



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.1	1.9
10°-20°	338.2	5.3
20°-30°	502.9	7.9
30°-40°	595.7	9.4
40°-50°	615.9	9.7
50°-60°	567.4	9.0
60°-70°	458.6	7.2
70°-80°	307.2	4.8
80°-90°	160.9	2.5
90°-100°	118.2	1.9
100°-110°	243.3	3.8
110°-120°	365.8	5.8
120°-130°	437.9	6.9
130°-140°	454.9	7.2
140°-150°	419.0	6.6
150°-160°	337.1	5.3
160°-170°	218.0	3.4
170°-180°	75.2	1.2
0°-30°	960.2	15.2
0°-40°	1555.9	24.6
0°-60°	2739.2	43.2
0°-90°	3666.0	57.9
90°-120°	727.2	11.5
90°-150°	2039.0	32.2
90°-180°	2669.0	42.1
0°-180°	6335.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1260	1260	1260	1260	1260	
5°	1260	1257	1249	1258	1257	119
15°	1203	1204	1196	1202	1198	339
25°	1093	1096	1089	1094	1088	503
35°	946	954	951	954	955	592
45°	779	792	799	807	809	601
55°	599	619	639	652	657	535
65°	412	441	471	488	494	409
75°	227	260	299	323	330	241
85°	68	109	152	178	189	72
90°	20	65	111	141	152	15
95°	50	79	100	128	138	55
105°	184	207	243	267	276	195
115°	331	344	376	395	400	328
125°	466	470	493	510	515	416
135°	577	580	587	601	604	445
145°	668	667	667	674	676	417
155°	734	730	731	733	728	338
165°	774	771	771	774	770	219
175°	792	789	789	793	788	75
180°	792	792	792	792	792	



TEST NUMBER: P333468-927

CATALOG NUMBER: S125DIW-S1270D770U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8
2.5°	1262.7	1262.3	1261.9	1261.5	1261.0	1260.0	1258.5	1257.0	1255.5	1253.9	1255.5
5°	1259.8	1259.3	1258.7	1258.1	1257.6	1256.4	1254.4	1252.5	1250.6	1248.7	1250.9
7.5°	1248.7	1248.5	1248.2	1248.0	1247.8	1246.7	1244.8	1242.8	1240.8	1238.8	1240.7
10°	1238.8	1238.8	1238.8	1238.8	1238.8	1237.7	1235.5	1233.3	1231.1	1228.9	1230.8
12.5°	1225.0	1225.2	1225.4	1225.7	1225.8	1225.1	1223.4	1221.5	1219.8	1218.1	1219.6
15°	1203.0	1203.2	1203.6	1203.8	1204.1	1203.2	1201.3	1199.4	1197.5	1195.6	1197.2
17.5°	1174.3	1174.9	1175.4	1176.0	1176.5	1175.8	1173.9	1172.0	1170.1	1168.2	1169.4
20°	1153.6	1154.1	1154.7	1155.2	1155.8	1155.1	1153.2	1151.3	1149.3	1147.4	1148.3
22.5°	1129.9	1130.8	1131.9	1132.8	1133.9	1133.2	1131.1	1128.9	1126.8	1124.7	1125.7
25°	1093.1	1093.9	1094.7	1095.5	1096.4	1096.0	1094.3	1092.7	1091.0	1089.3	1090.4
27.5°	1052.1	1053.3	1054.5	1055.7	1056.9	1056.5	1054.7	1052.8	1051.0	1049.1	1049.9
30°	1021.4	1023.1	1024.7	1026.4	1028.0	1028.0	1026.4	1024.7	1023.1	1021.4	1022.0
32.5°	993.8	995.2	996.6	998.1	999.5	999.6	998.4	997.2	995.9	994.7	995.3
35°	946.1	948.0	949.9	951.9	953.8	954.3	953.5	952.7	951.9	951.0	951.9
37.5°	898.4	900.2	901.9	903.7	905.5	906.2	905.9	905.6	905.4	905.1	906.2
40°	865.8	868.0	870.2	872.4	874.6	875.5	875.3	875.0	874.7	874.5	875.5
42.5°	830.2	833.1	835.9	838.8	841.7	843.4	844.0	844.6	845.2	845.8	847.1
45°	779.3	782.4	785.4	788.4	791.4	793.6	795.0	796.4	797.7	799.1	801.1
47.5°	727.2	730.0	732.8	735.6	738.4	741.0	743.4	745.8	748.1	750.4	753.3
50°	691.7	694.7	697.7	700.7	703.8	706.8	709.8	712.8	715.8	718.8	721.8
52.5°	654.1	657.8	661.5	665.1	668.8	672.5	676.2	679.9	683.5	687.2	690.5
55°	599.0	603.4	607.8	612.2	616.6	621.0	625.3	629.8	634.1	638.6	641.6
57.5°	542.7	548.0	553.3	558.5	563.8	568.9	574.0	579.0	584.1	589.1	592.6
60°	505.2	510.6	516.1	521.7	527.1	532.6	538.1	543.6	549.1	554.5	558.6
62.5°	468.6	474.1	479.6	485.1	490.5	496.3	502.2	508.1	514.0	520.0	524.5
65°	412.5	418.8	425.2	431.5	437.8	444.3	450.8	457.4	464.0	470.6	474.7
67.5°	359.7	365.8	371.9	378.0	384.0	390.5	397.1	403.9	410.5	417.2	422.2
70°	321.2	327.4	333.7	340.1	346.3	353.1	360.2	367.4	374.5	381.7	386.9
72.5°	283.6	290.1	296.7	303.2	309.7	316.9	324.6	332.5	340.2	348.1	353.7
75°	227.3	234.4	241.5	248.7	255.8	263.8	272.5	281.3	290.1	298.9	304.4
77.5°	173.2	181.4	189.6	197.9	206.1	214.4	222.9	231.3	239.8	248.3	254.3
80°	139.6	147.8	156.1	164.3	172.5	181.3	190.6	199.9	209.3	218.6	224.7
82.5°	108.9	117.6	126.3	135.0	143.6	152.7	162.3	171.8	181.4	190.9	196.8
85°	68.0	77.0	86.0	95.1	104.2	113.5	123.1	132.7	142.3	151.9	158.0
87.5°	38.7	47.6	56.6	65.6	74.6	83.9	93.4	102.9	112.4	121.9	128.4
90°	20.4	30.2	40.0	49.8	59.7	69.7	79.9	90.2	100.4	110.7	117.6
92.5°	26.9	34.2	41.6	49.0	56.4	65.3	75.7	86.0	96.3	106.7	113.4
95°	49.5	56.2	63.0	69.7	76.5	82.1	86.4	90.8	95.1	99.6	106.2
97.5°	84.4	91.6	98.7	105.8	113.0	116.1	115.3	114.5	113.7	112.9	114.9
100°	111.6	117.8	123.9	130.1	136.3	143.9	153.3	162.6	171.9	181.2	167.5
102.5°	139.3	145.1	150.9	156.7	162.6	169.9	178.8	187.7	196.5	205.4	207.2
105°	183.7	188.6	193.5	198.4	203.4	209.9	218.2	226.4	234.6	242.9	248.3
107.5°	229.9	233.6	237.3	241.1	244.8	250.7	258.9	267.0	275.3	283.4	288.9
110°	259.8	263.2	266.5	269.7	273.1	278.7	286.6	294.5	302.5	310.5	315.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	289.0	291.9	294.9	297.9	300.8	306.1	313.7	321.3	328.9	336.5	341.0
115°	331.4	334.0	336.6	339.1	341.7	346.7	353.9	361.2	368.4	375.7	380.1
117.5°	375.4	376.6	377.9	379.1	380.3	384.6	391.8	399.1	406.3	413.6	417.6
120°	403.5	404.3	405.0	405.7	406.3	410.0	416.8	423.4	430.2	436.8	441.2
122.5°	427.5	428.3	429.2	430.1	430.9	434.6	440.8	447.1	453.4	459.6	463.8
125°	465.7	466.4	467.0	467.6	468.3	471.3	476.8	482.3	487.8	493.3	497.2
127.5°	501.2	501.6	502.0	502.3	502.7	505.2	509.5	514.0	518.4	522.8	526.6
130°	523.8	524.1	524.5	524.9	525.3	527.4	531.4	535.4	539.4	543.4	546.8
132.5°	545.3	546.1	546.7	547.4	548.1	549.9	552.5	555.2	557.9	560.5	564.3
135°	577.1	577.7	578.1	578.6	579.2	580.3	581.9	583.5	585.2	586.8	590.2
137.5°	606.3	606.8	607.3	607.7	608.2	608.8	609.4	610.1	610.9	611.6	614.8
140°	624.6	624.9	625.1	625.4	625.7	625.8	626.0	626.1	626.3	626.5	629.7
142.5°	642.0	641.9	641.8	641.8	641.7	641.8	642.1	642.3	642.5	642.8	645.4
145°	667.5	667.4	667.4	667.4	667.4	667.4	667.4	667.4	667.4	667.4	668.9
147.5°	688.6	688.5	688.4	688.4	688.3	688.4	688.6	688.6	688.8	689.0	689.6
150°	702.6	702.3	702.1	701.8	701.6	701.6	701.8	702.1	702.3	702.6	702.9
152.5°	716.2	715.7	715.1	714.5	713.9	713.8	714.1	714.3	714.5	714.8	715.1
155°	733.7	732.9	732.1	731.3	730.6	730.3	730.6	730.9	731.1	731.3	731.7
157.5°	747.2	746.8	746.3	745.8	745.4	745.1	745.1	745.2	745.2	745.2	745.7
160°	756.6	755.8	755.0	754.2	753.5	753.1	753.3	753.4	753.5	753.7	754.2
162.5°	764.1	763.3	762.6	761.8	761.0	760.7	760.8	761.0	761.0	761.2	761.9
165°	774.2	773.4	772.7	771.9	771.1	770.8	770.9	771.0	771.2	771.3	772.1
167.5°	781.7	780.9	780.1	779.3	778.5	778.2	778.3	778.4	778.6	778.7	779.6
170°	786.0	785.1	784.1	783.2	782.3	781.9	782.0	782.2	782.3	782.4	783.5
172.5°	788.8	787.9	787.0	786.0	785.1	784.8	785.1	785.3	785.5	785.8	786.6
175°	791.9	791.1	790.3	789.5	788.7	788.4	788.5	788.6	788.8	788.9	790.0
177.5°	793.2	792.6	792.0	791.4	790.8	790.4	790.6	790.7	790.8	790.9	791.6
180°	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8
2.5°	1257.0	1258.5	1260.0	1260.7	1260.4	1260.3	1260.0	1259.8
5°	1253.1	1255.3	1257.5	1258.5	1258.1	1257.9	1257.6	1257.4
7.5°	1242.6	1244.6	1246.5	1247.3	1247.1	1246.7	1246.5	1246.2
10°	1232.8	1234.7	1236.6	1237.5	1237.2	1236.9	1236.6	1236.4
12.5°	1221.0	1222.5	1224.0	1224.4	1223.7	1223.0	1222.3	1221.5
15°	1198.9	1200.6	1202.1	1202.5	1201.3	1200.2	1199.1	1198.0
17.5°	1170.7	1172.0	1173.2	1173.5	1172.8	1172.2	1171.6	1170.8
20°	1149.1	1149.9	1150.7	1151.1	1151.1	1151.1	1151.1	1151.1
22.5°	1126.8	1127.8	1128.9	1129.0	1128.4	1127.8	1127.0	1126.4
25°	1091.5	1092.7	1093.8	1093.6	1092.3	1090.8	1089.5	1088.1
27.5°	1050.7	1051.4	1052.2	1052.3	1051.8	1051.3	1050.8	1050.4
30°	1022.5	1023.1	1023.7	1023.7	1023.5	1023.2	1022.9	1022.6
32.5°	995.9	996.4	997.0	997.1	996.8	996.6	996.2	996.0
35°	952.7	953.5	954.3	954.7	954.7	954.7	954.7	954.7
37.5°	907.3	908.4	909.5	910.0	909.8	909.7	909.7	909.5
40°	876.6	877.7	878.8	879.6	880.2	880.7	881.3	881.9
42.5°	848.4	849.8	851.0	851.8	851.9	852.0	852.2	852.2
45°	803.0	804.9	806.8	807.9	808.2	808.4	808.7	809.0
47.5°	756.1	758.8	761.7	763.3	764.0	764.5	765.2	765.8
50°	724.8	727.9	730.9	732.8	733.6	734.5	735.3	736.1
52.5°	693.7	697.0	700.1	702.1	702.7	703.3	703.9	704.5
55°	644.6	647.6	650.6	652.7	653.8	654.9	656.0	657.1
57.5°	596.0	599.5	603.0	605.1	605.9	606.7	607.6	608.4
60°	562.8	566.9	571.0	573.5	574.3	575.1	576.0	576.8
62.5°	529.1	533.6	538.2	541.0	542.0	543.1	544.2	545.2
65°	478.8	482.9	487.0	489.6	490.8	491.9	493.0	494.0
67.5°	427.2	432.2	437.2	440.4	441.8	443.2	444.7	446.2
70°	392.1	397.3	402.5	405.9	407.6	409.2	410.9	412.5
72.5°	359.3	365.0	370.7	374.1	375.3	376.5	377.7	378.9
75°	309.9	315.4	320.8	324.3	325.7	327.0	328.4	329.8
77.5°	260.3	266.3	272.4	276.0	277.1	278.1	279.2	280.4
80°	230.7	236.7	242.8	246.4	247.4	248.5	249.6	250.7
82.5°	202.6	208.4	214.2	218.1	220.1	222.0	224.0	226.0
85°	164.0	170.0	176.1	180.2	182.4	184.6	186.8	188.9
87.5°	134.8	141.2	147.7	151.9	153.9	155.9	158.0	159.9
90°	124.6	131.6	138.6	143.1	145.4	147.8	150.1	152.4
92.5°	120.2	127.0	133.7	138.2	140.2	142.4	144.4	146.6
95°	113.0	119.6	126.4	130.6	132.5	134.4	136.4	138.3
97.5°	117.0	119.1	121.2	123.2	125.1	126.9	128.8	130.6
100°	153.8	140.1	126.5	120.3	121.4	122.5	123.6	124.7
102.5°	209.1	211.0	212.9	210.2	203.0	195.7	188.5	181.3
105°	253.8	259.3	264.8	268.5	270.2	272.0	273.9	275.6
107.5°	294.3	299.8	305.2	308.6	310.0	311.2	312.6	313.9
110°	320.1	325.0	329.7	333.2	335.3	337.3	339.4	341.4



TEST NUMBER: P333468-927

CATALOG NUMBER: S125DIW-S1270D770U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	345.5	350.1	354.6	357.7	359.4	361.2	362.9	364.6
115°	384.5	389.0	393.4	396.0	396.9	397.8	398.6	399.5
117.5°	421.5	425.6	429.5	432.3	433.8	435.3	436.9	438.4
120°	445.7	450.0	454.5	457.2	458.2	459.1	460.2	461.1
122.5°	468.0	472.2	476.4	479.0	479.8	480.7	481.6	482.5
125°	501.1	504.9	508.7	511.2	512.1	513.2	514.1	515.2
127.5°	530.4	534.2	538.0	540.1	540.7	541.4	542.0	542.6
130°	550.2	553.7	557.1	559.2	560.0	560.7	561.4	562.1
132.5°	568.1	571.8	575.6	577.7	578.2	578.7	579.2	579.7
135°	593.5	596.8	600.1	602.1	602.6	603.2	603.8	604.4
137.5°	618.1	621.4	624.7	626.5	627.0	627.4	627.8	628.3
140°	633.0	636.3	639.5	641.4	641.7	642.0	642.3	642.6
142.5°	648.0	650.7	653.3	654.7	655.1	655.4	655.7	656.0
145°	670.4	671.9	673.4	674.3	674.6	674.9	675.3	675.6
147.5°	690.1	690.8	691.4	691.4	691.0	690.5	690.1	689.7
150°	703.1	703.4	703.7	703.4	702.7	701.9	701.1	700.3
152.5°	715.3	715.6	715.9	715.6	714.7	713.8	712.9	712.0
155°	732.1	732.5	732.9	732.6	731.6	730.6	729.5	728.4
157.5°	746.1	746.5	746.9	746.6	745.5	744.5	743.5	742.4
160°	754.7	755.3	755.7	755.5	754.5	753.4	752.4	751.3
162.5°	762.6	763.3	764.1	763.9	762.8	761.6	760.5	759.3
165°	772.9	773.6	774.4	774.3	773.2	772.2	771.2	770.1
167.5°	780.5	781.5	782.4	782.4	781.2	780.0	778.8	777.6
170°	784.5	785.6	786.6	786.6	785.4	784.2	783.0	781.9
172.5°	787.6	788.5	789.5	789.3	788.2	787.0	785.8	784.7
175°	791.0	792.0	793.1	793.0	791.9	790.7	789.5	788.3
177.5°	792.3	793.1	793.8	793.8	792.9	792.1	791.2	790.4
180°	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9

(END OF REPORT)