

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: P333469-927

Luminaire Tested: **S125DIW-S1270D770U927-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333469-927
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-S1270D770U927-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6012.3 lumens
Efficiency: N/A
Efficacy: 100.5 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

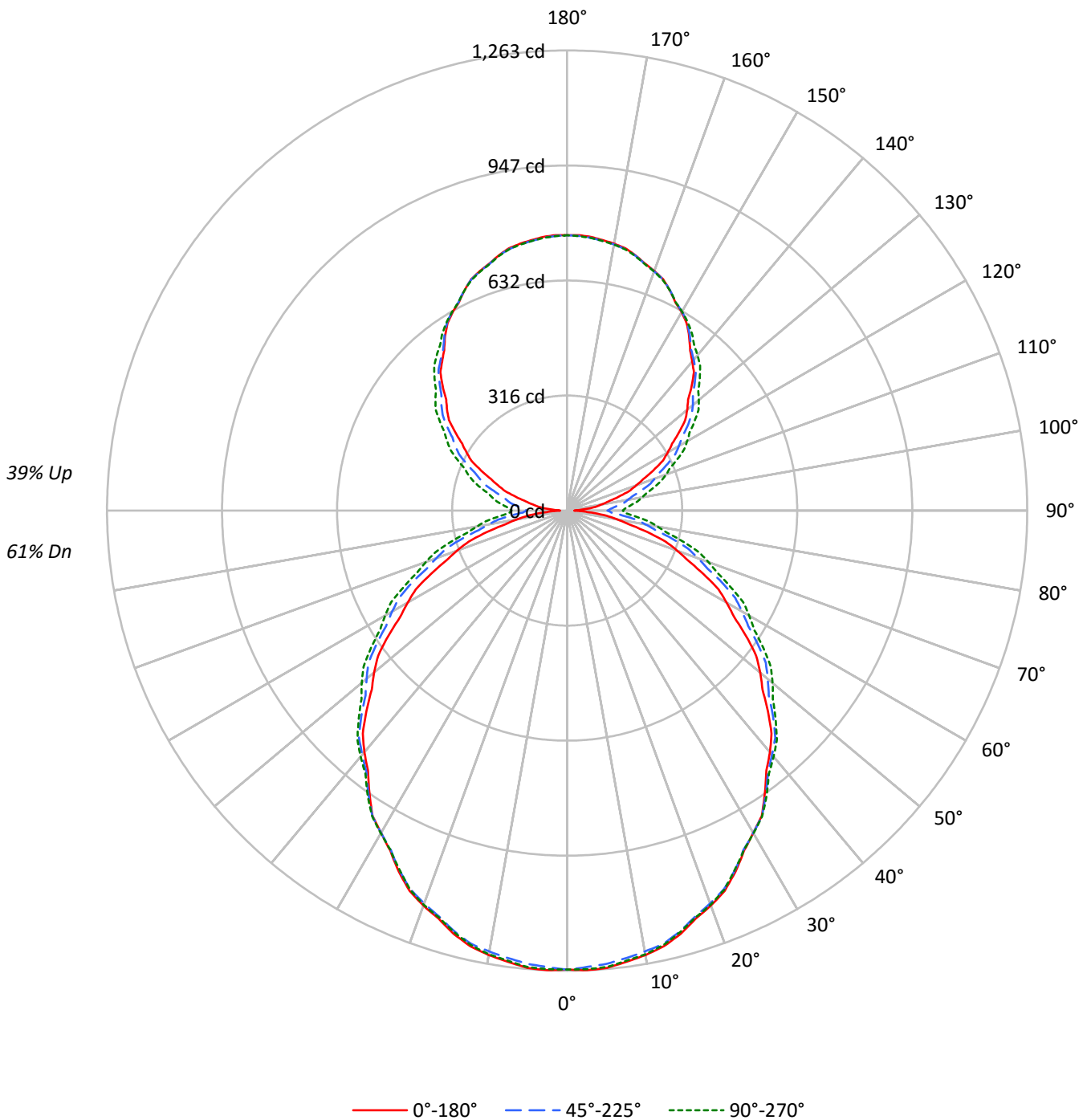
Input Watts (W): 59.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66	61
1	99	95	90	86	93	88	85	81	77	74	72	67	65	63	57	56	54	49
2	90	82	75	70	84	77	71	66	67	63	59	58	55	52	50	47	45	41
3	82	72	64	58	76	67	60	55	59	53	49	51	47	43	44	41	38	34
4	75	63	55	49	70	60	52	46	52	46	41	45	41	37	39	35	32	29
5	69	56	48	42	64	53	45	40	47	40	36	41	36	32	35	31	28	25
6	63	51	42	36	59	48	40	34	42	36	31	37	32	28	32	28	25	22
7	59	46	37	32	55	43	36	30	38	32	27	33	28	25	29	25	22	19
8	54	42	33	28	51	39	32	27	35	29	24	31	26	22	27	23	20	17
9	51	38	30	25	47	36	29	24	32	26	22	28	23	20	25	21	18	15
10	47	35	27	22	44	33	26	21	29	24	20	26	21	18	23	19	16	14

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	2.0
10°-20°	338.2	5.6
20°-30°	502.9	8.4
30°-40°	595.7	9.9
40°-50°	615.9	10.2
50°-60°	567.4	9.4
60°-70°	458.6	7.6
70°-80°	307.2	5.1
80°-90°	160.9	2.7
90°-100°	140.0	2.3
100°-110°	215.4	3.6
110°-120°	297.3	4.9
120°-130°	358.2	6.0
130°-140°	384.3	6.4
140°-150°	368.1	6.1
150°-160°	307.3	5.1
160°-170°	204.3	3.4
170°-180°	71.5	1.2
0°-30°	960.2	16.0
0°-40°	1555.9	25.9
0°-60°	2739.2	45.6
0°-90°	3666.0	61.0
90°-120°	652.7	10.9
90°-150°	1763.3	29.3
90°-180°	2346.0	39.0
0°-180°	6012.3	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°	54	88	136	166	177	53
105°	145	169	208	236	247	155
115°	261	273	305	326	334	258
125°	375	378	402	420	427	335
135°	484	486	495	510	515	373
145°	584	585	587	593	596	365
155°	667	667	668	670	667	307
165°	725	724	724	726	723	204
175°	754	752	752	755	751	72
180°	756	756	756	756	756	



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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°	32.0	40.9	49.7	58.6	67.4	77.2	87.9	98.5	109.2	119.9	126.8
95°	54.3	61.7	69.1	76.4	83.9	92.9	103.5	114.2	124.8	135.5	142.4
97.5°	78.1	84.6	91.1	97.7	104.2	112.9	123.7	134.5	145.3	156.1	162.7
100°	95.9	101.7	107.4	113.2	119.0	127.1	137.6	148.1	158.5	169.1	175.9
102.5°	115.2	121.0	126.8	132.7	138.6	146.2	155.6	165.0	174.4	183.9	190.7
105°	145.2	150.3	155.3	160.3	165.4	172.4	181.4	190.4	199.5	208.5	214.8
107.5°	178.6	182.9	187.3	191.7	196.1	202.5	211.0	219.5	228.1	236.5	242.4
110°	201.5	205.5	209.5	213.4	217.3	223.3	231.4	239.5	247.6	255.6	261.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	226.0	228.9	232.0	235.0	237.9	243.4	251.4	259.3	267.3	275.2	280.4
115°	260.9	263.3	265.8	268.2	270.6	275.6	283.0	290.3	297.8	305.1	310.0
117.5°	295.9	297.4	298.9	300.3	301.8	306.1	313.1	320.0	327.1	334.1	338.8
120°	318.5	319.9	321.4	322.9	324.3	328.3	334.8	341.2	347.6	354.1	358.8
122.5°	341.9	342.5	343.2	343.8	344.4	347.9	354.3	360.8	367.3	373.7	378.0
125°	374.9	375.3	375.9	376.4	376.8	379.9	385.6	391.2	396.8	402.4	406.5
127.5°	408.9	409.1	409.2	409.4	409.6	412.0	416.6	421.3	426.0	430.6	434.5
130°	430.1	430.5	430.8	431.2	431.6	433.8	437.9	442.0	446.2	450.2	453.9
132.5°	450.3	451.2	452.3	453.3	454.3	456.3	459.1	462.1	465.0	467.9	471.7
135°	483.5	484.0	484.5	485.1	485.5	486.8	488.9	490.9	493.0	495.0	498.6
137.5°	514.8	515.3	515.9	516.4	517.0	517.8	519.0	520.2	521.5	522.7	526.1
140°	534.0	534.7	535.4	536.0	536.6	537.3	538.0	538.6	539.3	540.0	543.3
142.5°	554.3	554.6	554.9	555.2	555.6	556.0	556.6	557.1	557.7	558.3	560.9
145°	584.0	584.2	584.6	584.8	585.0	585.3	585.7	586.1	586.5	586.9	588.3
147.5°	610.3	610.6	610.9	611.2	611.5	611.7	612.0	612.4	612.7	613.0	613.8
150°	628.7	628.5	628.4	628.3	628.1	628.4	628.8	629.4	629.9	630.4	630.4
152.5°	643.7	643.9	644.0	644.3	644.4	644.6	644.8	645.1	645.2	645.5	645.8
155°	666.9	666.9	666.9	666.9	666.9	666.9	667.1	667.2	667.3	667.5	668.0
157.5°	687.6	687.3	687.0	686.7	686.4	686.3	686.5	686.6	686.7	686.9	687.4
160°	699.8	699.4	699.0	698.6	698.2	698.1	698.2	698.4	698.5	698.6	699.2
162.5°	710.7	710.3	710.0	709.8	709.5	709.3	709.4	709.4	709.4	709.5	710.1
165°	725.1	724.8	724.6	724.3	724.1	724.0	724.1	724.2	724.4	724.5	725.0
167.5°	737.4	736.8	736.3	735.8	735.2	735.0	735.0	735.0	735.0	735.0	735.8
170°	743.9	743.4	742.8	742.4	741.8	741.6	741.6	741.6	741.6	741.6	742.4
172.5°	748.6	748.1	747.6	747.0	746.6	746.2	746.2	746.2	746.2	746.2	747.0
175°	753.9	753.4	752.9	752.3	751.8	751.5	751.5	751.5	751.5	751.5	752.3
177.5°	756.6	756.2	755.7	755.3	754.9	754.7	754.6	754.5	754.4	754.2	754.9
180°	755.7	755.7	755.7	755.7	755.7	755.7	755.7	755.7	755.7	755.7	755.7



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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	143.2	145.5	147.8	150.1	152.4
92.5°	133.8	140.8	147.7	152.3	154.6	156.7	158.9	161.1
95°	149.3	156.3	163.3	167.9	170.0	172.2	174.4	176.6
97.5°	169.4	175.9	182.6	186.9	188.9	191.0	193.0	195.0
100°	182.9	189.8	196.8	201.2	203.1	205.0	206.9	208.8
102.5°	197.6	204.4	211.2	215.6	217.6	219.6	221.7	223.6
105°	221.0	227.3	233.5	237.9	240.2	242.5	244.8	247.1
107.5°	248.2	254.1	259.8	263.6	265.3	267.0	268.6	270.3
110°	266.9	272.4	278.1	281.8	283.5	285.3	287.2	288.9



TEST NUMBER: P333469-927

CATALOG NUMBER: S125DIW-S1270D770U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	285.6	290.7	296.0	299.4	301.0	302.7	304.4	306.1
115°	314.8	319.6	324.4	327.6	329.1	330.6	332.1	333.6
117.5°	343.6	348.3	353.2	356.2	357.5	358.9	360.2	361.6
120°	363.5	368.0	372.7	375.7	376.8	377.9	379.0	380.2
122.5°	382.3	386.7	391.0	393.8	395.1	396.2	397.5	398.7
125°	410.7	414.8	418.9	421.6	422.9	424.1	425.3	426.6
127.5°	438.5	442.4	446.3	449.0	450.3	451.6	453.0	454.3
130°	457.6	461.4	465.1	467.5	468.6	469.7	470.8	471.9
132.5°	475.3	479.0	482.8	485.1	485.8	486.6	487.4	488.1
135°	502.2	505.7	509.3	511.5	512.4	513.3	514.0	514.9
137.5°	529.5	532.9	536.3	538.2	538.7	539.1	539.6	540.0
140°	546.5	549.8	553.1	554.9	555.4	555.9	556.3	556.7
142.5°	563.7	566.4	569.2	570.8	571.2	571.6	572.1	572.5
145°	589.6	591.0	592.4	593.4	594.1	594.8	595.6	596.3
147.5°	614.5	615.3	616.0	616.2	615.8	615.4	615.1	614.7
150°	630.4	630.4	630.4	630.4	630.4	630.4	630.5	630.5
152.5°	646.1	646.4	646.7	646.7	646.3	645.9	645.4	645.0
155°	668.5	669.0	669.6	669.5	668.8	668.2	667.5	666.9
157.5°	687.9	688.4	689.0	688.8	687.9	687.1	686.2	685.3
160°	699.7	700.2	700.7	700.7	700.0	699.3	698.7	698.1
162.5°	710.7	711.3	711.9	711.9	711.1	710.3	709.6	708.8
165°	725.6	726.1	726.6	726.4	725.7	724.9	724.1	723.3
167.5°	736.6	737.4	738.1	738.1	737.3	736.5	735.7	734.8
170°	743.1	743.9	744.7	744.7	743.7	742.8	741.9	741.0
172.5°	747.8	748.6	749.4	749.4	748.6	747.7	746.9	746.2
175°	753.1	753.9	754.7	754.6	753.7	752.8	751.9	751.0
177.5°	755.5	756.1	756.8	756.7	756.0	755.3	754.6	753.8
180°	755.7	755.7	755.7	755.7	755.7	755.7	755.7	755.7

(END OF REPORT)