

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: P333308-927

Luminaire Tested: **S125DIP-S1270D590U927-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333308-927
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: S125DIP-S1270D590U927-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5523.7 lumens
Efficiency: N/A
Efficacy: 100.2 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

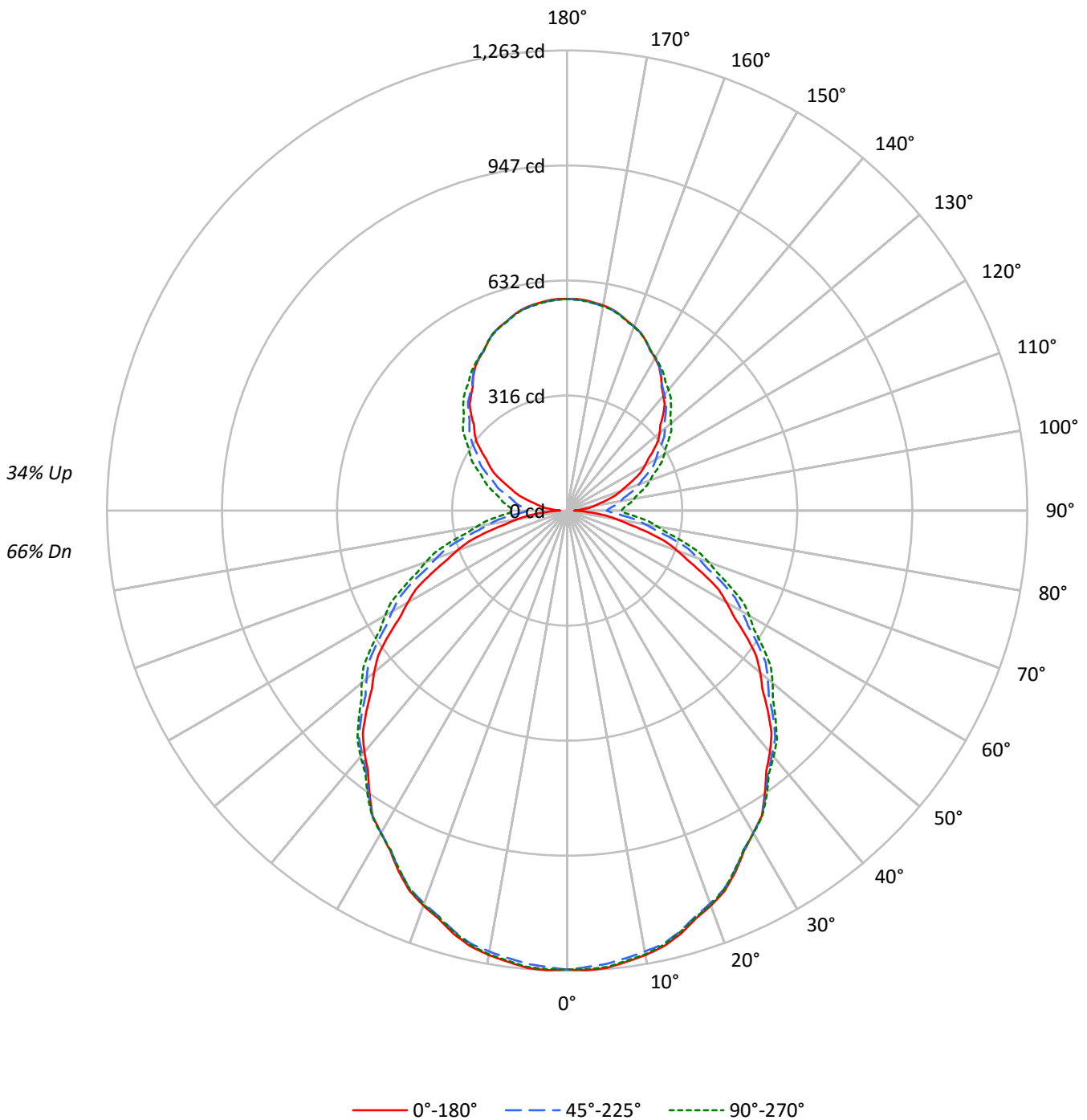
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71	66
1	100	96	91	87	94	90	86	83	80	77	74	70	68	66	61	60	58	54
2	91	83	76	71	85	78	72	67	69	65	61	61	57	54	53	51	48	44
3	83	73	65	58	78	69	61	56	61	55	50	54	49	45	47	44	41	37
4	76	64	56	49	71	61	53	47	54	48	43	48	43	39	42	38	35	32
5	70	57	48	42	65	54	46	40	48	42	37	43	38	33	38	33	30	27
6	64	51	43	37	60	49	41	35	43	37	32	39	33	29	34	30	26	24
7	59	46	38	32	56	44	36	31	39	33	28	35	30	26	31	27	23	21
8	55	42	34	28	52	40	32	27	36	30	25	32	27	23	29	24	21	19
9	51	38	31	25	48	37	29	24	33	27	23	30	24	21	26	22	19	17
10	48	35	28	23	45	34	27	22	30	24	20	27	22	19	24	20	17	15

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	2.2
10°-20°	338.2	6.1
20°-30°	502.9	9.1
30°-40°	595.7	10.8
40°-50°	615.9	11.2
50°-60°	567.4	10.3
60°-70°	458.6	8.3
70°-80°	307.2	5.6
80°-90°	160.6	2.9
90°-100°	128.3	2.3
100°-110°	180.8	3.3
110°-120°	238.7	4.3
120°-130°	281.1	5.1
130°-140°	297.8	5.4
140°-150°	283.4	5.1
150°-160°	236.2	4.3
160°-170°	157.0	2.8
170°-180°	54.9	1.0
0°-30°	960.2	17.4
0°-40°	1555.9	28.2
0°-60°	2739.2	49.6
0°-90°	3665.6	66.4
90°-120°	547.7	9.9
90°-150°	1410.1	25.5
90°-180°	1858.0	33.6
0°-180°	5523.7	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	63	108	138	149	15
95°	45	79	125	154	165	44
105°	114	137	176	202	213	122
115°	202	214	246	267	274	200
125°	289	292	316	334	340	259
135°	372	374	383	398	403	287
145°	449	450	451	457	461	280
155°	512	512	513	514	512	236
165°	557	556	557	558	556	157
175°	579	578	578	580	577	55
180°	581	581	581	581	581	



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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	47.5	56.5	65.4	74.4	83.6	93.1	102.6	112.0	121.5	127.9
90°	20.2	29.8	39.4	49.0	58.5	68.4	78.4	88.4	98.5	108.5	115.3
92.5°	28.8	37.4	46.1	54.8	63.5	73.0	83.4	93.9	104.3	114.7	121.4
95°	45.4	52.8	60.1	67.4	74.8	83.7	94.0	104.3	114.6	124.9	131.7
97.5°	63.4	69.9	76.4	82.9	89.4	97.8	108.2	118.6	129.0	139.4	145.8
100°	76.8	82.6	88.4	94.1	99.9	107.8	118.0	128.0	138.1	148.2	154.9
102.5°	91.4	97.1	102.9	108.6	114.3	121.8	131.0	140.2	149.5	158.7	165.2
105°	114.2	119.1	124.0	128.8	133.7	140.6	149.4	158.3	167.1	175.9	182.0
107.5°	139.4	143.6	147.9	152.1	156.4	162.6	171.0	179.4	187.7	196.1	201.8
110°	156.9	160.7	164.5	168.3	172.1	177.9	185.9	193.9	201.9	209.9	215.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	175.7	178.6	181.5	184.3	187.3	192.7	200.5	208.3	216.2	224.0	229.2
115°	202.2	204.5	206.8	209.1	211.5	216.3	223.6	231.0	238.3	245.7	250.5
117.5°	228.8	230.2	231.7	233.1	234.6	238.8	245.7	252.6	259.5	266.5	271.2
120°	246.1	247.5	248.8	250.1	251.4	255.3	261.7	268.2	274.6	281.0	285.7
122.5°	264.0	264.5	265.1	265.6	266.3	269.7	276.0	282.4	288.8	295.1	299.4
125°	289.2	289.5	289.9	290.2	290.5	293.5	299.0	304.7	310.2	315.8	320.0
127.5°	315.1	315.1	315.2	315.3	315.4	317.7	322.3	326.9	331.5	336.2	340.2
130°	331.4	331.6	331.8	332.0	332.2	334.4	338.4	342.5	346.5	350.5	354.3
132.5°	346.7	347.4	348.2	349.0	349.7	351.6	354.5	357.4	360.3	363.2	367.0
135°	372.2	372.5	372.8	373.1	373.4	374.6	376.7	378.7	380.7	382.7	386.3
137.5°	396.1	396.5	396.8	397.2	397.6	398.3	399.5	400.6	401.8	402.9	406.3
140°	410.7	411.1	411.7	412.2	412.6	413.2	413.8	414.4	414.9	415.5	418.7
142.5°	426.2	426.4	426.6	426.8	427.1	427.4	427.8	428.3	428.6	429.1	431.8
145°	449.1	449.2	449.3	449.5	449.6	449.8	450.1	450.4	450.8	451.0	452.4
147.5°	469.0	469.2	469.4	469.7	469.9	470.1	470.3	470.6	470.9	471.1	471.7
150°	483.1	483.0	482.9	482.8	482.7	482.8	483.2	483.6	484.0	484.4	484.4
152.5°	494.6	494.8	495.0	495.1	495.2	495.4	495.5	495.7	495.8	496.1	496.3
155°	512.5	512.5	512.5	512.5	512.5	512.5	512.6	512.7	512.9	512.9	513.3
157.5°	528.4	528.1	527.9	527.8	527.5	527.4	527.5	527.7	527.8	527.8	528.2
160°	537.8	537.5	537.2	536.9	536.5	536.5	536.5	536.7	536.8	536.9	537.3
162.5°	546.1	545.9	545.7	545.4	545.2	545.1	545.1	545.2	545.2	545.2	545.7
165°	557.2	557.0	556.8	556.6	556.4	556.3	556.4	556.6	556.7	556.7	557.1
167.5°	566.6	566.3	565.8	565.4	565.0	564.8	564.8	564.8	564.8	564.8	565.4
170°	571.6	571.2	570.8	570.5	570.1	569.9	569.9	569.9	569.9	569.9	570.5
172.5°	575.3	574.9	574.5	574.1	573.7	573.5	573.5	573.5	573.5	573.5	574.1
175°	579.3	578.9	578.5	578.1	577.7	577.6	577.6	577.6	577.6	577.6	578.1
177.5°	581.5	581.1	580.8	580.5	580.1	580.0	579.9	579.8	579.7	579.6	580.1
180°	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7



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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°	134.4	140.8	147.2	151.4	153.4	155.3	157.3	159.3
90°	122.2	129.0	135.8	140.3	142.5	144.7	146.9	149.2
92.5°	128.2	134.9	141.7	146.2	148.3	150.4	152.6	154.7
95°	138.5	145.2	151.9	156.4	158.5	160.6	162.7	164.9
97.5°	152.3	158.7	165.1	169.3	171.3	173.3	175.2	177.3
100°	161.5	168.2	174.8	179.1	180.9	182.8	184.7	186.5
102.5°	171.7	178.3	184.8	189.0	191.0	192.9	194.8	196.8
105°	188.1	194.2	200.3	204.5	206.7	208.9	211.1	213.3
107.5°	207.6	213.3	219.0	222.8	224.5	226.2	227.8	229.5
110°	220.9	226.4	232.0	235.6	237.4	239.2	241.1	242.9



TEST NUMBER: P333308-927

CATALOG NUMBER: S125DIP-S1270D590U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	234.3	239.4	244.5	248.0	249.8	251.5	253.3	254.9
115°	255.3	260.2	265.0	268.2	269.7	271.3	272.8	274.4
117.5°	276.0	280.7	285.5	288.6	290.0	291.5	292.9	294.5
120°	290.3	294.9	299.6	302.6	303.8	305.1	306.3	307.6
122.5°	303.8	308.2	312.6	315.4	316.7	318.1	319.4	320.7
125°	324.2	328.4	332.6	335.3	336.6	337.9	339.1	340.4
127.5°	344.1	348.1	352.0	354.7	356.1	357.5	358.9	360.3
130°	358.1	361.8	365.5	368.0	369.2	370.3	371.5	372.6
132.5°	370.7	374.5	378.2	380.5	381.4	382.2	383.1	384.0
135°	389.8	393.4	397.0	399.3	400.2	401.2	402.2	403.1
137.5°	409.6	413.0	416.4	418.4	419.0	419.5	420.2	420.7
140°	422.0	425.2	428.4	430.3	430.9	431.5	432.1	432.7
142.5°	434.5	437.2	439.9	441.6	442.1	442.8	443.3	443.9
145°	453.8	455.1	456.5	457.6	458.4	459.1	459.9	460.8
147.5°	472.5	473.1	473.8	474.0	473.9	473.6	473.5	473.3
150°	484.4	484.4	484.4	484.5	484.6	484.7	484.7	484.8
152.5°	496.5	496.8	497.0	496.9	496.6	496.4	496.1	495.7
155°	513.7	514.1	514.5	514.5	514.0	513.5	512.9	512.5
157.5°	528.6	529.0	529.4	529.3	528.6	528.0	527.4	526.6
160°	537.7	538.1	538.4	538.4	538.0	537.4	536.9	536.5
162.5°	546.1	546.6	547.2	547.1	546.5	545.9	545.3	544.7
165°	557.5	557.9	558.4	558.3	557.7	557.1	556.4	555.9
167.5°	566.0	566.6	567.2	567.2	566.6	565.9	565.3	564.7
170°	571.1	571.6	572.3	572.2	571.6	570.8	570.1	569.4
172.5°	574.7	575.3	575.9	575.9	575.3	574.6	574.0	573.4
175°	578.8	579.3	580.0	579.9	579.2	578.5	577.8	577.1
177.5°	580.6	581.1	581.5	581.5	581.0	580.4	579.8	579.2
180°	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7

(END OF REPORT)