

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: P333309-927

Luminaire Tested: **S125DIP-S1270D590U927-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333309-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
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-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5584.1 lumens
Efficiency: N/A
Efficacy: 101.3 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: Semi-Direct

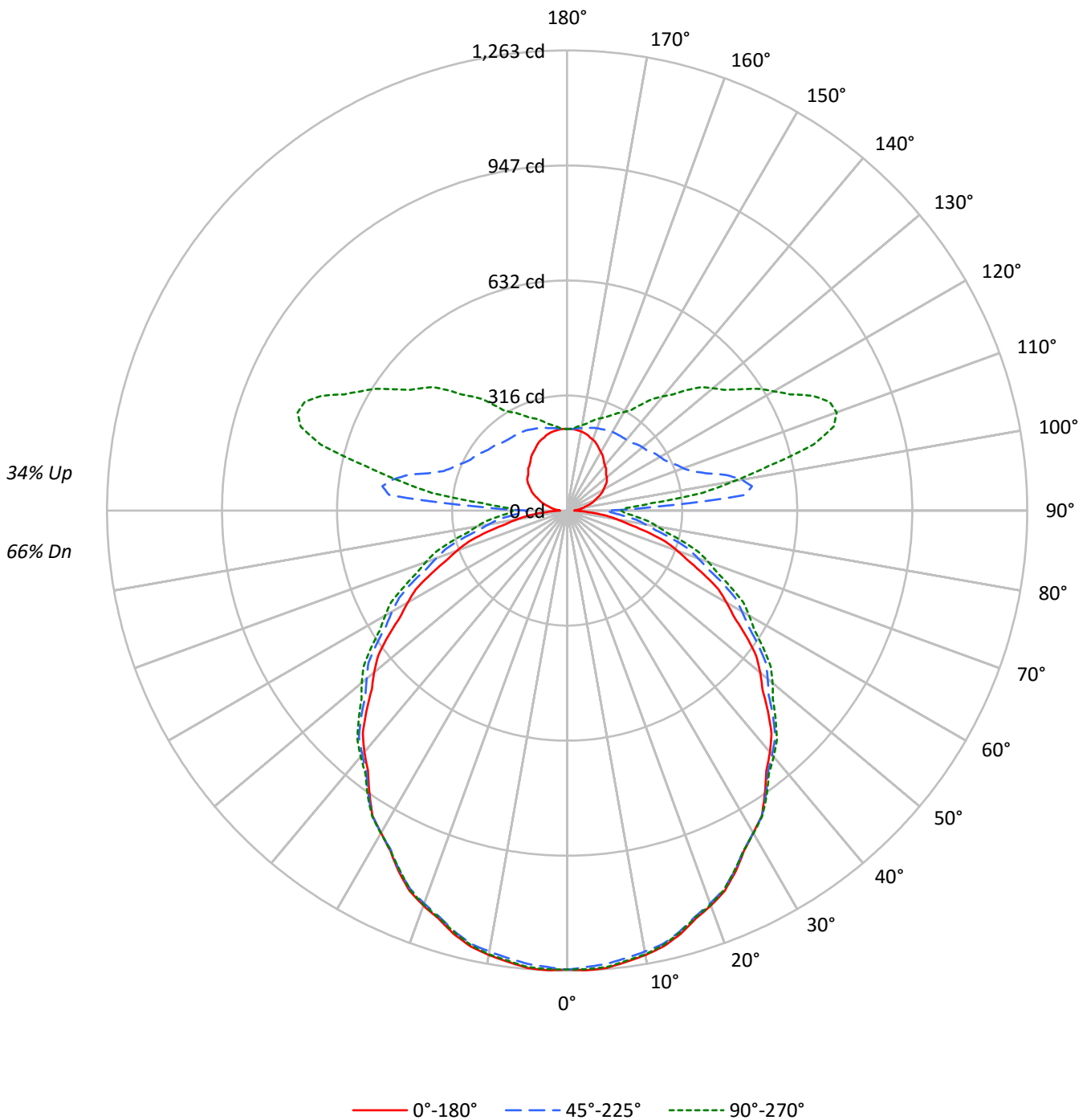
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	92	92	92	81	81	81	70	70	70	66
1	100	95	91	87	94	90	86	83	79	76	74	70	67	65	61	59	58	53
2	91	83	76	70	85	78	72	67	69	64	60	61	57	54	53	50	48	44
3	83	73	65	58	77	68	61	56	61	55	50	53	49	45	47	43	40	37
4	76	64	56	49	71	60	53	47	54	48	43	47	42	38	41	38	34	31
5	69	57	48	42	65	54	46	40	48	42	37	42	37	33	37	33	30	27
6	64	51	43	36	60	48	41	35	43	37	32	38	33	29	34	30	26	24
7	59	46	38	32	55	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	28	24	21	19
9	51	38	31	25	48	36	29	24	33	27	22	29	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	2.1
10°-20°	338.2	6.1
20°-30°	502.9	9.0
30°-40°	595.7	10.7
40°-50°	615.9	11.0
50°-60°	567.4	10.2
60°-70°	458.6	8.2
70°-80°	307.2	5.5
80°-90°	160.5	2.9
90°-100°	251.8	4.5
100°-110°	415.2	7.4
110°-120°	371.9	6.7
120°-130°	290.7	5.2
130°-140°	224.1	4.0
140°-150°	163.1	2.9
150°-160°	113.2	2.0
160°-170°	66.7	1.2
170°-180°	21.7	0.4
0°-30°	960.2	17.2
0°-40°	1555.9	27.9
0°-60°	2739.2	49.1
0°-90°	3665.6	65.6
90°-120°	1038.9	18.6
90°-150°	1716.8	30.7
90°-180°	1919.0	34.4
0°-180°	5584.1	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	14
95°	31	93	490	298	232	28
105°	62	103	396	737	700	66
115°	99	127	311	636	745	97
125°	132	153	281	498	580	116
135°	151	180	260	403	469	117
145°	174	198	251	319	356	109
155°	197	212	245	277	289	91
165°	215	221	235	249	253	61
175°	224	224	226	228	227	21
180°	224	224	224	224	224	



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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	83.7	93.1	102.6	112.0	121.5	127.9
90°	20.2	29.5	39.1	48.8	58.5	68.4	78.3	88.5	98.3	108.5	115.3
92.5°	23.3	32.6	44.5	58.2	74.1	96.2	130.4	181.3	235.8	243.0	221.3
95°	31.0	38.6	49.3	61.4	78.5	107.0	164.8	273.5	407.6	490.5	488.0
97.5°	39.4	46.3	55.3	66.6	82.0	104.4	145.4	227.2	366.7	511.6	585.5
100°	45.2	51.9	59.5	70.2	84.5	105.4	140.4	207.9	330.6	487.1	605.9
102.5°	51.8	57.7	64.5	75.1	88.3	108.4	140.3	198.2	302.9	448.8	586.5
105°	62.2	66.5	73.2	82.1	93.7	112.7	140.9	189.3	273.0	395.5	530.8
107.5°	72.2	76.9	82.8	90.2	101.5	118.7	145.8	188.1	257.6	357.9	475.2
110°	79.6	83.8	88.9	96.3	106.3	123.6	149.8	188.6	251.0	339.1	442.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	87.9	91.4	95.5	102.2	111.6	128.1	153.4	190.2	247.2	326.5	417.7
115°	98.7	101.5	104.8	110.7	119.5	135.3	159.1	192.5	243.0	311.2	388.9
117.5°	108.3	110.9	113.6	119.0	127.9	142.8	165.4	196.0	240.4	300.6	369.0
120°	115.5	117.7	120.3	125.2	133.7	148.6	170.7	198.8	239.9	294.5	357.4
122.5°	122.2	123.5	125.3	129.8	138.6	153.1	175.0	201.7	238.6	288.8	346.8
125°	131.5	132.1	134.1	137.8	146.2	160.6	180.9	205.9	237.6	280.6	331.9
127.5°	137.8	138.8	141.4	146.3	155.2	169.1	187.9	210.3	237.7	273.8	317.8
130°	142.4	143.5	146.9	152.4	161.7	175.2	193.1	214.0	238.2	270.1	309.2
132.5°	145.0	146.7	151.0	157.6	167.3	180.5	197.5	216.6	238.4	266.2	300.9
135°	150.7	152.3	157.4	164.3	173.6	186.6	202.5	219.4	238.0	260.2	289.5
137.5°	157.9	159.0	163.8	170.9	179.9	192.8	206.5	221.7	238.6	256.4	280.2
140°	161.2	162.6	167.9	175.2	183.8	196.1	209.5	223.3	238.1	253.7	274.8
142.5°	166.3	167.1	171.9	178.9	186.9	198.3	210.7	223.6	237.4	252.1	270.6
145°	173.9	174.5	178.7	184.8	192.7	202.9	214.7	225.9	238.1	251.3	266.2
147.5°	180.5	181.1	185.0	190.8	197.9	207.1	217.4	227.6	238.6	250.1	262.4
150°	185.3	186.2	189.3	195.2	201.5	209.2	219.2	228.6	238.6	249.0	259.8
152.5°	190.4	190.8	193.7	198.8	204.8	211.8	220.9	229.3	238.2	247.6	257.3
155°	197.0	197.0	199.7	204.2	208.7	215.1	222.8	230.0	237.3	244.9	253.0
157.5°	203.0	202.9	205.1	209.0	212.9	217.7	224.3	230.4	236.1	242.2	249.1
160°	207.0	206.5	208.3	211.5	215.1	219.2	225.1	230.4	235.0	240.4	245.8
162.5°	210.2	209.8	211.6	214.4	217.3	220.6	225.8	230.1	233.9	238.2	243.0
165°	215.1	214.2	215.6	217.8	219.6	222.4	225.9	229.6	232.3	235.0	238.6
167.5°	218.3	217.9	218.7	220.0	221.3	222.9	225.9	228.5	229.7	231.8	234.3
170°	220.5	220.1	220.5	221.4	222.4	223.7	225.9	227.8	228.6	230.0	231.8
172.5°	222.0	221.2	221.6	222.5	223.1	223.7	225.6	227.0	227.2	227.8	229.3
175°	223.7	222.8	223.2	223.7	223.7	223.7	225.1	225.9	225.5	225.5	225.9
177.5°	224.5	223.8	223.8	224.1	223.8	223.8	224.5	224.8	224.1	224.1	224.5
180°	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1



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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°	134.3	140.7	147.1	151.4	153.4	155.3	157.2	159.1
90°	122.1	128.8	135.5	140.6	142.5	144.4	146.8	148.7
92.5°	189.6	173.7	165.4	162.8	158.9	159.7	161.1	162.2
95°	427.1	364.5	315.0	281.0	250.8	239.2	237.5	232.2
97.5°	579.4	537.0	488.6	439.7	413.6	390.1	378.9	375.0
100°	646.4	630.0	589.2	546.0	516.4	485.5	470.5	464.9
102.5°	666.2	685.4	668.6	640.4	608.7	587.2	570.7	567.0
105°	644.7	712.1	737.4	736.2	723.7	710.7	703.5	700.1
107.5°	587.6	675.7	732.2	759.4	768.3	770.0	768.7	766.8
110°	545.7	636.8	705.7	747.7	769.9	780.4	785.5	787.4



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CATALOG NUMBER: S125DIP-S1270D590U927-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	511.7	598.2	667.6	716.3	748.0	764.6	774.4	779.6
115°	468.3	543.4	610.2	662.7	699.7	722.9	737.3	744.8
117.5°	437.8	502.9	560.9	609.3	646.4	670.7	685.2	690.6
120°	420.9	479.7	534.2	577.0	612.1	635.5	649.4	654.6
122.5°	406.7	461.4	510.2	550.4	581.9	603.4	617.3	622.2
125°	386.5	437.0	480.7	516.1	542.8	562.7	574.0	579.9
127.5°	365.7	412.8	453.5	486.8	511.4	529.3	540.3	543.9
130°	353.2	396.9	435.9	467.9	491.9	508.2	518.6	522.7
132.5°	340.2	381.4	417.2	448.0	471.7	487.7	497.3	501.5
135°	322.0	356.8	389.3	417.5	438.8	455.0	464.5	468.7
137.5°	307.0	335.4	362.7	386.7	405.7	420.3	428.9	433.0
140°	298.2	322.4	346.3	367.3	385.1	397.9	405.8	409.2
142.5°	290.6	311.2	331.7	349.9	365.2	376.3	383.8	386.7
145°	281.5	296.9	312.4	325.7	337.7	346.5	352.5	355.5
147.5°	273.9	285.7	296.9	306.6	315.7	322.3	325.7	327.0
150°	269.7	279.7	288.3	296.6	303.6	309.3	311.4	312.1
152.5°	266.2	275.0	282.9	289.2	295.0	299.4	301.3	301.7
155°	260.7	268.0	274.3	279.2	283.8	286.9	288.3	288.8
157.5°	255.3	261.3	266.2	270.1	273.5	276.2	277.4	277.3
160°	251.7	256.2	260.7	263.9	267.0	269.3	270.2	269.7
162.5°	247.7	251.9	255.6	258.5	260.9	262.8	263.0	262.9
165°	242.2	245.3	248.1	250.3	252.2	253.0	253.0	253.0
167.5°	236.9	239.1	241.1	242.7	243.7	244.5	244.1	244.0
170°	234.1	235.4	236.8	237.7	238.6	239.1	239.1	238.6
172.5°	230.8	232.2	233.1	233.7	233.9	234.7	234.0	233.5
175°	227.3	227.3	228.2	228.2	228.2	228.6	227.8	227.3
177.5°	224.8	225.2	225.2	225.2	224.8	225.2	224.1	224.1
180°	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1

(END OF REPORT)