

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: P333271-935

Luminaire Tested: **S125DIP-S1090D810U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333271-935
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: S125DIP-S1090D810U935-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6463.3 lumens
Efficiency: N/A
Efficacy: 118.8 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

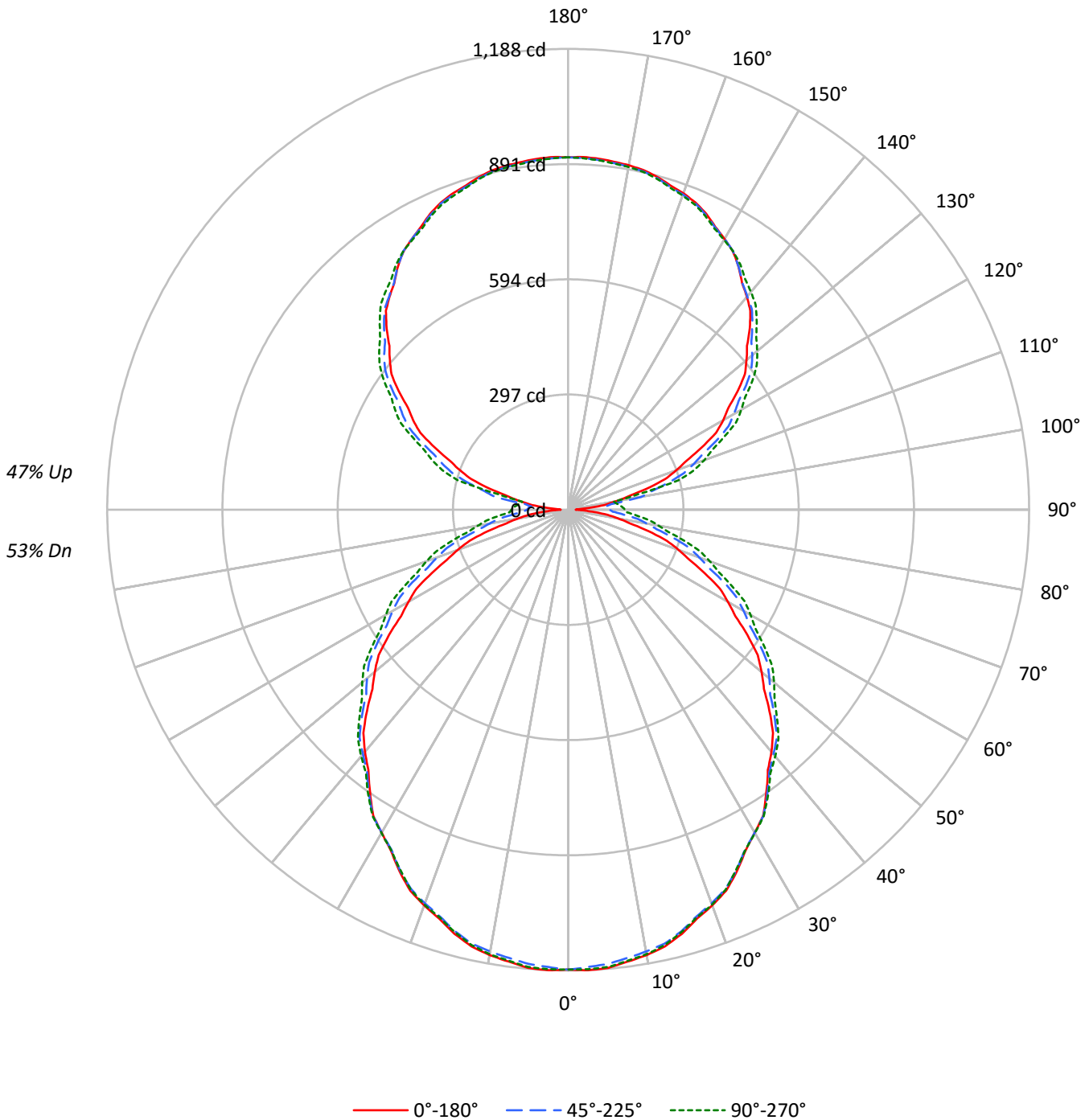
Input Watts (W): 54.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333271-935

CATALOG NUMBER: S125DIP-S1090D810U935-4F0-1E-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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59	53
1	98	93	89	85	90	86	83	79	74	71	68	62	60	58	51	50	48	43
2	89	81	74	69	82	75	69	64	64	60	56	54	51	48	45	42	40	36
3	81	71	63	57	74	66	59	53	56	51	47	47	43	40	39	36	34	30
4	74	62	54	48	68	58	51	45	50	44	40	42	38	34	35	32	29	25
5	68	56	47	41	62	52	44	39	44	39	34	38	33	30	31	28	25	22
6	62	50	41	35	57	46	39	33	40	34	30	34	29	26	28	25	22	19
7	58	45	37	31	53	42	35	29	36	30	26	31	26	23	26	22	20	17
8	53	41	33	27	49	38	31	26	33	27	23	28	24	20	24	20	17	15
9	50	37	30	24	46	35	28	23	30	25	21	26	21	18	22	18	16	14
10	46	34	27	22	43	32	25	21	28	22	19	24	20	16	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7657	7657	7657
5°	7672	7516	7539
10°	7617	7381	7370
15°	7527	7221	7155
20°	7405	7022	6940
25°	7259	6810	6675
30°	7083	6575	6434
35°	6919	6361	6214
40°	6751	6134	5991
45°	6562	5941	5794
50°	6381	5731	5621
55°	6164	5532	5416
60°	5927	5306	5207
65°	5679	5069	4972
70°	5397	4745	4731
75°	4952	4435	4434
80°	4367	4057	4111
85°	3824	3802	4009



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.1	1.7
10°-20°	318.2	4.9
20°-30°	473.3	7.3
30°-40°	560.6	8.7
40°-50°	579.6	9.0
50°-60°	533.9	8.3
60°-70°	431.6	6.7
70°-80°	289.0	4.5
80°-90°	151.8	2.3
90°-100°	117.1	1.8
100°-110°	265.5	4.1
110°-120°	410.5	6.4
120°-130°	497.1	7.7
130°-140°	519.6	8.0
140°-150°	480.1	7.4
150°-160°	386.7	6.0
160°-170°	250.1	3.9
170°-180°	86.3	1.3
0°-30°	903.6	14.0
0°-40°	1464.2	22.7
0°-60°	2577.8	39.9
0°-90°	3450.2	53.4
90°-120°	793.1	12.3
90°-150°	2290.0	35.4
90°-180°	3013.0	46.6
0°-180°	6463.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1186	1186	1186	1186	1186	
5°	1186	1183	1175	1184	1183	112
15°	1132	1133	1125	1132	1128	319
25°	1029	1032	1025	1029	1024	473
35°	890	898	895	898	898	557
45°	733	746	752	760	761	566
55°	564	582	601	613	618	504
65°	388	415	443	460	465	385
75°	214	244	281	304	310	227
85°	64	102	143	168	178	68
90°	19	62	106	135	146	14
95°	54	81	96	123	133	61
105°	208	230	265	287	295	221
115°	379	391	421	438	442	375
125°	533	538	560	575	580	476
135°	662	665	671	684	687	510
145°	765	766	766	772	773	478
155°	842	838	839	841	836	388
165°	888	884	885	888	883	251
175°	908	905	905	910	904	86
180°	908	908	908	908	908	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6
2.5°	1188.4	1187.9	1187.5	1187.1	1186.7	1185.8	1184.3	1182.8	1181.5	1180.0	1181.5
5°	1185.6	1185.1	1184.6	1184.0	1183.5	1182.3	1180.5	1178.7	1176.9	1175.1	1177.2
7.5°	1175.1	1174.9	1174.7	1174.5	1174.3	1173.3	1171.4	1169.5	1167.7	1165.8	1167.6
10°	1165.8	1165.8	1165.8	1165.8	1165.8	1164.8	1162.7	1160.6	1158.6	1156.5	1158.3
12.5°	1152.8	1153.0	1153.2	1153.4	1153.7	1152.9	1151.2	1149.6	1148.0	1146.2	1147.7
15°	1132.1	1132.4	1132.6	1132.9	1133.2	1132.4	1130.6	1128.8	1127.0	1125.2	1126.7
17.5°	1105.1	1105.6	1106.1	1106.6	1107.2	1106.6	1104.7	1102.9	1101.1	1099.3	1100.5
20°	1085.6	1086.2	1086.7	1087.2	1087.7	1087.0	1085.2	1083.4	1081.6	1079.8	1080.6
22.5°	1063.2	1064.2	1065.1	1066.1	1067.0	1066.4	1064.5	1062.5	1060.4	1058.4	1059.4
25°	1028.6	1029.4	1030.2	1031.0	1031.7	1031.4	1029.8	1028.3	1026.7	1025.2	1026.2
27.5°	990.1	991.2	992.3	993.5	994.6	994.3	992.6	990.8	989.0	987.3	988.0
30°	961.2	962.8	964.3	965.9	967.4	967.4	965.9	964.3	962.8	961.2	961.7
32.5°	935.2	936.5	937.9	939.3	940.6	940.6	939.5	938.4	937.3	936.2	936.7
35°	890.4	892.2	894.0	895.8	897.6	898.1	897.3	896.6	895.8	895.0	895.8
37.5°	845.5	847.1	848.8	850.4	852.0	852.8	852.6	852.3	852.0	851.8	852.8
40°	814.8	816.8	818.9	821.0	823.0	824.0	823.7	823.5	823.2	822.9	824.0
42.5°	781.3	784.0	786.7	789.4	792.0	793.7	794.3	794.8	795.4	796.0	797.2
45°	733.4	736.2	739.1	741.9	744.8	746.8	748.1	749.4	750.7	752.0	753.8
47.5°	684.4	687.0	689.7	692.2	694.9	697.3	699.6	701.8	704.0	706.2	708.9
50°	650.9	653.8	656.6	659.4	662.3	665.1	668.0	670.8	673.6	676.5	679.3
52.5°	615.5	619.1	622.5	625.9	629.4	632.8	636.4	639.8	643.3	646.7	649.8
55°	563.7	567.8	572.0	576.1	580.2	584.4	588.5	592.6	596.8	600.9	603.7
57.5°	510.7	515.7	520.6	525.6	530.5	535.5	540.2	544.9	549.7	554.4	557.7
60°	475.4	480.5	485.7	490.9	496.0	501.2	506.4	511.5	516.7	521.9	525.7
62.5°	441.0	446.2	451.3	456.5	461.7	467.0	472.6	478.2	483.8	489.3	493.6
65°	388.2	394.2	400.1	406.0	412.0	418.0	424.2	430.4	436.6	442.8	446.7
67.5°	338.5	344.2	349.9	355.7	361.4	367.4	373.8	380.0	386.3	392.6	397.4
70°	302.2	308.2	314.1	320.0	326.0	332.3	339.0	345.7	352.4	359.1	364.0
72.5°	266.9	273.0	279.1	285.3	291.4	298.2	305.6	312.9	320.2	327.5	332.9
75°	213.9	220.6	227.3	234.0	240.7	248.2	256.5	264.8	273.0	281.3	286.5
77.5°	163.0	170.7	178.5	186.2	194.0	201.8	209.7	217.7	225.7	233.6	239.3
80°	131.3	139.1	146.8	154.5	162.3	170.6	179.3	188.1	196.9	205.7	211.4
82.5°	102.5	110.6	118.8	127.0	135.2	143.7	152.7	161.7	170.7	179.7	185.2
85°	63.9	72.4	80.9	89.5	98.0	106.8	115.8	124.8	133.9	142.9	148.6
87.5°	36.4	44.9	53.4	61.9	70.4	79.1	88.2	97.1	106.2	115.1	121.2
90°	19.3	28.8	38.2	47.7	57.1	66.7	76.6	86.4	96.3	106.1	112.8
92.5°	27.1	33.9	40.7	47.5	54.3	62.7	72.6	82.6	92.5	102.4	108.8
95°	53.5	59.8	66.0	72.3	78.5	83.3	86.4	89.5	92.6	95.7	102.0
97.5°	93.8	100.7	107.5	114.4	121.2	123.3	120.5	117.7	114.9	112.2	113.4
100°	125.3	131.1	137.0	142.8	148.7	156.1	165.0	173.8	182.7	191.6	174.7
102.5°	157.1	162.7	168.3	173.9	179.5	186.5	194.9	203.3	211.7	220.2	221.2
105°	208.4	213.2	217.9	222.7	227.4	233.6	241.3	249.1	256.8	264.6	269.8
107.5°	261.7	265.2	268.7	272.2	275.8	281.4	289.1	296.9	304.6	312.4	317.5
110°	296.4	299.5	302.6	305.7	308.8	314.0	321.6	329.1	336.7	344.1	348.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	329.8	332.6	335.4	338.2	341.0	346.1	353.3	360.5	367.7	374.9	379.0
115°	378.7	381.3	383.7	386.3	388.9	393.6	400.5	407.3	414.2	421.0	425.1
117.5°	429.4	430.5	431.6	432.8	433.9	438.0	445.0	451.9	458.8	465.7	469.3
120°	461.7	462.3	462.9	463.6	464.2	467.7	474.1	480.4	486.8	493.3	497.3
122.5°	489.3	490.3	491.1	492.1	493.0	496.5	502.4	508.3	514.3	520.2	524.1
125°	533.2	534.0	534.8	535.6	536.4	539.3	544.5	549.7	554.8	560.0	563.5
127.5°	574.2	574.7	575.1	575.7	576.2	578.5	582.6	586.8	590.9	595.0	598.6
130°	600.0	600.5	601.1	601.5	602.0	604.2	608.0	611.7	615.4	619.2	622.4
132.5°	625.0	625.8	626.6	627.4	628.3	629.9	632.3	634.8	637.3	639.7	643.3
135°	661.5	662.2	662.8	663.5	664.1	665.1	666.7	668.1	669.7	671.2	674.2
137.5°	695.1	695.7	696.2	696.8	697.4	698.0	698.6	699.2	699.8	700.4	703.5
140°	716.3	716.5	716.9	717.1	717.5	717.6	717.7	717.9	718.0	718.1	721.3
142.5°	736.2	736.2	736.2	736.1	736.1	736.2	736.4	736.7	737.0	737.3	739.7
145°	765.4	765.4	765.5	765.5	765.6	765.6	765.6	765.6	765.6	765.6	767.1
147.5°	789.8	789.8	789.7	789.6	789.6	789.6	789.8	790.0	790.2	790.4	791.0
150°	806.0	805.7	805.4	805.1	804.8	804.8	805.1	805.4	805.7	806.0	806.3
152.5°	821.7	821.0	820.3	819.7	819.0	818.8	819.1	819.4	819.7	820.0	820.3
155°	841.7	840.8	839.9	839.0	838.1	837.8	838.1	838.4	838.7	839.0	839.4
157.5°	857.1	856.6	856.1	855.6	855.0	854.7	854.8	854.8	854.8	854.9	855.3
160°	868.0	867.0	866.2	865.2	864.4	864.0	864.1	864.3	864.4	864.5	865.1
162.5°	876.6	875.6	874.8	873.8	873.0	872.6	872.7	872.9	873.1	873.2	874.0
165°	888.1	887.3	886.3	885.5	884.5	884.2	884.3	884.5	884.6	884.8	885.7
167.5°	896.7	895.9	894.9	894.0	893.0	892.7	892.8	892.9	893.1	893.3	894.3
170°	901.6	900.5	899.5	898.5	897.4	897.0	897.1	897.2	897.4	897.6	898.8
172.5°	904.8	903.8	902.8	901.7	900.6	900.3	900.5	900.8	901.0	901.3	902.4
175°	908.4	907.4	906.5	905.7	904.7	904.4	904.5	904.7	904.8	905.0	906.2
177.5°	910.0	909.2	908.5	907.8	907.1	906.8	906.9	907.0	907.1	907.2	908.1
180°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6
2.5°	1182.8	1184.3	1185.8	1186.4	1186.2	1185.9	1185.8	1185.6
5°	1179.2	1181.3	1183.4	1184.3	1184.0	1183.8	1183.5	1183.3
7.5°	1169.4	1171.2	1173.0	1173.8	1173.5	1173.3	1173.0	1172.8
10°	1160.1	1161.9	1163.7	1164.5	1164.2	1164.0	1163.7	1163.5
12.5°	1149.1	1150.5	1151.8	1152.2	1151.6	1150.9	1150.2	1149.5
15°	1128.3	1129.8	1131.4	1131.6	1130.6	1129.5	1128.5	1127.5
17.5°	1101.7	1102.9	1104.1	1104.3	1103.7	1103.1	1102.5	1101.9
20°	1081.3	1082.1	1082.9	1083.3	1083.3	1083.3	1083.3	1083.3
22.5°	1060.4	1061.4	1062.3	1062.5	1061.9	1061.3	1060.7	1060.1
25°	1027.3	1028.3	1029.3	1029.2	1027.9	1026.6	1025.3	1024.0
27.5°	988.7	989.5	990.2	990.3	989.8	989.4	988.9	988.4
30°	962.3	962.8	963.3	963.5	963.2	962.9	962.7	962.4
32.5°	937.2	937.7	938.2	938.3	938.1	937.8	937.5	937.3
35°	896.6	897.3	898.1	898.5	898.5	898.5	898.5	898.5
37.5°	853.9	854.9	855.9	856.4	856.3	856.2	856.0	855.9
40°	825.0	826.0	827.1	827.9	828.4	828.9	829.4	829.9
42.5°	798.4	799.7	800.9	801.6	801.7	801.8	801.9	802.0
45°	755.6	757.4	759.2	760.3	760.5	760.8	761.0	761.3
47.5°	711.5	714.1	716.8	718.3	718.9	719.5	720.1	720.7
50°	682.2	685.0	687.9	689.7	690.4	691.2	692.0	692.8
52.5°	652.8	655.8	658.9	660.7	661.2	661.9	662.5	663.0
55°	606.6	609.4	612.3	614.2	615.3	616.3	617.3	618.4
57.5°	560.9	564.2	567.5	569.5	570.2	571.0	571.8	572.6
60°	529.6	533.5	537.4	539.7	540.4	541.2	542.0	542.8
62.5°	497.9	502.2	506.5	509.1	510.1	511.1	512.0	513.1
65°	450.6	454.4	458.3	460.8	461.8	462.9	463.9	464.9
67.5°	402.0	406.7	411.5	414.5	415.8	417.2	418.4	419.8
70°	368.9	373.8	378.8	382.0	383.6	385.1	386.7	388.2
72.5°	338.2	343.5	348.8	352.1	353.2	354.3	355.4	356.6
75°	291.6	296.8	302.0	305.1	306.4	307.7	309.0	310.3
77.5°	245.0	250.6	256.3	259.7	260.7	261.7	262.8	263.8
80°	217.1	222.7	228.4	231.8	232.8	233.8	234.9	235.9
82.5°	190.6	196.1	201.6	205.3	207.2	209.0	210.9	212.7
85°	154.3	160.0	165.7	169.5	171.6	173.7	175.7	177.8
87.5°	127.3	133.4	139.5	143.5	145.4	147.3	149.2	151.1
90°	119.4	126.1	132.9	137.3	139.6	141.8	144.0	146.4
92.5°	115.3	121.8	128.3	132.5	134.6	136.6	138.6	140.6
95°	108.5	114.9	121.3	125.4	127.3	129.1	130.9	132.7
97.5°	114.6	115.8	117.0	118.5	120.2	122.0	123.7	125.4
100°	157.8	140.9	124.1	116.1	117.1	118.0	119.0	119.9
102.5°	222.1	223.2	224.1	220.3	211.7	203.1	194.4	185.8
105°	274.9	280.1	285.2	288.7	290.3	292.0	293.6	295.3
107.5°	322.6	327.8	332.9	336.0	337.2	338.4	339.5	340.7
110°	353.1	357.6	362.0	365.2	367.1	369.1	371.1	373.1



TEST NUMBER: P333271-935

CATALOG NUMBER: S125DIP-S1090D810U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	383.1	387.3	391.4	394.3	395.9	397.5	399.1	400.7
115°	429.1	433.2	437.2	439.6	440.2	440.9	441.6	442.2
117.5°	472.9	476.6	480.2	482.7	484.1	485.3	486.7	488.1
120°	501.4	505.5	509.6	512.0	512.8	513.7	514.4	515.2
122.5°	528.0	531.8	535.7	538.0	538.7	539.4	540.1	540.8
125°	567.1	570.6	574.1	576.4	577.2	578.0	578.9	579.7
127.5°	602.1	605.5	609.1	611.0	611.4	611.7	612.2	612.5
130°	625.5	628.7	631.9	633.8	634.3	634.8	635.3	635.9
132.5°	646.8	650.3	653.8	655.7	656.1	656.4	656.8	657.1
135°	677.3	680.4	683.5	685.2	685.5	686.0	686.3	686.7
137.5°	706.6	709.7	712.8	714.5	714.8	715.1	715.3	715.6
140°	724.4	727.5	730.6	732.3	732.5	732.5	732.7	732.8
142.5°	742.2	744.7	747.2	748.5	748.6	748.7	748.9	749.1
145°	768.4	769.9	771.4	772.1	772.3	772.4	772.6	772.7
147.5°	791.5	792.1	792.7	792.7	792.1	791.5	790.9	790.3
150°	806.6	806.9	807.2	806.8	805.9	804.9	804.1	803.1
152.5°	820.6	820.9	821.2	820.8	819.8	818.8	817.8	816.7
155°	839.9	840.3	840.8	840.4	839.2	838.0	836.8	835.6
157.5°	855.8	856.4	856.8	856.4	855.2	854.0	852.8	851.6
160°	865.7	866.3	866.9	866.7	865.5	864.3	863.1	861.9
162.5°	874.9	875.7	876.5	876.3	874.9	873.7	872.4	871.1
165°	886.6	887.4	888.4	888.2	887.0	885.8	884.6	883.4
167.5°	895.4	896.5	897.6	897.4	896.0	894.8	893.4	892.1
170°	899.9	901.1	902.3	902.2	901.0	899.6	898.2	896.9
172.5°	903.4	904.6	905.7	905.5	904.1	902.8	901.5	900.1
175°	907.3	908.5	909.7	909.6	908.4	907.0	905.7	904.3
177.5°	909.0	909.7	910.6	910.6	909.6	908.6	907.7	906.7
180°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4

(END OF REPORT)