

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: P333272-935

Luminaire Tested: **S125DIP-S1090D810U935-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333272-935
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-S1090D810U935-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6088.1 lumens
Efficiency: N/A
Efficacy: 111.9 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

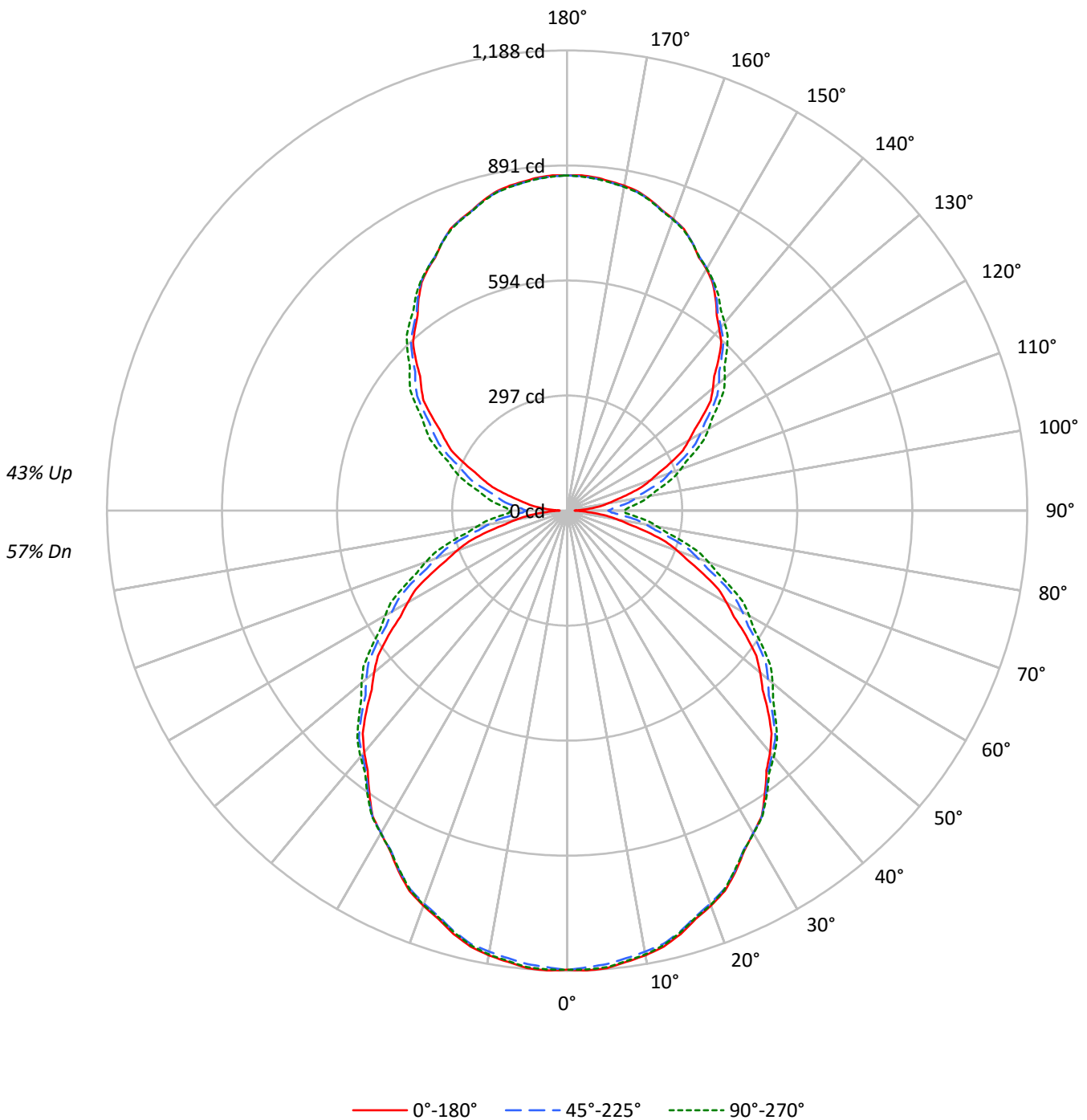
Input Watts (W): 54.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57
1	98	94	89	86	91	87	84	80	75	72	70	64	62	60	54	52	51	46
2	89	81	75	69	83	76	70	65	65	61	57	56	52	50	47	44	42	38
3	81	71	63	57	75	66	60	54	57	52	48	49	45	42	41	38	36	32
4	74	63	55	48	69	59	51	46	51	45	40	43	39	35	37	33	30	27
5	68	56	48	41	63	52	45	39	45	39	35	39	34	31	33	29	26	23
6	63	50	42	36	58	47	39	34	41	35	30	35	30	27	30	26	23	20
7	58	45	37	31	54	42	35	30	37	31	27	32	27	24	27	23	21	18
8	54	41	33	28	50	39	31	26	34	28	24	29	24	21	25	21	18	16
9	50	38	30	25	47	35	28	23	31	25	21	27	22	19	23	19	17	14
10	47	34	27	22	44	32	26	21	29	23	19	25	20	17	21	18	15	13

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	1.8
10°-20°	318.2	5.2
20°-30°	473.3	7.8
30°-40°	560.6	9.2
40°-50°	579.6	9.5
50°-60°	533.9	8.8
60°-70°	431.6	7.1
70°-80°	289.0	4.7
80°-90°	151.8	2.5
90°-100°	142.1	2.3
100°-110°	233.1	3.8
110°-120°	331.4	5.4
120°-130°	405.0	6.7
130°-140°	437.7	7.2
140°-150°	421.0	6.9
150°-160°	351.8	5.8
160°-170°	233.9	3.8
170°-180°	81.8	1.3
0°-30°	903.6	14.8
0°-40°	1464.2	24.1
0°-60°	2577.8	42.3
0°-90°	3450.2	56.7
90°-120°	706.6	11.6
90°-150°	1970.3	32.4
90°-180°	2638.0	43.3
0°-180°	6088.1	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	15
95°	59	91	137	166	176	59
105°	164	187	225	251	262	175
115°	297	309	340	359	366	294
125°	428	432	455	472	477	383
135°	553	556	565	579	583	426
145°	668	670	672	678	680	417
155°	763	763	764	766	763	351
165°	830	829	830	832	828	234
175°	863	861	860	864	860	82
180°	865	865	865	865	865	



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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°	33.1	41.5	50.0	58.5	67.0	76.4	86.6	96.9	107.2	117.4	124.2
95°	58.9	65.9	72.9	79.9	87.0	95.6	105.8	116.1	126.4	136.7	143.4
97.5°	86.4	92.6	98.8	105.0	111.1	119.4	130.0	140.5	151.0	161.6	168.0
100°	107.0	112.4	117.9	123.3	128.7	136.6	146.8	157.0	167.2	177.4	184.2
102.5°	129.2	134.9	140.5	146.1	151.7	159.0	168.1	177.1	186.1	195.2	201.9
105°	163.9	168.8	173.7	178.6	183.5	190.3	198.9	207.6	216.2	224.8	230.9
107.5°	202.4	206.7	210.9	215.2	219.5	225.7	233.8	241.9	250.0	258.2	263.7
110°	228.9	232.8	236.7	240.5	244.4	250.1	257.8	265.4	273.2	280.9	286.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	257.0	259.8	262.7	265.6	268.5	273.7	281.3	288.9	296.4	304.0	308.9
115°	297.1	299.5	302.0	304.4	306.8	311.5	318.5	325.5	332.5	339.6	344.1
117.5°	337.4	338.9	340.4	341.8	343.3	347.3	354.0	360.6	367.2	373.8	378.3
120°	363.3	364.8	366.4	367.9	369.4	373.2	379.3	385.4	391.5	397.6	402.0
122.5°	390.4	391.0	391.7	392.3	392.9	396.3	402.4	408.5	414.7	420.8	424.8
125°	428.1	428.8	429.4	430.1	430.7	433.7	439.0	444.3	449.6	455.0	458.7
127.5°	467.4	467.6	467.9	468.1	468.4	470.7	475.1	479.5	484.0	488.4	492.1
130°	491.6	492.1	492.6	493.1	493.5	495.8	499.6	503.6	507.5	511.4	514.9
132.5°	514.9	516.1	517.3	518.4	519.6	521.6	524.3	527.0	529.8	532.4	536.0
135°	553.0	553.7	554.3	555.0	555.6	556.9	558.9	560.9	562.7	564.7	568.1
137.5°	588.9	589.5	590.2	590.9	591.6	592.5	593.7	594.9	596.1	597.3	600.5
140°	611.1	611.9	612.6	613.4	614.2	614.8	615.5	616.3	617.0	617.7	620.9
142.5°	634.3	634.7	635.2	635.6	636.0	636.5	637.1	637.7	638.3	638.9	641.6
145°	668.4	668.7	669.1	669.4	669.7	670.1	670.5	671.0	671.5	671.9	673.2
147.5°	698.7	699.0	699.4	699.7	700.0	700.3	700.8	701.1	701.5	701.8	702.6
150°	719.7	719.5	719.5	719.3	719.1	719.4	720.0	720.6	721.2	721.8	721.8
152.5°	736.9	737.2	737.4	737.6	737.8	738.0	738.2	738.5	738.7	739.0	739.3
155°	763.4	763.4	763.4	763.4	763.4	763.5	763.7	763.9	764.0	764.1	764.7
157.5°	787.2	786.9	786.5	786.2	785.8	785.7	785.9	786.1	786.2	786.4	787.0
160°	801.2	800.7	800.3	799.9	799.4	799.3	799.4	799.5	799.7	799.9	800.5
162.5°	813.6	813.2	812.9	812.6	812.3	812.1	812.1	812.2	812.2	812.3	813.0
165°	830.2	829.8	829.6	829.2	829.0	828.9	829.0	829.1	829.3	829.5	830.1
167.5°	844.1	843.5	842.9	842.3	841.7	841.5	841.5	841.5	841.5	841.5	842.3
170°	851.7	851.1	850.5	849.9	849.3	848.9	848.9	848.9	848.9	848.9	849.9
172.5°	857.0	856.4	855.8	855.2	854.6	854.4	854.4	854.4	854.4	854.4	855.2
175°	863.2	862.5	861.9	861.3	860.7	860.4	860.4	860.4	860.4	860.4	861.3
177.5°	866.3	865.7	865.3	864.8	864.3	864.0	863.9	863.8	863.7	863.5	864.3
180°	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1



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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°	130.9	137.6	144.3	148.8	150.9	153.0	155.2	157.3
95°	150.2	156.9	163.6	168.1	170.1	172.2	174.4	176.4
97.5°	174.4	180.8	187.3	191.4	193.3	195.3	197.2	199.1
100°	191.0	197.7	204.5	208.8	210.6	212.5	214.3	216.2
102.5°	208.6	215.2	222.0	226.3	228.3	230.2	232.2	234.2
105°	236.9	243.1	249.1	253.2	255.5	257.8	260.0	262.3
107.5°	269.3	274.8	280.4	284.0	285.6	287.1	288.7	290.2
110°	291.5	296.9	302.3	305.7	307.5	309.1	310.7	312.4



TEST NUMBER: P333272-935

CATALOG NUMBER: S125DIP-S1090D810U935-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	313.8	318.8	323.7	326.9	328.5	330.0	331.6	333.0
115°	348.5	353.0	357.6	360.5	361.9	363.3	364.7	366.1
117.5°	382.9	387.4	391.8	394.7	395.9	397.0	398.2	399.3
120°	406.4	410.8	415.2	417.8	418.8	419.7	420.7	421.6
122.5°	429.0	433.0	437.0	439.6	440.7	441.8	442.8	443.9
125°	462.6	466.4	470.3	472.8	473.9	475.0	476.1	477.3
127.5°	495.7	499.4	503.1	505.5	506.7	507.9	509.1	510.3
130°	518.3	521.9	525.3	527.5	528.5	529.5	530.5	531.5
132.5°	539.4	542.9	546.4	548.5	549.1	549.7	550.4	551.0
135°	571.4	574.8	578.2	580.2	580.9	581.6	582.3	583.0
137.5°	603.7	607.0	610.2	612.0	612.3	612.5	612.9	613.1
140°	624.0	627.1	630.3	632.0	632.2	632.5	632.8	633.1
142.5°	644.2	646.8	649.5	650.8	651.2	651.4	651.7	652.0
145°	674.5	675.8	677.1	678.0	678.6	679.2	679.8	680.4
147.5°	703.4	704.1	704.9	705.0	704.5	703.9	703.4	702.8
150°	721.8	721.8	721.8	721.7	721.7	721.6	721.6	721.5
152.5°	739.7	740.0	740.4	740.4	739.9	739.3	738.9	738.4
155°	765.3	765.9	766.5	766.5	765.7	765.0	764.2	763.4
157.5°	787.6	788.2	788.8	788.6	787.6	786.6	785.6	784.6
160°	801.1	801.6	802.2	802.2	801.4	800.6	799.9	799.2
162.5°	813.6	814.4	815.1	815.0	814.2	813.3	812.4	811.6
165°	830.7	831.3	831.8	831.7	830.8	829.9	829.0	828.1
167.5°	843.3	844.1	845.1	845.0	844.1	843.2	842.2	841.3
170°	850.8	851.7	852.6	852.5	851.4	850.4	849.4	848.3
172.5°	856.2	857.0	858.0	858.0	857.0	856.1	855.1	854.2
175°	862.2	863.2	864.0	863.9	862.9	861.9	860.8	859.8
177.5°	865.0	865.6	866.4	866.3	865.5	864.7	863.8	863.0
180°	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1

(END OF REPORT)