

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: P333254-935

Luminaire Tested: **S125DIP-S1090D365U935-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333254-935
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-S1090D365U935-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4764.1 lumens
Efficiency: N/A
Efficacy: 109.5 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

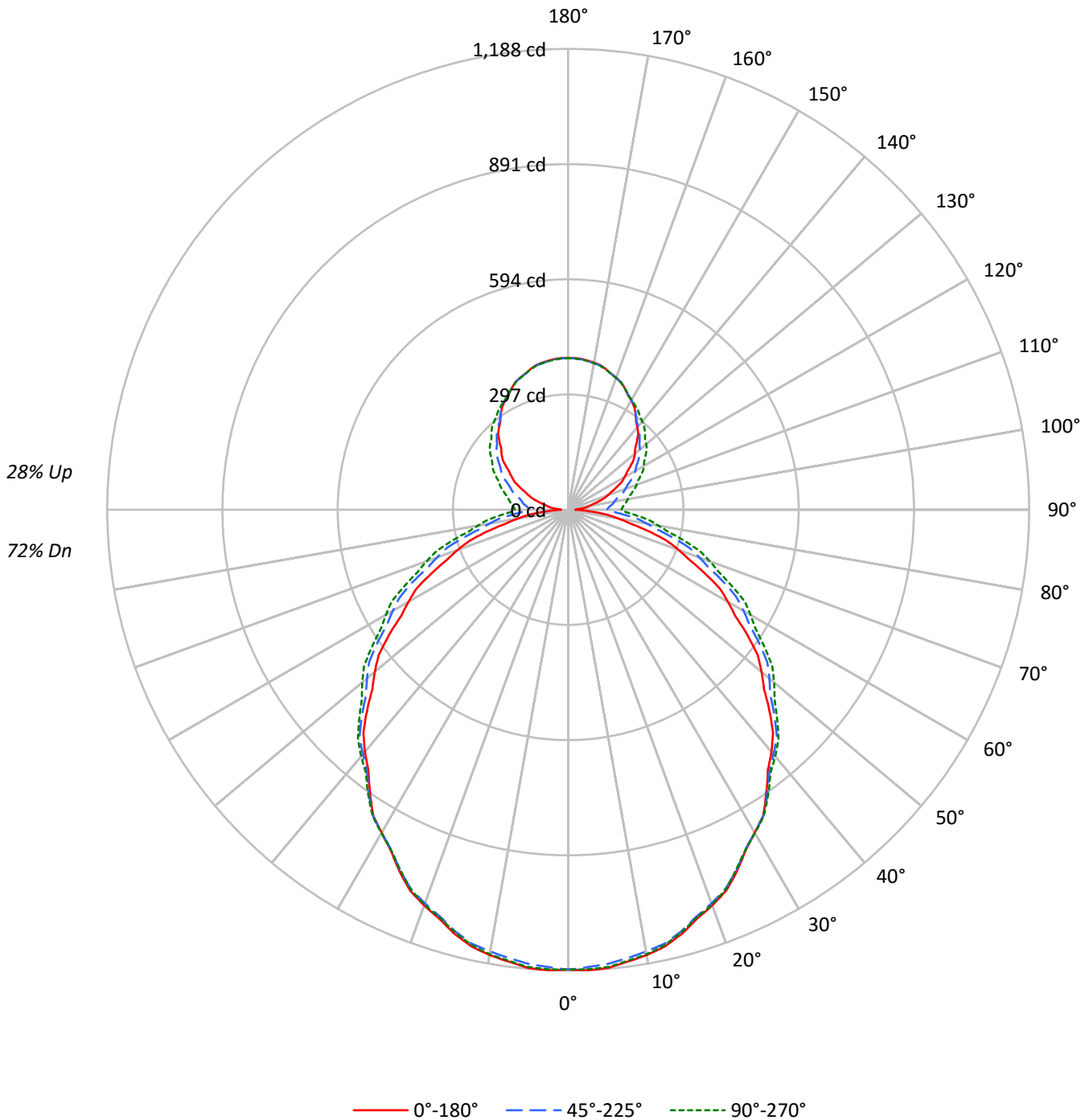
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	112	112	112	107	107	107	107	96	96	96	86	86	86	77	77	77	72
1	102	97	92	88	96	92	88	84	83	79	77	74	72	69	66	64	63	59
2	92	84	77	71	87	80	74	68	72	67	63	64	61	57	58	55	52	48
3	84	74	65	59	79	70	63	57	63	57	52	57	52	48	51	47	44	40
4	77	65	56	50	72	62	54	48	56	49	44	50	45	41	45	41	37	34
5	70	58	49	43	66	55	47	41	50	43	38	45	40	35	41	36	33	30
6	65	52	43	37	61	50	42	36	45	38	33	41	35	31	37	32	29	26
7	60	47	38	32	57	45	37	31	41	34	29	37	31	27	34	29	25	23
8	56	43	34	29	53	41	33	28	37	31	26	34	28	24	31	26	23	20
9	52	39	31	26	49	37	30	25	34	28	23	31	26	22	28	24	20	18
10	49	36	28	23	46	34	27	23	32	25	21	29	24	20	26	22	19	17

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	2.4
10°-20°	318.2	6.7
20°-30°	473.3	9.9
30°-40°	560.6	11.8
40°-50°	579.6	12.2
50°-60°	533.9	11.2
60°-70°	431.6	9.1
70°-80°	289.0	6.1
80°-90°	150.7	3.2
90°-100°	110.3	2.3
100°-110°	139.4	2.9
110°-120°	172.6	3.6
120°-130°	196.0	4.1
130°-140°	203.5	4.3
140°-150°	191.4	4.0
150°-160°	159.0	3.3
160°-170°	105.7	2.2
170°-180°	37.0	0.8
0°-30°	903.6	19.0
0°-40°	1464.2	30.7
0°-60°	2577.8	54.1
0°-90°	3449.2	72.4
90°-120°	422.2	8.9
90°-150°	1013.1	21.3
90°-180°	1315.0	27.6
0°-180°	4764.1	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	59	100	127	138	13
95°	35	66	108	135	145	33
105°	80	101	137	161	171	85
115°	138	149	178	198	206	137
125°	196	198	220	238	244	175
135°	251	252	260	275	280	194
145°	303	303	304	309	313	189
155°	345	345	345	346	345	159
165°	375	375	375	376	374	106
175°	390	389	389	390	389	37
180°	391	391	391	391	391	



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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°	36.3	44.7	53.0	61.5	69.8	78.4	87.3	96.2	105.0	113.9	119.9
90°	18.9	27.7	36.5	45.3	54.2	63.2	72.4	81.7	90.9	100.2	106.4
92.5°	24.1	32.1	40.1	48.2	56.2	65.0	74.6	84.1	93.7	103.2	109.4
95°	34.9	41.8	48.6	55.4	62.3	70.4	79.9	89.4	98.8	108.3	114.4
97.5°	46.6	52.7	58.8	64.8	70.9	78.7	88.2	97.6	106.9	116.3	122.2
100°	55.4	60.8	66.2	71.6	77.1	84.4	93.5	102.6	111.8	121.0	127.0
102.5°	64.9	70.2	75.5	80.8	86.0	93.0	101.4	109.9	118.5	127.0	132.9
105°	79.8	84.3	88.8	93.2	97.7	104.0	112.2	120.4	128.5	136.6	142.2
107.5°	96.4	100.3	104.2	108.1	111.8	117.7	125.4	133.2	140.9	148.7	153.9
110°	108.0	111.4	114.9	118.3	121.7	127.2	134.6	142.0	149.5	156.9	162.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	120.6	123.3	126.0	128.5	131.2	136.2	143.4	150.8	158.1	165.3	170.1
115°	138.1	140.2	142.3	144.4	146.5	150.9	157.7	164.6	171.4	178.3	182.9
117.5°	155.8	157.0	158.3	159.6	160.9	164.9	171.3	177.8	184.3	190.7	195.2
120°	167.4	168.5	169.6	170.7	171.9	175.4	181.4	187.4	193.5	199.4	203.8
122.5°	179.2	179.6	180.1	180.6	181.1	184.3	190.2	196.0	202.0	207.9	212.1
125°	196.0	196.2	196.4	196.5	196.7	199.3	204.6	209.8	215.1	220.2	224.3
127.5°	213.2	213.1	213.1	213.1	213.0	215.2	219.5	223.9	228.2	232.5	236.2
130°	224.1	224.2	224.3	224.4	224.5	226.4	230.1	233.8	237.6	241.3	244.9
132.5°	234.1	234.6	235.1	235.7	236.2	237.8	240.6	243.3	246.1	248.8	252.4
135°	251.2	251.4	251.6	251.7	251.8	252.9	254.8	256.6	258.5	260.4	263.7
137.5°	267.3	267.5	267.7	267.9	268.1	268.7	269.7	270.7	271.7	272.8	276.0
140°	276.9	277.2	277.6	277.8	278.2	278.6	279.1	279.6	280.0	280.4	283.4
142.5°	287.3	287.4	287.5	287.6	287.7	287.8	288.2	288.4	288.8	289.0	291.6
145°	302.7	302.7	302.7	302.8	302.8	302.9	303.1	303.3	303.5	303.7	305.0
147.5°	315.8	316.0	316.1	316.2	316.4	316.6	316.8	316.9	317.0	317.2	317.8
150°	325.3	325.3	325.2	325.1	325.0	325.1	325.4	325.7	326.0	326.2	326.2
152.5°	333.1	333.2	333.3	333.4	333.5	333.6	333.7	333.8	333.9	334.0	334.2
155°	345.1	345.1	345.1	345.1	345.1	345.1	345.2	345.3	345.3	345.4	345.7
157.5°	355.8	355.7	355.5	355.3	355.2	355.2	355.2	355.3	355.3	355.4	355.7
160°	362.1	362.0	361.7	361.5	361.4	361.3	361.4	361.4	361.4	361.5	361.8
162.5°	367.7	367.6	367.5	367.3	367.1	367.0	367.0	367.1	367.1	367.1	367.5
165°	375.2	375.1	375.0	374.8	374.7	374.6	374.7	374.8	374.9	374.9	375.2
167.5°	381.5	381.3	381.0	380.7	380.5	380.3	380.3	380.3	380.3	380.3	380.7
170°	385.0	384.7	384.4	384.2	383.8	383.7	383.7	383.7	383.7	383.7	384.2
172.5°	387.4	387.1	386.8	386.6	386.3	386.2	386.2	386.2	386.2	386.2	386.6
175°	390.1	389.9	389.6	389.3	389.1	388.9	388.9	388.9	388.9	388.9	389.3
177.5°	391.5	391.3	391.1	390.9	390.6	390.5	390.5	390.5	390.4	390.3	390.6
180°	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1



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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°	126.0	132.0	138.0	141.9	143.8	145.6	147.5	149.3
90°	112.7	119.0	125.3	129.4	131.5	133.5	135.4	137.5
92.5°	115.6	121.8	128.0	132.1	134.1	136.0	137.9	139.9
95°	120.6	126.7	132.9	137.0	138.9	140.9	142.8	144.7
97.5°	128.1	134.0	139.8	143.7	145.5	147.3	149.2	151.0
100°	133.0	139.1	145.1	149.0	150.6	152.3	154.0	155.7
102.5°	138.7	144.6	150.5	154.3	156.0	157.7	159.5	161.3
105°	147.8	153.3	158.9	162.7	164.7	166.8	168.8	170.8
107.5°	159.3	164.6	170.0	173.4	175.0	176.6	178.1	179.8
110°	167.1	172.2	177.3	180.7	182.4	184.3	186.0	187.7



TEST NUMBER: P333254-935

CATALOG NUMBER: S125DIP-S1090D365U935-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	175.0	179.7	184.5	187.8	189.4	191.1	192.8	194.5
115°	187.4	192.1	196.7	199.7	201.1	202.7	204.1	205.6
117.5°	199.7	204.1	208.5	211.5	213.0	214.5	215.9	217.4
120°	208.2	212.6	217.0	219.8	221.1	222.4	223.7	225.0
122.5°	216.2	220.3	224.5	227.1	228.5	229.8	231.2	232.5
125°	228.3	232.3	236.3	238.8	240.1	241.3	242.5	243.7
127.5°	240.0	243.7	247.5	250.0	251.4	252.8	254.2	255.5
130°	248.5	252.0	255.5	257.9	259.1	260.2	261.4	262.5
132.5°	255.9	259.5	263.0	265.3	266.1	267.1	267.9	268.8
135°	267.1	270.4	273.8	276.0	277.0	278.0	279.1	280.1
137.5°	279.1	282.1	285.3	287.2	287.9	288.6	289.3	290.0
140°	286.5	289.4	292.4	294.2	294.9	295.6	296.3	297.0
142.5°	294.1	296.6	299.1	300.7	301.4	302.1	302.8	303.5
145°	306.3	307.5	308.8	310.0	310.7	311.6	312.5	313.2
147.5°	318.4	318.9	319.5	319.8	319.8	319.9	319.9	319.9
150°	326.2	326.2	326.2	326.3	326.4	326.5	326.7	326.7
152.5°	334.3	334.5	334.7	334.7	334.5	334.2	334.1	333.9
155°	345.9	346.2	346.5	346.5	346.1	345.8	345.4	345.1
157.5°	355.9	356.3	356.5	356.5	356.0	355.5	355.1	354.6
160°	362.1	362.3	362.6	362.6	362.2	361.9	361.5	361.2
162.5°	367.7	368.1	368.4	368.4	368.0	367.6	367.2	366.8
165°	375.5	375.7	376.0	375.9	375.5	375.1	374.7	374.3
167.5°	381.2	381.5	381.9	381.9	381.5	381.1	380.6	380.3
170°	384.5	385.0	385.4	385.3	384.9	384.4	383.9	383.4
172.5°	387.0	387.4	387.8	387.8	387.4	386.9	386.5	386.1
175°	389.7	390.1	390.5	390.5	390.0	389.5	389.1	388.6
177.5°	391.0	391.3	391.6	391.6	391.2	390.8	390.5	390.0
180°	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1

(END OF REPORT)