

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: P333255-935

Luminaire Tested: **S125DIP-S1090D365U935-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333255-935
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-S1090D365U935-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4804.7 lumens
Efficiency: N/A
Efficacy: 110.5 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

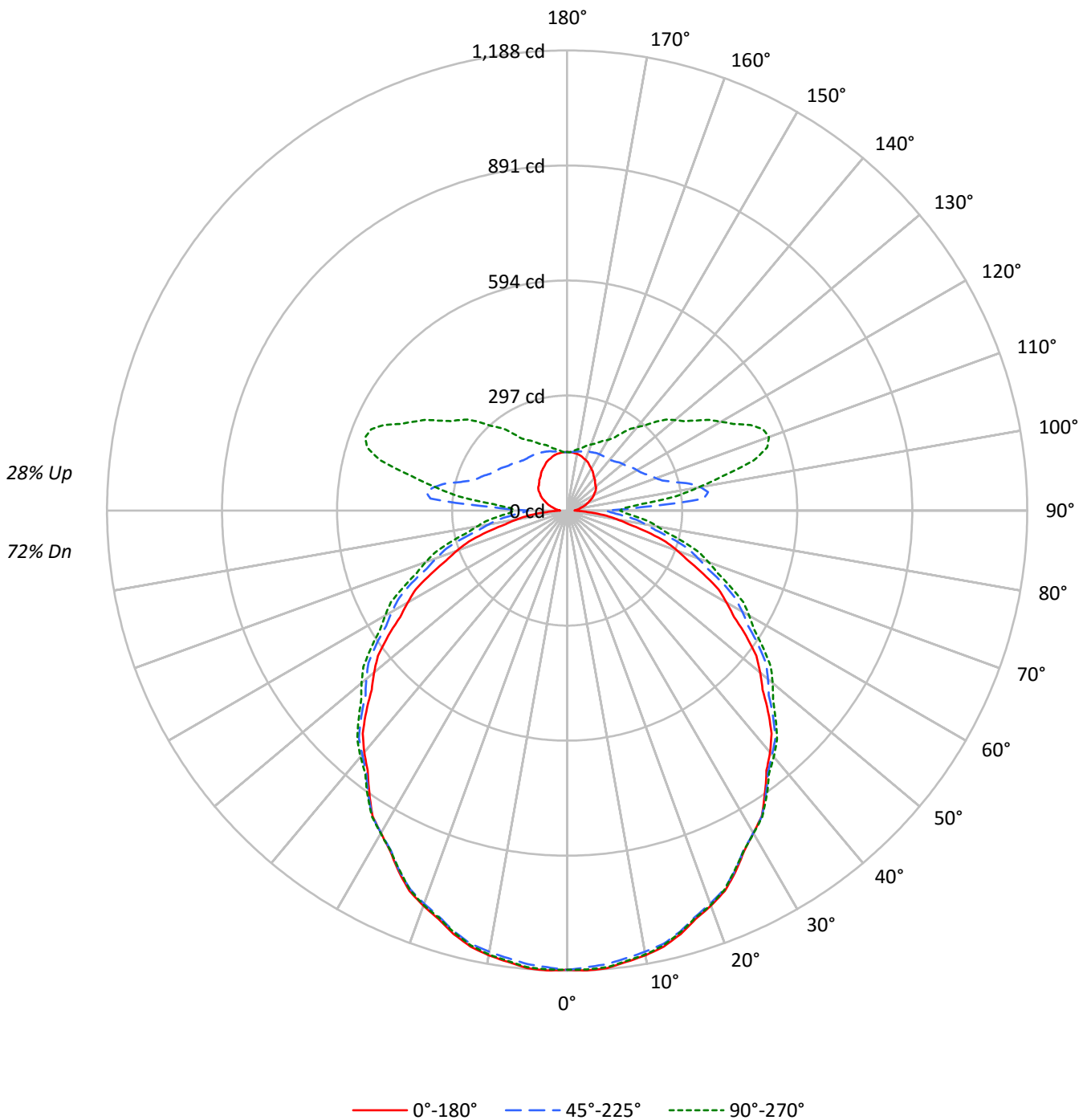
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	106	106	106	95	95	95		85	85	85		76	76	76	72
1	102	97	92	88	96	92	88	84	82	79	76		74	71	69		66	64	62	58
2	92	84	77	71	87	80	73	68	71	67	62		64	60	57		57	54	52	48
3	84	73	65	59	79	70	62	57	63	57	52		56	52	48		50	47	43	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	39	35		40	36	32	29
6	65	52	43	37	61	49	41	36	45	38	33		41	35	31		36	32	28	26
7	60	47	38	32	57	45	37	31	41	34	29		37	31	27		33	29	25	23
8	56	43	34	29	53	41	33	28	37	31	26		34	28	24		31	26	22	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	22	31	25	21		29	23	20		26	22	18	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	2.3
10°-20°	318.2	6.6
20°-30°	473.3	9.9
30°-40°	560.6	11.7
40°-50°	579.6	12.1
50°-60°	533.9	11.1
60°-70°	431.6	9.0
70°-80°	289.0	6.0
80°-90°	150.7	3.1
90°-100°	193.5	4.0
100°-110°	297.2	6.2
110°-120°	262.3	5.5
120°-130°	202.5	4.2
130°-140°	153.9	3.2
140°-150°	110.4	2.3
150°-160°	76.3	1.6
160°-170°	44.9	0.9
170°-180°	14.6	0.3
0°-30°	903.6	18.8
0°-40°	1464.2	30.5
0°-60°	2577.8	53.7
0°-90°	3449.2	71.8
90°-120°	753.0	15.7
90°-150°	1219.7	25.4
90°-180°	1356.0	28.2
0°-180°	4804.7	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	137	13
95°	25	76	354	232	190	23
105°	45	78	285	521	498	47
115°	68	90	222	447	522	67
125°	90	105	197	348	405	80
135°	102	122	178	278	324	79
145°	117	133	169	216	242	73
155°	133	143	165	186	194	61
165°	145	149	158	168	170	41
175°	151	151	152	154	153	14
180°	151	151	151	151	151	



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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	61.4	69.8	78.4	87.3	96.2	105.0	113.9	119.9
90°	18.9	27.5	36.3	45.2	54.1	63.2	72.3	81.7	90.7	100.2	106.4
92.5°	20.5	28.8	39.1	50.5	63.4	80.6	106.2	143.0	182.3	189.7	176.8
95°	25.1	32.2	41.3	51.4	64.8	86.3	127.6	203.3	296.1	354.5	354.4
97.5°	30.4	36.8	44.5	53.9	66.0	83.1	113.1	170.7	267.0	367.0	418.3
100°	34.1	40.1	46.8	55.5	66.7	82.7	108.7	156.4	241.4	349.1	430.7
102.5°	38.2	43.7	49.6	58.2	68.5	83.9	107.7	149.0	221.8	322.4	416.5
105°	44.9	49.0	54.7	61.8	70.8	85.2	106.4	141.2	199.8	284.6	377.0
107.5°	51.2	55.4	60.4	66.4	74.9	88.1	108.5	139.1	188.0	257.6	338.0
110°	55.9	59.6	64.0	69.7	77.4	90.5	110.2	138.4	182.5	243.9	315.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	61.5	64.6	68.0	73.3	80.3	92.7	111.8	138.5	179.0	234.4	297.1
115°	68.4	70.9	73.6	78.1	84.5	96.3	114.3	138.7	174.6	222.4	276.0
117.5°	74.6	76.7	78.9	82.7	89.1	100.3	117.3	139.7	171.4	213.8	261.1
120°	79.5	81.1	83.1	86.6	92.6	103.6	120.1	140.7	170.0	208.5	252.2
122.5°	83.6	84.6	86.0	89.1	95.1	105.8	122.2	141.8	168.2	203.6	243.9
125°	89.9	90.2	91.4	93.9	99.4	109.9	125.0	143.3	166.1	196.6	232.3
127.5°	93.8	94.4	96.1	99.3	105.2	115.1	129.0	145.3	164.9	190.5	221.2
130°	96.9	97.6	99.7	103.4	109.6	119.2	132.2	147.4	164.7	187.2	214.6
132.5°	98.4	99.5	102.4	106.8	113.4	122.6	134.8	148.5	164.0	183.5	207.8
135°	102.1	103.1	106.5	111.1	117.3	126.2	137.4	149.3	162.4	177.9	198.5
137.5°	106.9	107.6	110.8	115.5	121.5	130.4	139.7	150.2	161.9	174.1	191.0
140°	108.9	109.8	113.5	118.3	124.1	132.4	141.5	150.9	160.9	171.5	186.5
142.5°	112.3	112.8	116.0	120.6	126.0	133.6	142.0	150.7	160.0	169.9	183.0
145°	117.4	117.8	120.5	124.5	129.8	136.6	144.6	152.1	160.3	169.2	179.6
147.5°	121.6	121.9	124.6	128.5	133.3	139.4	146.4	153.3	160.7	168.4	176.8
150°	124.8	125.4	127.5	131.5	135.7	140.9	147.6	153.9	160.7	167.6	175.0
152.5°	128.2	128.5	130.4	133.9	137.9	142.6	148.8	154.5	160.4	166.7	173.2
155°	132.7	132.7	134.5	137.5	140.6	144.8	150.0	154.9	159.7	165.0	170.4
157.5°	136.7	136.6	138.1	140.7	143.4	146.6	151.0	155.2	158.9	163.1	167.7
160°	139.4	139.1	140.3	142.4	144.8	147.6	151.5	155.2	158.3	161.9	165.6
162.5°	141.5	141.3	142.5	144.4	146.3	148.5	152.1	155.0	157.5	160.4	163.6
165°	144.8	144.2	145.2	146.6	147.9	149.7	152.1	154.5	156.4	158.3	160.7
167.5°	147.1	146.7	147.3	148.1	149.0	150.2	152.1	153.9	154.7	156.1	157.8
170°	148.5	148.2	148.5	149.1	149.7	150.6	152.1	153.3	153.9	154.9	156.1
172.5°	149.5	149.0	149.2	149.8	150.2	150.6	151.9	152.9	153.0	153.4	154.4
175°	150.6	150.0	150.3	150.6	150.6	150.6	151.5	152.1	151.9	151.9	152.1
177.5°	151.2	150.7	150.7	150.9	150.7	150.7	151.2	151.4	150.9	150.9	151.2
180°	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9



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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	137.9	142.0	143.8	145.6	147.4	149.2
90°	112.7	118.9	125.2	129.7	131.5	133.3	135.3	137.2
92.5°	157.0	147.9	144.0	143.3	141.2	142.2	143.6	144.9
95°	315.0	274.4	242.7	220.8	201.0	193.7	193.1	190.0
97.5°	415.7	388.7	357.7	325.7	308.7	293.4	286.3	284.2
100°	459.5	450.0	424.1	396.0	376.5	356.1	346.5	343.1
102.5°	471.7	486.1	476.3	458.2	437.3	423.3	412.6	410.5
105°	455.2	502.0	520.6	520.8	512.8	504.6	500.3	498.5
107.5°	415.3	476.0	515.5	534.7	541.2	542.8	542.3	541.6
110°	385.8	448.5	496.3	525.6	541.1	548.6	552.6	554.4



TEST NUMBER: P333255-935

CATALOG NUMBER: S125DIP-S1090D365U935-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	361.7	421.3	469.3	503.1	525.0	536.7	543.8	547.8
115°	330.9	382.7	429.0	465.4	490.6	506.8	516.9	522.4
117.5°	308.7	353.7	394.0	427.5	453.0	469.8	480.0	484.2
120°	296.2	337.1	375.0	404.7	428.8	444.9	454.7	458.7
122.5°	285.4	323.5	357.5	385.4	407.1	422.0	431.8	435.5
125°	270.2	305.4	336.0	360.6	378.9	392.7	400.7	405.0
127.5°	254.5	287.3	315.8	339.0	355.9	368.5	376.3	379.1
130°	245.2	275.6	303.0	325.2	341.7	353.0	360.4	363.5
132.5°	235.4	264.1	289.3	310.6	326.9	338.1	344.7	347.9
135°	221.4	245.7	268.6	288.3	303.0	314.3	321.1	324.2
137.5°	209.9	230.0	249.2	266.0	279.0	289.1	295.2	298.3
140°	203.0	220.2	237.0	251.8	264.1	273.0	278.6	281.1
142.5°	197.2	211.7	226.2	239.0	249.6	257.4	262.7	265.0
145°	190.4	201.0	211.8	221.2	229.5	235.7	240.0	242.4
147.5°	184.7	192.8	200.4	207.1	213.3	217.9	220.3	221.4
150°	181.7	188.4	194.2	199.8	204.6	208.4	209.9	210.5
152.5°	179.3	185.2	190.5	194.8	198.6	201.6	202.9	203.3
155°	175.6	180.5	184.7	188.0	191.1	193.2	194.2	194.4
157.5°	171.9	175.9	179.3	181.8	184.3	186.0	186.8	186.8
160°	169.5	172.5	175.6	177.7	179.9	181.3	181.9	181.7
162.5°	166.8	169.6	172.2	174.1	175.7	176.9	177.1	177.0
165°	163.1	165.2	167.0	168.6	169.8	170.4	170.4	170.4
167.5°	159.5	161.0	162.4	163.5	164.1	164.6	164.4	164.3
170°	157.6	158.5	159.5	160.1	160.7	161.0	161.0	160.7
172.5°	155.4	156.4	157.0	157.4	157.5	158.1	157.6	157.2
175°	153.1	153.1	153.7	153.7	153.7	153.9	153.3	153.1
177.5°	151.4	151.6	151.6	151.6	151.4	151.6	150.9	150.9
180°	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9

(END OF REPORT)