

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: P333254-930

Luminaire Tested: **S125DIP-S1090D365U930-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333254-930
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-S1090D365U930-4F0-1E-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: 4511.2 lumens
Efficiency: N/A
Efficacy: 103.7 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

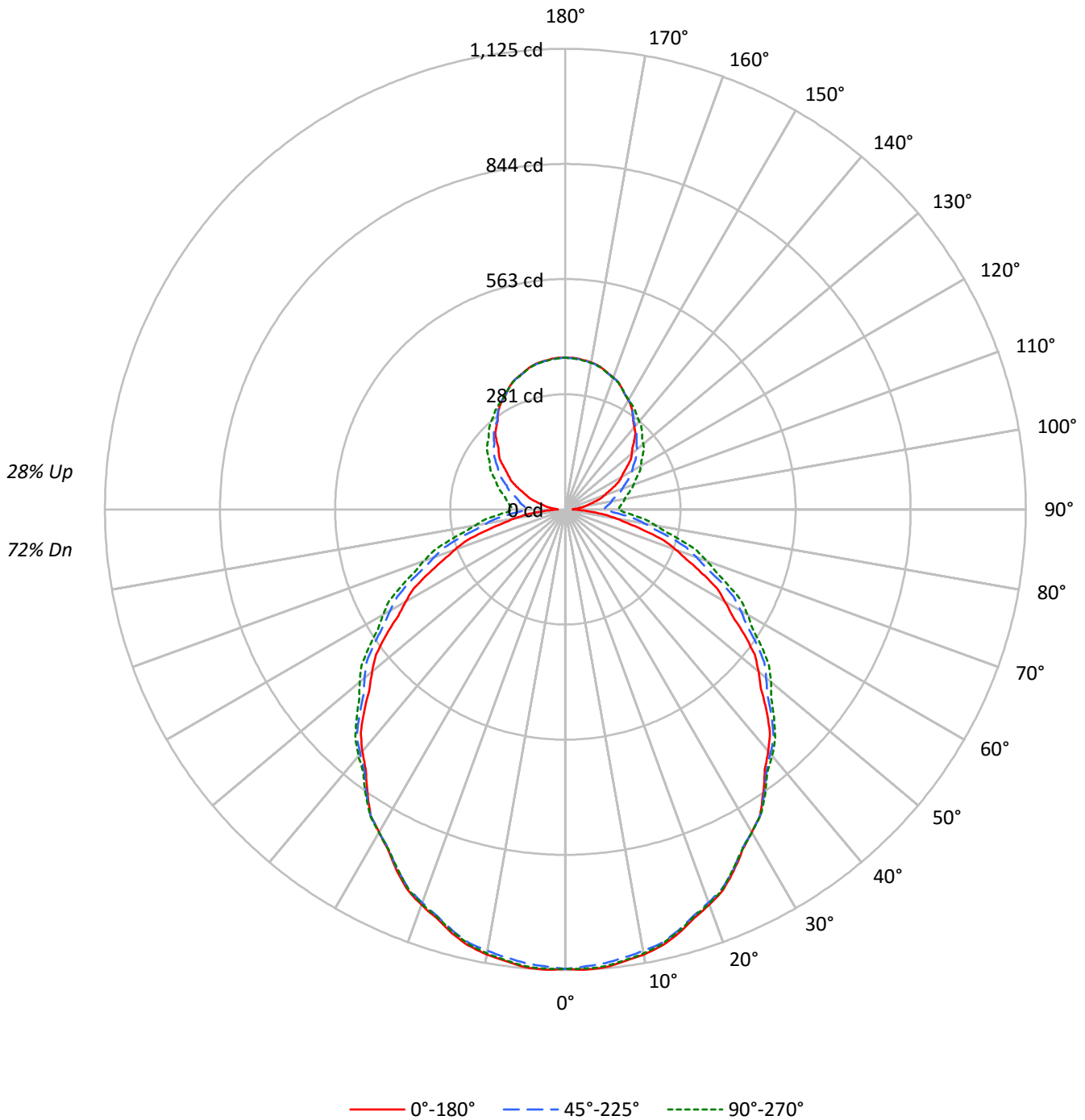
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	112	112	112	112	107	107	107	107	96	96	96	86	86	86	77	77	77	77	77	77	72	
1	102	97	92	88	96	92	88	84	83	79	77	74	72	69	66	64	63	66	64	63	59	
2	92	84	77	71	87	80	74	68	72	67	63	64	61	57	58	55	52	58	55	52	48	
3	84	74	65	59	79	70	63	57	63	57	52	57	52	48	51	47	44	51	47	44	40	
4	77	65	56	50	72	62	54	48	56	49	44	50	45	41	45	41	37	45	41	37	34	
5	70	58	49	43	66	55	47	41	50	43	38	45	40	35	41	36	33	41	36	33	30	
6	65	52	43	37	61	50	42	36	45	38	33	41	35	31	37	32	29	37	32	29	26	
7	60	47	38	32	57	45	37	31	41	34	29	37	31	27	34	29	25	34	29	25	23	
8	56	43	34	29	53	41	33	28	37	31	26	34	28	24	31	26	23	31	26	23	20	
9	52	39	31	26	49	37	30	25	34	28	23	31	26	22	28	24	20	28	24	20	18	
10	49	36	28	23	46	34	27	23	32	25	21	29	24	20	26	22	19	26	22	19	17	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7251	7251	7251
5°	7265	7116	7139
10°	7213	6989	6979
15°	7128	6837	6775
20°	7012	6650	6572
25°	6874	6448	6320
30°	6707	6226	6092
35°	6552	6023	5884
40°	6393	5809	5674
45°	6214	5626	5487
50°	6043	5427	5322
55°	5837	5239	5128
60°	5611	5024	4931
65°	5377	4800	4709
70°	5112	4494	4480
75°	4688	4200	4198
80°	4134	3842	3893
85°	3621	3600	3798



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.2	2.4
10°-20°	301.3	6.7
20°-30°	448.2	9.9
30°-40°	530.9	11.8
40°-50°	548.9	12.2
50°-60°	505.6	11.2
60°-70°	408.7	9.1
70°-80°	273.7	6.1
80°-90°	142.7	3.2
90°-100°	104.4	2.3
100°-110°	132.0	2.9
110°-120°	163.4	3.6
120°-130°	185.6	4.1
130°-140°	192.7	4.3
140°-150°	181.3	4.0
150°-160°	150.6	3.3
160°-170°	100.1	2.2
170°-180°	35.0	0.8
0°-30°	855.7	19.0
0°-40°	1386.5	30.7
0°-60°	2441.0	54.1
0°-90°	3266.1	72.4
90°-120°	399.8	8.9
90°-150°	959.4	21.3
90°-180°	1245.0	27.6
0°-180°	4511.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1123	1123	1123	1123	1123	
5°	1123	1120	1113	1121	1120	106
15°	1072	1073	1065	1071	1068	302
25°	974	977	971	975	970	448
35°	843	850	848	851	851	527
45°	694	706	712	719	721	536
55°	534	551	569	581	586	477
65°	368	393	419	435	440	365
75°	202	232	266	287	294	215
85°	60	97	135	159	168	64
90°	18	56	95	121	130	13
95°	33	63	103	128	137	31
105°	76	96	129	152	162	81
115°	131	141	169	188	195	129
125°	186	187	209	225	231	166
135°	238	239	246	260	265	183
145°	287	287	288	293	297	179
155°	327	327	327	328	327	150
165°	355	355	355	356	354	100
175°	369	368	368	370	368	35
180°	370	370	370	370	370	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7
2.5°	1125.3	1124.9	1124.5	1124.1	1123.7	1122.8	1121.4	1120.1	1118.8	1117.4	1118.8
5°	1122.7	1122.2	1121.7	1121.2	1120.7	1119.6	1117.9	1116.1	1114.4	1112.7	1114.7
7.5°	1112.7	1112.6	1112.3	1112.1	1112.0	1111.0	1109.2	1107.4	1105.7	1103.9	1105.6
10°	1103.9	1103.9	1103.9	1103.9	1103.9	1102.9	1101.0	1099.0	1097.1	1095.1	1096.8
12.5°	1091.6	1091.8	1092.0	1092.2	1092.4	1091.7	1090.1	1088.6	1087.0	1085.4	1086.8
15°	1072.0	1072.3	1072.5	1072.8	1073.0	1072.3	1070.6	1068.9	1067.1	1065.4	1066.9
17.5°	1046.4	1046.9	1047.4	1047.9	1048.4	1047.8	1046.1	1044.4	1042.7	1041.0	1042.1
20°	1028.0	1028.5	1029.0	1029.5	1030.0	1029.3	1027.6	1025.9	1024.2	1022.5	1023.2
22.5°	1006.8	1007.7	1008.6	1009.5	1010.4	1009.8	1008.0	1006.1	1004.1	1002.2	1003.1
25°	974.0	974.8	975.5	976.2	977.0	976.6	975.2	973.7	972.2	970.8	971.8
27.5°	937.5	938.6	939.6	940.8	941.8	941.5	939.9	938.2	936.5	934.9	935.6
30°	910.2	911.7	913.1	914.6	916.1	916.1	914.6	913.1	911.7	910.2	910.7
32.5°	885.6	886.8	888.1	889.4	890.6	890.7	889.7	888.6	887.5	886.5	887.0
35°	843.1	844.8	846.5	848.2	849.9	850.4	849.7	849.0	848.2	847.5	848.2
37.5°	800.6	802.2	803.7	805.3	806.8	807.6	807.3	807.1	806.8	806.6	807.6
40°	771.5	773.5	775.4	777.4	779.3	780.2	780.0	779.8	779.5	779.3	780.2
42.5°	739.8	742.4	744.9	747.5	750.0	751.5	752.1	752.6	753.2	753.7	754.9
45°	694.5	697.2	699.9	702.5	705.2	707.2	708.4	709.6	710.9	712.1	713.8
47.5°	648.1	650.5	653.1	655.5	658.0	660.3	662.4	664.6	666.7	668.7	671.2
50°	616.4	619.1	621.7	624.4	627.1	629.8	632.5	635.2	637.9	640.6	643.3
52.5°	582.9	586.2	589.5	592.7	596.0	599.2	602.6	605.8	609.1	612.4	615.3
55°	533.8	537.7	541.6	545.5	549.4	553.3	557.3	561.2	565.1	569.0	571.7
57.5°	483.6	488.3	493.0	497.7	502.4	507.0	511.5	516.0	520.5	525.0	528.1
60°	450.1	455.0	459.9	464.8	469.7	474.6	479.5	484.4	489.3	494.2	497.8
62.5°	417.6	422.5	427.4	432.3	437.2	442.2	447.5	452.8	458.1	463.3	467.4
65°	367.6	373.2	378.9	384.5	390.1	395.8	401.7	407.6	413.4	419.3	423.0
67.5°	320.5	326.0	331.3	336.8	342.2	347.9	353.9	359.9	365.8	371.8	376.3
70°	286.2	291.8	297.4	303.0	308.7	314.6	321.0	327.3	333.7	340.1	344.7
72.5°	252.7	258.5	264.3	270.2	276.0	282.3	289.3	296.3	303.2	310.1	315.2
75°	202.5	208.9	215.2	221.6	228.0	235.1	242.9	250.7	258.5	266.4	271.3
77.5°	154.3	161.7	169.0	176.3	183.7	191.1	198.6	206.2	213.7	221.2	226.6
80°	124.3	131.7	139.0	146.3	153.7	161.5	169.8	178.1	186.5	194.8	200.2
82.5°	97.1	104.8	112.5	120.3	128.0	136.1	144.6	153.1	161.7	170.2	175.4
85°	60.5	68.6	76.6	84.7	92.8	101.1	109.7	118.2	126.8	135.3	140.7
87.5°	34.4	42.3	50.2	58.2	66.1	74.3	82.7	91.1	99.5	107.9	113.6
90°	17.9	26.3	34.6	42.9	51.3	59.8	68.6	77.4	86.1	94.9	100.8
92.5°	22.8	30.4	38.0	45.7	53.2	61.6	70.6	79.7	88.7	97.8	103.6
95°	33.0	39.5	46.0	52.5	59.0	66.7	75.7	84.6	93.6	102.6	108.4
97.5°	44.1	49.9	55.7	61.4	67.2	74.5	83.5	92.4	101.3	110.1	115.7
100°	52.4	57.6	62.7	67.8	73.0	79.9	88.5	97.2	105.9	114.5	120.3
102.5°	61.5	66.4	71.5	76.5	81.4	88.1	96.0	104.1	112.2	120.3	125.8
105°	75.6	79.8	84.1	88.3	92.5	98.5	106.2	114.0	121.6	129.4	134.7
107.5°	91.3	95.0	98.7	102.3	105.9	111.5	118.8	126.1	133.5	140.8	145.8
110°	102.2	105.5	108.8	112.0	115.2	120.4	127.4	134.4	141.5	148.5	153.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	114.2	116.8	119.3	121.7	124.3	129.0	135.8	142.8	149.7	156.5	161.1
115°	130.8	132.7	134.8	136.7	138.7	142.9	149.4	155.9	162.3	168.8	173.2
117.5°	147.5	148.7	149.9	151.2	152.4	156.1	162.2	168.4	174.5	180.6	184.8
120°	158.5	159.6	160.6	161.7	162.7	166.1	171.8	177.5	183.2	188.8	193.0
122.5°	169.7	170.1	170.6	171.0	171.5	174.5	180.1	185.6	191.3	196.9	200.8
125°	185.6	185.8	186.0	186.1	186.2	188.7	193.7	198.7	203.7	208.6	212.4
127.5°	201.9	201.8	201.8	201.8	201.7	203.7	207.8	212.0	216.1	220.1	223.6
130°	212.2	212.3	212.4	212.5	212.5	214.3	217.8	221.4	225.0	228.5	231.9
132.5°	221.7	222.2	222.7	223.1	223.6	225.2	227.8	230.4	233.0	235.6	239.0
135°	237.9	238.1	238.2	238.3	238.5	239.5	241.2	243.0	244.8	246.5	249.7
137.5°	253.2	253.3	253.5	253.6	253.9	254.5	255.4	256.3	257.3	258.3	261.3
140°	262.2	262.5	262.9	263.1	263.4	263.8	264.2	264.7	265.1	265.5	268.4
142.5°	272.1	272.1	272.2	272.3	272.4	272.6	272.9	273.1	273.5	273.7	276.1
145°	286.7	286.7	286.7	286.7	286.7	286.8	287.0	287.2	287.4	287.6	288.8
147.5°	299.1	299.2	299.3	299.5	299.6	299.8	299.9	300.1	300.2	300.4	300.9
150°	308.0	308.0	307.9	307.9	307.8	307.9	308.1	308.4	308.7	308.9	308.9
152.5°	315.4	315.5	315.6	315.7	315.8	315.8	316.0	316.1	316.2	316.3	316.4
155°	326.8	326.8	326.8	326.8	326.8	326.8	326.9	326.9	327.0	327.1	327.3
157.5°	336.9	336.8	336.6	336.5	336.4	336.3	336.4	336.5	336.5	336.6	336.8
160°	342.9	342.8	342.5	342.3	342.2	342.1	342.2	342.2	342.3	342.3	342.6
162.5°	348.2	348.1	348.0	347.8	347.6	347.6	347.6	347.6	347.6	347.6	348.0
165°	355.3	355.1	355.1	354.9	354.8	354.7	354.8	354.9	355.0	355.0	355.3
167.5°	361.3	361.0	360.8	360.5	360.3	360.1	360.1	360.1	360.1	360.1	360.5
170°	364.5	364.3	364.0	363.8	363.5	363.4	363.4	363.4	363.4	363.4	363.8
172.5°	366.8	366.6	366.3	366.1	365.8	365.7	365.7	365.7	365.7	365.7	366.1
175°	369.4	369.2	368.9	368.7	368.4	368.3	368.3	368.3	368.3	368.3	368.7
177.5°	370.7	370.6	370.3	370.1	369.9	369.8	369.7	369.7	369.7	369.6	369.9
180°	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7
2.5°	1120.1	1121.4	1122.8	1123.4	1123.2	1123.0	1122.8	1122.7
5°	1116.6	1118.6	1120.5	1121.4	1121.2	1121.0	1120.7	1120.5
7.5°	1107.3	1109.1	1110.8	1111.5	1111.3	1111.0	1110.8	1110.5
10°	1098.5	1100.2	1102.0	1102.7	1102.4	1102.2	1102.0	1101.7
12.5°	1088.1	1089.4	1090.7	1091.0	1090.5	1089.8	1089.2	1088.5
15°	1068.4	1069.8	1071.3	1071.5	1070.6	1069.6	1068.6	1067.6
17.5°	1043.3	1044.3	1045.5	1045.7	1045.1	1044.6	1044.0	1043.4
20°	1023.9	1024.7	1025.4	1025.8	1025.8	1025.8	1025.8	1025.8
22.5°	1004.1	1005.0	1005.9	1006.1	1005.5	1004.9	1004.4	1003.8
25°	972.7	973.7	974.7	974.5	973.3	972.1	970.9	969.6
27.5°	936.2	936.9	937.6	937.8	937.3	936.9	936.4	936.0
30°	911.2	911.7	912.2	912.3	912.1	911.8	911.6	911.3
32.5°	887.5	887.9	888.4	888.5	888.3	888.0	887.8	887.5
35°	849.0	849.7	850.4	850.8	850.8	850.8	850.8	850.8
37.5°	808.5	809.5	810.5	810.9	810.8	810.7	810.6	810.5
40°	781.2	782.2	783.2	783.9	784.4	784.9	785.4	785.9
42.5°	756.0	757.2	758.4	759.0	759.1	759.2	759.4	759.5
45°	715.5	717.2	718.9	719.9	720.2	720.4	720.6	720.9
47.5°	673.8	676.2	678.7	680.2	680.8	681.3	681.8	682.4
50°	646.0	648.7	651.3	653.1	653.8	654.5	655.3	656.0
52.5°	618.2	621.0	623.9	625.7	626.1	626.7	627.3	627.8
55°	574.4	577.1	579.8	581.6	582.6	583.6	584.6	585.5
57.5°	531.2	534.3	537.4	539.2	540.0	540.7	541.4	542.2
60°	501.5	505.2	508.8	511.0	511.8	512.5	513.2	514.0
62.5°	471.5	475.6	479.6	482.1	483.1	484.0	484.9	485.8
65°	426.6	430.3	434.0	436.3	437.3	438.3	439.3	440.3
67.5°	380.7	385.1	389.6	392.5	393.7	395.0	396.2	397.5
70°	349.4	354.0	358.7	361.7	363.2	364.7	366.2	367.6
72.5°	320.2	325.3	330.3	333.4	334.4	335.5	336.6	337.7
75°	276.1	281.0	285.9	288.9	290.2	291.4	292.6	293.8
77.5°	232.0	237.3	242.7	245.9	246.9	247.9	248.8	249.8
80°	205.5	210.9	216.3	219.5	220.5	221.4	222.4	223.4
82.5°	180.5	185.7	190.9	194.4	196.2	197.9	199.7	201.4
85°	146.1	151.5	156.9	160.5	162.5	164.4	166.4	168.4
87.5°	119.3	125.0	130.7	134.4	136.2	137.9	139.7	141.4
90°	106.7	112.7	118.6	122.5	124.5	126.4	128.2	130.2
92.5°	109.5	115.4	121.2	125.1	126.9	128.7	130.6	132.5
95°	114.2	120.0	125.9	129.7	131.5	133.4	135.2	137.1
97.5°	121.3	126.9	132.4	136.1	137.8	139.5	141.3	143.0
100°	126.0	131.7	137.4	141.0	142.6	144.2	145.9	147.4
102.5°	131.3	137.0	142.5	146.1	147.7	149.4	151.1	152.7
105°	140.0	145.2	150.5	154.1	156.0	157.9	159.8	161.8
107.5°	150.8	155.9	160.9	164.2	165.7	167.2	168.7	170.2
110°	158.2	163.1	167.9	171.1	172.8	174.5	176.1	177.7



TEST NUMBER: P333254-930

CATALOG NUMBER: S125DIP-S1090D365U930-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	165.7	170.2	174.7	177.8	179.4	181.0	182.5	184.2
115°	177.5	181.9	186.2	189.1	190.5	191.9	193.3	194.7
117.5°	189.1	193.2	197.5	200.2	201.7	203.1	204.5	205.9
120°	197.1	201.3	205.5	208.1	209.4	210.6	211.8	213.0
122.5°	204.7	208.6	212.5	215.1	216.4	217.6	218.9	220.1
125°	216.1	220.0	223.7	226.2	227.4	228.5	229.7	230.8
127.5°	227.2	230.8	234.3	236.8	238.1	239.4	240.7	241.9
130°	235.3	238.6	242.0	244.2	245.3	246.4	247.5	248.6
132.5°	242.3	245.7	249.1	251.2	252.0	252.9	253.7	254.5
135°	252.9	256.1	259.3	261.3	262.3	263.3	264.2	265.2
137.5°	264.2	267.2	270.2	272.0	272.6	273.3	273.9	274.6
140°	271.3	274.0	276.9	278.6	279.2	279.9	280.5	281.2
142.5°	278.5	280.9	283.2	284.8	285.4	286.1	286.7	287.4
145°	290.0	291.2	292.4	293.5	294.2	295.1	295.9	296.6
147.5°	301.5	302.0	302.6	302.8	302.8	302.9	302.9	302.9
150°	308.9	308.9	308.9	309.0	309.1	309.2	309.3	309.4
152.5°	316.6	316.7	316.9	316.9	316.7	316.5	316.3	316.2
155°	327.6	327.8	328.1	328.1	327.8	327.4	327.1	326.8
157.5°	337.0	337.4	337.6	337.5	337.1	336.6	336.2	335.8
160°	342.8	343.1	343.3	343.3	343.0	342.7	342.3	342.0
162.5°	348.2	348.5	348.9	348.9	348.5	348.1	347.7	347.3
165°	355.6	355.8	356.0	356.0	355.6	355.2	354.8	354.4
167.5°	360.9	361.3	361.7	361.7	361.3	360.9	360.4	360.1
170°	364.1	364.5	364.9	364.8	364.4	363.9	363.5	363.1
172.5°	366.5	366.8	367.2	367.2	366.8	366.4	366.0	365.6
175°	369.0	369.4	369.8	369.7	369.3	368.8	368.4	367.9
177.5°	370.2	370.6	370.8	370.8	370.5	370.1	369.7	369.3
180°	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3

(END OF REPORT)