

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: P333255-940

Luminaire Tested: **S125DIP-S1090D365U940-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333255-940
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-S1090D365U940-4F0-1E-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: 4976.1 lumens
Efficiency: N/A
Efficacy: 114.4 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

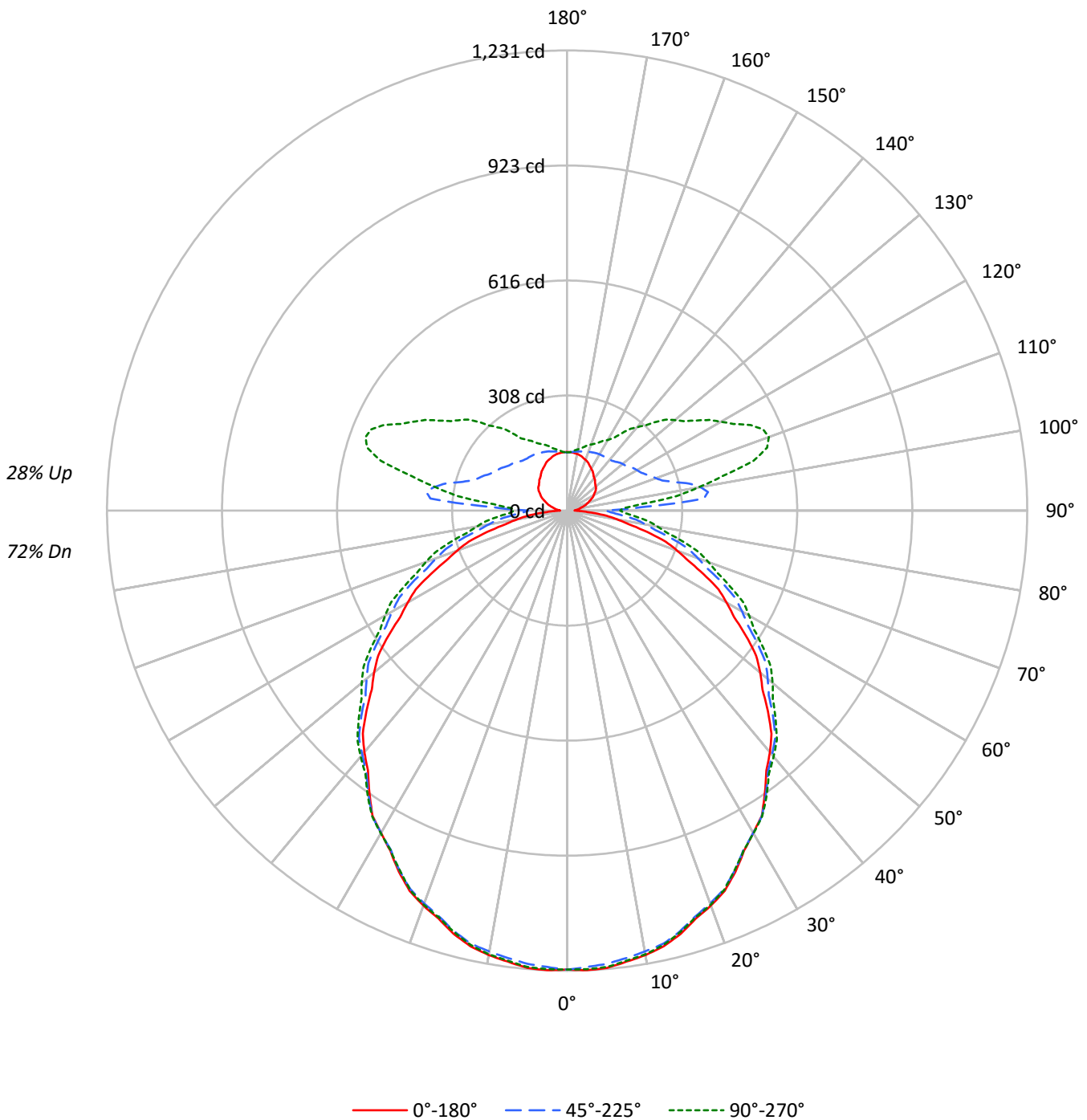
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7930	7930	7930
5°	7946	7783	7808
10°	7889	7644	7633
15°	7796	7478	7410
20°	7670	7273	7188
25°	7518	7053	6912
30°	7336	6810	6664
35°	7165	6588	6435
40°	6992	6353	6205
45°	6796	6152	6001
50°	6609	5935	5821
55°	6384	5729	5609
60°	6137	5495	5392
65°	5882	5250	5150
70°	5590	4914	4900
75°	5128	4592	4592
80°	4524	4201	4257
85°	3962	3938	4152



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.1	2.3
10°-20°	329.6	6.6
20°-30°	490.2	9.9
30°-40°	580.6	11.7
40°-50°	600.3	12.1
50°-60°	553.0	11.1
60°-70°	447.0	9.0
70°-80°	299.4	6.0
80°-90°	156.1	3.1
90°-100°	200.4	4.0
100°-110°	307.8	6.2
110°-120°	271.6	5.5
120°-130°	209.7	4.2
130°-140°	159.3	3.2
140°-150°	114.4	2.3
150°-160°	79.0	1.6
160°-170°	46.5	0.9
170°-180°	15.1	0.3
0°-30°	935.9	18.8
0°-40°	1516.5	30.5
0°-60°	2669.7	53.7
0°-90°	3572.2	71.8
90°-120°	779.8	15.7
90°-150°	1263.2	25.4
90°-180°	1404.0	28.2
0°-180°	4976.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1228	1228	1228	1228	1228	
5°	1228	1225	1217	1226	1226	116
15°	1172	1173	1165	1172	1168	330
25°	1065	1068	1062	1066	1060	490
35°	922	930	927	930	930	577
45°	760	772	779	787	788	586
55°	584	603	622	635	640	522
65°	402	430	459	476	482	399
75°	222	253	291	314	321	235
85°	66	106	148	174	184	70
90°	20	61	104	132	142	13
95°	26	78	367	240	197	23
105°	46	81	295	539	516	49
115°	71	94	230	463	541	70
125°	93	108	204	361	420	82
135°	106	126	184	288	336	82
145°	122	138	175	224	251	76
155°	137	148	171	193	201	63
165°	150	154	164	174	176	42
175°	156	156	157	159	158	15
180°	156	156	156	156	156	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9
2.5°	1230.7	1230.3	1229.8	1229.5	1229.0	1228.1	1226.5	1225.0	1223.6	1222.1	1223.6
5°	1227.9	1227.4	1226.8	1226.3	1225.7	1224.5	1222.6	1220.8	1218.9	1217.0	1219.1
7.5°	1217.0	1216.8	1216.6	1216.4	1216.2	1215.1	1213.2	1211.2	1209.3	1207.4	1209.2
10°	1207.4	1207.4	1207.4	1207.4	1207.4	1206.3	1204.2	1202.0	1199.9	1197.7	1199.6
12.5°	1193.9	1194.1	1194.4	1194.5	1194.8	1194.0	1192.3	1190.6	1188.9	1187.1	1188.7
15°	1172.5	1172.8	1173.0	1173.3	1173.6	1172.8	1170.9	1169.0	1167.2	1165.3	1166.9
17.5°	1144.5	1145.0	1145.6	1146.1	1146.7	1146.0	1144.2	1142.3	1140.4	1138.5	1139.8
20°	1124.4	1124.9	1125.4	1126.0	1126.5	1125.8	1123.9	1122.0	1120.2	1118.3	1119.1
22.5°	1101.2	1102.2	1103.1	1104.1	1105.1	1104.5	1102.4	1100.4	1098.2	1096.2	1097.2
25°	1065.3	1066.1	1066.9	1067.7	1068.5	1068.2	1066.6	1065.0	1063.4	1061.8	1062.8
27.5°	1025.4	1026.5	1027.7	1028.9	1030.1	1029.7	1028.0	1026.1	1024.3	1022.5	1023.2
30°	995.5	997.1	998.7	1000.3	1001.9	1001.9	1000.3	998.7	997.1	995.5	996.0
32.5°	968.6	969.9	971.3	972.8	974.1	974.2	973.0	971.9	970.7	969.6	970.1
35°	922.1	924.0	925.9	927.7	929.6	930.1	929.3	928.5	927.7	926.9	927.7
37.5°	875.7	877.4	879.0	880.7	882.4	883.2	883.0	882.7	882.4	882.2	883.2
40°	843.8	846.0	848.1	850.2	852.4	853.4	853.1	852.8	852.6	852.3	853.4
42.5°	809.1	812.0	814.8	817.5	820.3	822.0	822.6	823.1	823.8	824.4	825.6
45°	759.6	762.5	765.4	768.4	771.3	773.5	774.8	776.1	777.5	778.8	780.7
47.5°	708.8	711.5	714.3	716.9	719.7	722.2	724.5	726.8	729.2	731.4	734.1
50°	674.1	677.1	680.0	683.0	685.9	688.8	691.8	694.7	697.7	700.6	703.6
52.5°	637.5	641.1	644.7	648.3	651.8	655.4	659.1	662.6	666.2	669.8	673.0
55°	583.8	588.1	592.4	596.6	600.9	605.2	609.5	613.8	618.0	622.3	625.3
57.5°	529.0	534.0	539.2	544.4	549.5	554.6	559.5	564.4	569.3	574.2	577.6
60°	492.3	497.7	503.0	508.4	513.7	519.1	524.4	529.8	535.1	540.5	544.5
62.5°	456.7	462.1	467.4	472.8	478.1	483.7	489.5	495.3	501.1	506.8	511.2
65°	402.1	408.2	414.4	420.5	426.7	432.9	439.3	445.8	452.2	458.6	462.6
67.5°	350.5	356.5	362.4	368.4	374.3	380.5	387.1	393.6	400.1	406.6	411.5
70°	313.0	319.1	325.3	331.4	337.6	344.1	351.1	358.0	365.0	371.9	377.0
72.5°	276.4	282.8	289.1	295.5	301.8	308.8	316.5	324.0	331.6	339.2	344.7
75°	221.5	228.5	235.4	242.4	249.3	257.1	265.6	274.2	282.8	291.3	296.7
77.5°	168.8	176.8	184.9	192.9	200.9	209.0	217.2	225.5	233.7	241.9	247.8
80°	136.0	144.0	152.0	160.1	168.1	176.6	185.7	194.8	203.9	213.0	218.9
82.5°	106.2	114.6	123.1	131.5	140.0	148.8	158.2	167.5	176.8	186.1	191.8
85°	66.2	75.0	83.8	92.6	101.5	110.6	119.9	129.3	138.7	148.0	153.9
87.5°	37.6	46.3	54.9	63.6	72.3	81.2	90.4	99.6	108.8	118.0	124.2
90°	19.6	28.4	37.6	46.8	56.0	65.5	74.9	84.6	94.0	103.8	110.2
92.5°	21.2	29.9	40.5	52.3	65.6	83.5	109.9	148.1	188.8	196.4	183.1
95°	26.0	33.3	42.8	53.2	67.1	89.3	132.2	210.5	306.7	367.1	367.0
97.5°	31.5	38.1	46.1	55.8	68.4	86.1	117.2	176.7	276.5	380.0	433.2
100°	35.3	41.6	48.4	57.5	69.1	85.7	112.5	162.0	250.0	361.6	446.0
102.5°	39.6	45.2	51.4	60.3	71.0	86.9	111.6	154.4	229.7	333.9	431.3
105°	46.5	50.7	56.6	64.0	73.3	88.3	110.2	146.2	207.0	294.7	390.5
107.5°	53.1	57.3	62.5	68.8	77.6	91.2	112.4	144.0	194.7	266.8	350.1
110°	57.9	61.7	66.3	72.2	80.2	93.7	114.1	143.4	189.0	252.6	326.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	63.7	66.9	70.4	75.9	83.2	96.0	115.7	143.5	185.4	242.7	307.7
115°	70.9	73.4	76.2	80.9	87.5	99.8	118.4	143.7	180.8	230.3	285.9
117.5°	77.2	79.5	81.7	85.7	92.3	103.9	121.5	144.6	177.5	221.4	270.4
120°	82.3	84.0	86.1	89.7	95.9	107.3	124.4	145.7	176.1	216.0	261.2
122.5°	86.6	87.7	89.1	92.3	98.5	109.6	126.5	146.9	174.2	210.9	252.6
125°	93.1	93.5	94.7	97.3	103.0	113.8	129.5	148.4	172.0	203.6	240.6
127.5°	97.1	97.7	99.5	102.8	109.0	119.2	133.6	150.4	170.8	197.2	229.1
130°	100.3	101.0	103.3	107.1	113.5	123.4	136.9	152.7	170.6	193.9	222.2
132.5°	101.9	103.1	106.0	110.6	117.4	127.0	139.6	153.8	169.9	190.0	215.3
135°	105.8	106.7	110.3	115.0	121.5	130.7	142.3	154.6	168.2	184.2	205.6
137.5°	110.7	111.5	114.8	119.6	125.8	135.0	144.7	155.6	167.6	180.3	197.8
140°	112.8	113.7	117.5	122.5	128.5	137.1	146.6	156.3	166.7	177.6	193.1
142.5°	116.3	116.8	120.1	124.9	130.5	138.4	147.0	156.0	165.7	175.9	189.6
145°	121.6	122.0	124.8	128.9	134.4	141.5	149.7	157.6	166.0	175.2	186.0
147.5°	125.9	126.3	129.0	133.1	138.0	144.4	151.6	158.7	166.4	174.4	183.2
150°	129.2	129.8	132.1	136.2	140.5	145.9	152.8	159.4	166.4	173.6	181.2
152.5°	132.8	133.1	135.1	138.7	142.9	147.7	154.1	160.0	166.1	172.6	179.4
155°	137.4	137.4	139.3	142.4	145.6	150.0	155.3	160.4	165.4	170.9	176.5
157.5°	141.6	141.5	143.0	145.7	148.5	151.9	156.4	160.7	164.6	168.9	173.7
160°	144.4	144.0	145.3	147.5	150.0	152.8	156.9	160.7	163.9	167.6	171.5
162.5°	146.6	146.3	147.6	149.5	151.5	153.8	157.5	160.5	163.1	166.1	169.4
165°	150.0	149.4	150.3	151.9	153.2	155.1	157.6	160.1	162.0	163.9	166.4
167.5°	152.3	151.9	152.6	153.4	154.3	155.5	157.6	159.3	160.2	161.7	163.5
170°	153.8	153.5	153.8	154.4	155.1	156.0	157.6	158.8	159.4	160.4	161.7
172.5°	154.8	154.3	154.5	155.2	155.5	156.0	157.3	158.4	158.5	158.9	159.9
175°	156.0	155.3	155.7	156.0	156.0	156.0	156.9	157.6	157.3	157.3	157.6
177.5°	156.6	156.0	156.0	156.3	156.0	156.0	156.6	156.9	156.3	156.3	156.6
180°	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9
2.5°	1225.0	1226.5	1228.1	1228.7	1228.5	1228.2	1228.1	1227.9
5°	1221.3	1223.4	1225.6	1226.5	1226.3	1226.0	1225.7	1225.5
7.5°	1211.1	1213.0	1214.9	1215.7	1215.4	1215.1	1214.9	1214.6
10°	1201.5	1203.4	1205.2	1206.0	1205.8	1205.5	1205.2	1205.0
12.5°	1190.1	1191.5	1192.9	1193.3	1192.7	1191.9	1191.2	1190.5
15°	1168.5	1170.1	1171.7	1172.0	1170.9	1169.8	1168.8	1167.7
17.5°	1141.0	1142.2	1143.4	1143.7	1143.1	1142.5	1141.8	1141.2
20°	1119.9	1120.7	1121.5	1122.0	1122.0	1122.0	1122.0	1122.0
22.5°	1098.2	1099.2	1100.2	1100.4	1099.7	1099.1	1098.5	1097.9
25°	1063.9	1065.0	1066.0	1065.9	1064.5	1063.2	1061.8	1060.5
27.5°	1024.0	1024.8	1025.5	1025.6	1025.1	1024.7	1024.1	1023.7
30°	996.6	997.1	997.6	997.8	997.6	997.3	997.0	996.8
32.5°	970.6	971.2	971.7	971.8	971.5	971.3	971.0	970.7
35°	928.5	929.3	930.1	930.5	930.5	930.5	930.5	930.5
37.5°	884.3	885.4	886.4	886.9	886.8	886.7	886.5	886.4
40°	854.4	855.5	856.6	857.4	857.9	858.4	859.0	859.5
42.5°	826.9	828.2	829.5	830.2	830.3	830.4	830.5	830.6
45°	782.6	784.4	786.3	787.4	787.6	787.9	788.2	788.5
47.5°	736.9	739.6	742.3	744.0	744.6	745.2	745.7	746.4
50°	706.5	709.4	712.4	714.3	715.1	715.9	716.7	717.5
52.5°	676.1	679.2	682.4	684.3	684.8	685.5	686.1	686.6
55°	628.2	631.2	634.1	636.1	637.2	638.3	639.4	640.4
57.5°	580.9	584.3	587.7	589.8	590.6	591.4	592.2	593.0
60°	548.5	552.5	556.5	558.9	559.7	560.5	561.3	562.1
62.5°	515.7	520.1	524.6	527.3	528.3	529.3	530.3	531.4
65°	466.6	470.6	474.7	477.2	478.3	479.4	480.5	481.5
67.5°	416.3	421.2	426.1	429.3	430.6	432.0	433.4	434.8
70°	382.1	387.2	392.3	395.7	397.3	398.9	400.5	402.1
72.5°	350.3	355.8	361.2	364.6	365.8	366.9	368.1	369.3
75°	302.0	307.4	312.7	316.0	317.4	318.7	320.0	321.4
77.5°	253.7	259.6	265.5	268.9	270.0	271.1	272.2	273.2
80°	224.8	230.7	236.6	240.0	241.1	242.2	243.3	244.3
82.5°	197.4	203.1	208.7	212.6	214.5	216.4	218.4	220.3
85°	159.8	165.7	171.6	175.6	177.7	179.9	182.0	184.1
87.5°	130.5	136.7	142.9	147.0	148.9	150.8	152.7	154.5
90°	116.7	123.1	129.7	134.3	136.2	138.0	140.2	142.0
92.5°	162.6	153.2	149.1	148.4	146.2	147.3	148.7	150.1
95°	326.3	284.2	251.4	228.7	208.2	200.6	200.0	196.8
97.5°	430.5	402.6	370.4	337.3	319.7	303.9	296.5	294.4
100°	475.9	466.1	439.3	410.1	389.9	368.8	358.8	355.3
102.5°	488.5	503.5	493.3	474.6	452.9	438.4	427.3	425.2
105°	471.4	520.0	539.2	539.4	531.1	522.6	518.2	516.3
107.5°	430.1	492.9	533.9	553.8	560.5	562.1	561.7	560.9
110°	399.6	464.5	514.0	544.3	560.4	568.2	572.3	574.2



TEST NUMBER: P333255-940

CATALOG NUMBER: S125DIP-S1090D365U940-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	374.6	436.3	486.1	521.0	543.7	555.8	563.2	567.3
115°	342.7	396.4	444.3	482.0	508.1	524.9	535.3	541.0
117.5°	319.7	366.3	408.0	442.7	469.1	486.6	497.1	501.5
120°	306.7	349.1	388.3	419.1	444.1	460.7	470.9	475.0
122.5°	295.6	335.0	370.2	399.1	421.6	437.0	447.2	451.0
125°	279.8	316.3	347.9	373.4	392.4	406.7	415.0	419.5
127.5°	263.6	297.6	327.1	351.1	368.6	381.7	389.7	392.6
130°	254.0	285.4	313.8	336.8	353.9	365.6	373.3	376.5
132.5°	243.8	273.5	299.6	321.7	338.6	350.2	357.0	360.3
135°	229.3	254.5	278.2	298.5	313.8	325.5	332.5	335.7
137.5°	217.4	238.2	258.1	275.4	288.9	299.4	305.8	308.9
140°	210.3	228.0	245.5	260.7	273.5	282.8	288.6	291.1
142.5°	204.2	219.3	234.3	247.5	258.5	266.5	272.1	274.5
145°	197.2	208.2	219.4	229.1	237.6	244.2	248.6	251.0
147.5°	191.3	199.7	207.6	214.5	220.9	225.7	228.2	229.3
150°	188.2	195.1	201.1	206.9	211.9	215.9	217.4	218.0
152.5°	185.7	191.8	197.2	201.7	205.7	208.8	210.2	210.5
155°	181.8	186.9	191.3	194.7	197.9	200.1	201.1	201.3
157.5°	178.1	182.2	185.7	188.3	190.8	192.6	193.5	193.4
160°	175.6	178.7	181.8	184.0	186.3	187.8	188.4	188.2
162.5°	172.7	175.7	178.3	180.3	182.0	183.2	183.4	183.3
165°	168.9	171.1	173.0	174.6	175.8	176.5	176.5	176.5
167.5°	165.2	166.7	168.2	169.3	170.0	170.5	170.2	170.1
170°	163.3	164.2	165.1	165.8	166.4	166.7	166.7	166.4
172.5°	161.0	161.9	162.6	163.0	163.1	163.7	163.2	162.8
175°	158.5	158.5	159.2	159.2	159.2	159.4	158.8	158.5
177.5°	156.9	157.0	157.0	157.0	156.9	157.0	156.3	156.3
180°	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3

(END OF REPORT)