

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: P333253-830

Luminaire Tested: **S125DIP-S1090D365U830-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333253-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S1090D365U830-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5400.9 lumens
Efficiency: N/A
Efficacy: 124.2 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

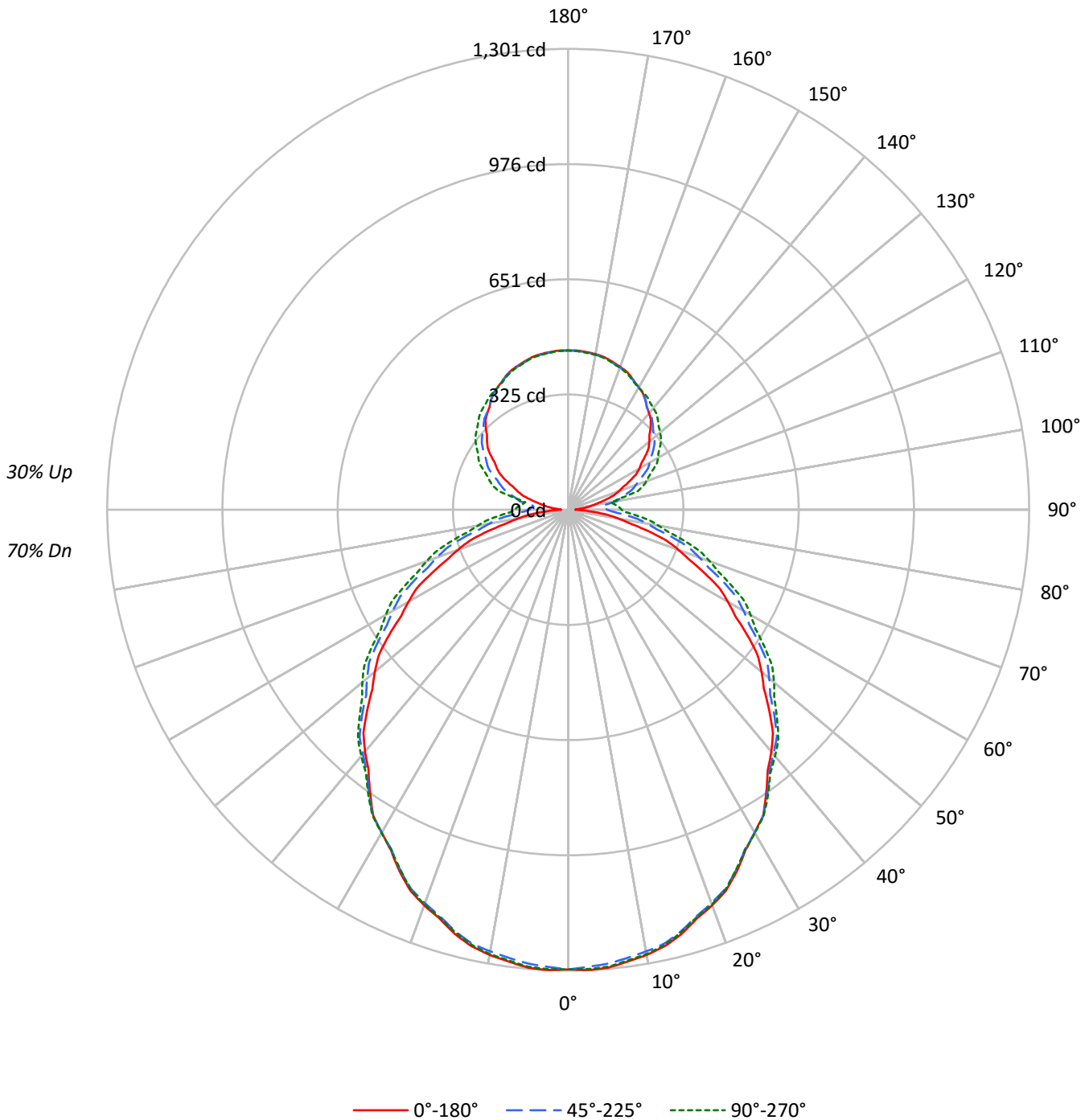
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333253-830

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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	94	94	94	84	84	84	74	74	74	70
1	101	96	92	88	95	91	87	84	81	78	76	72	70	68	64	62	61	57
2	92	84	77	71	86	79	73	68	71	66	62	63	59	56	56	53	50	47
3	83	73	65	59	78	69	62	56	62	56	52	55	51	47	49	46	42	39
4	76	65	56	50	72	61	54	48	55	49	44	49	44	40	44	40	36	33
5	70	58	49	42	66	55	47	41	49	43	38	44	39	35	39	35	32	29
6	65	52	43	37	61	49	41	35	44	38	33	40	34	30	36	31	28	25
7	60	47	38	32	56	44	37	31	40	34	29	36	31	27	33	28	25	22
8	55	42	34	29	52	40	33	28	37	30	26	33	28	24	30	25	22	20
9	52	39	31	26	49	37	30	25	34	27	23	31	25	21	28	23	20	18
10	48	36	28	23	46	34	27	22	31	25	21	28	23	19	26	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8382	8382	8382
5°	8399	8227	8253
10°	8339	8080	8068
15°	8240	7905	7833
20°	8107	7687	7597
25°	7947	7455	7307
30°	7754	7199	7044
35°	7574	6964	6802
40°	7390	6715	6559
45°	7184	6503	6343
50°	6986	6274	6153
55°	6748	6056	5928
60°	6488	5808	5700
65°	6217	5549	5444
70°	5908	5194	5179
75°	5420	4854	4854
80°	4780	4442	4501
85°	4183	4164	4388



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.7	2.3
10°-20°	348.4	6.5
20°-30°	518.1	9.6
30°-40°	613.7	11.4
40°-50°	634.5	11.7
50°-60°	584.5	10.8
60°-70°	472.5	8.7
70°-80°	316.4	5.9
80°-90°	165.0	3.1
90°-100°	108.4	2.0
100°-110°	168.6	3.1
110°-120°	228.1	4.2
120°-130°	260.1	4.8
130°-140°	263.3	4.9
140°-150°	238.8	4.4
150°-160°	191.4	3.5
160°-170°	123.8	2.3
170°-180°	42.7	0.8
0°-30°	989.2	18.3
0°-40°	1602.9	29.7
0°-60°	2821.9	52.2
0°-90°	3775.9	69.9
90°-120°	505.0	9.4
90°-150°	1267.3	23.5
90°-180°	1625.0	30.1
0°-180°	5400.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1298	1298	1298	1298	1298	
5°	1298	1295	1286	1296	1295	123
15°	1239	1240	1232	1239	1234	349
25°	1126	1129	1122	1127	1121	518
35°	975	983	980	983	984	610
45°	803	816	823	832	833	619
55°	617	637	658	671	677	551
65°	425	454	485	503	509	422
75°	234	268	308	332	340	248
85°	70	112	156	183	195	75
90°	21	64	110	139	150	14
95°	36	68	98	127	137	37
105°	109	132	169	194	203	116
115°	192	203	236	256	263	190
125°	267	269	293	311	318	238
135°	329	330	338	353	358	253
145°	380	379	379	385	389	237
155°	416	415	415	416	414	192
165°	439	438	438	440	437	124
175°	449	448	448	450	447	43
180°	449	449	449	449	449	



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CATALOG NUMBER: S125DIP-S1090D365U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9
2.5°	1300.9	1300.4	1300.0	1299.6	1299.1	1298.1	1296.5	1294.9	1293.4	1291.8	1293.4
5°	1297.9	1297.3	1296.8	1296.2	1295.6	1294.3	1292.3	1290.3	1288.4	1286.4	1288.6
7.5°	1286.4	1286.2	1285.9	1285.7	1285.5	1284.4	1282.3	1280.3	1278.3	1276.2	1278.2
10°	1276.2	1276.2	1276.2	1276.2	1276.2	1275.1	1272.8	1270.5	1268.3	1266.0	1268.0
12.5°	1262.0	1262.2	1262.4	1262.6	1262.9	1262.1	1260.3	1258.5	1256.7	1254.8	1256.4
15°	1239.3	1239.6	1239.9	1240.2	1240.5	1239.6	1237.7	1235.7	1233.7	1231.7	1233.4
17.5°	1209.8	1210.3	1210.9	1211.4	1212.0	1211.4	1209.4	1207.4	1205.4	1203.4	1204.8
20°	1188.5	1189.0	1189.6	1190.1	1190.7	1190.0	1188.0	1186.0	1184.0	1182.0	1182.9
22.5°	1163.9	1165.0	1166.0	1167.1	1168.1	1167.4	1165.3	1163.1	1160.8	1158.7	1159.7
25°	1126.1	1126.9	1127.8	1128.6	1129.4	1129.1	1127.4	1125.7	1124.0	1122.3	1123.4
27.5°	1083.8	1085.1	1086.3	1087.6	1088.8	1088.4	1086.6	1084.6	1082.7	1080.8	1081.6
30°	1052.3	1054.0	1055.6	1057.3	1059.0	1059.0	1057.3	1055.6	1054.0	1052.3	1052.8
32.5°	1023.8	1025.2	1026.7	1028.2	1029.6	1029.7	1028.5	1027.3	1026.1	1024.8	1025.4
35°	974.7	976.7	978.6	980.6	982.6	983.2	982.3	981.5	980.6	979.8	980.6
37.5°	925.6	927.4	929.2	930.9	932.7	933.6	933.3	933.0	932.7	932.5	933.6
40°	891.9	894.2	896.5	898.7	901.0	902.0	901.7	901.4	901.2	900.9	902.0
42.5°	855.3	858.3	861.2	864.1	867.0	868.8	869.5	870.1	870.7	871.4	872.7
45°	802.9	806.0	809.1	812.2	815.3	817.6	819.0	820.4	821.8	823.2	825.2
47.5°	749.2	752.1	755.0	757.8	760.7	763.4	765.8	768.3	770.7	773.1	776.0
50°	712.6	715.7	718.8	721.9	725.0	728.1	731.2	734.3	737.4	740.6	743.7
52.5°	673.8	677.7	681.5	685.2	689.0	692.8	696.6	700.4	704.2	707.9	711.3
55°	617.1	621.6	626.1	630.7	635.2	639.7	644.2	648.8	653.3	657.8	660.9
57.5°	559.1	564.5	570.0	575.4	580.8	586.2	591.4	596.5	601.7	606.9	610.5
60°	520.4	526.0	531.7	537.3	543.0	548.7	554.3	560.0	565.6	571.3	575.5
62.5°	482.8	488.4	494.1	499.7	505.4	511.2	517.4	523.5	529.6	535.6	540.4
65°	425.0	431.5	438.0	444.5	451.0	457.6	464.4	471.2	478.0	484.7	489.0
67.5°	370.5	376.8	383.0	389.4	395.6	402.2	409.2	416.0	422.9	429.8	435.0
70°	330.8	337.3	343.8	350.3	356.8	363.7	371.1	378.4	385.8	393.1	398.5
72.5°	292.2	298.9	305.6	312.4	319.1	326.4	334.5	342.5	350.5	358.5	364.4
75°	234.1	241.5	248.8	256.2	263.5	271.7	280.8	289.8	298.9	307.9	313.6
77.5°	178.4	186.9	195.4	203.9	212.4	220.9	229.6	238.4	247.0	255.7	261.9
80°	143.7	152.2	160.7	169.2	177.7	186.7	196.3	205.9	215.6	225.2	231.4
82.5°	112.3	121.1	130.1	139.0	148.0	157.3	167.2	177.0	186.9	196.7	202.7
85°	69.9	79.3	88.6	97.9	107.3	116.9	126.8	136.7	146.6	156.5	162.7
87.5°	39.8	48.9	58.1	67.3	76.4	85.9	95.6	105.3	115.0	124.7	131.3
90°	20.7	30.3	40.0	49.6	59.3	69.2	79.3	89.4	99.5	109.7	116.5
92.5°	23.5	31.4	39.4	47.3	55.2	64.4	74.7	85.0	95.3	105.6	112.3
95°	35.5	42.7	49.8	56.9	64.1	71.0	77.9	84.6	91.4	98.2	104.8
97.5°	54.7	61.6	68.7	75.7	82.8	88.1	91.8	95.5	99.2	102.9	106.8
100°	69.7	75.8	82.0	88.1	94.3	102.0	111.4	120.7	130.1	139.4	134.3
102.5°	84.9	90.7	96.4	102.2	107.9	115.4	124.3	133.4	142.3	151.4	155.0
105°	109.4	114.2	119.0	123.9	128.7	135.3	143.8	152.3	160.8	169.3	174.9
107.5°	135.0	138.7	142.6	146.5	150.3	156.4	164.7	173.0	181.3	189.5	195.2
110°	151.5	154.9	158.3	161.6	165.0	170.8	178.9	186.9	195.0	203.0	208.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	168.1	170.9	173.8	176.7	179.6	184.9	192.7	200.5	208.3	216.0	220.9
115°	191.5	193.9	196.2	198.6	201.0	205.9	213.3	220.6	228.1	235.5	240.3
117.5°	215.9	217.3	218.5	219.8	221.0	225.4	232.5	239.8	247.0	254.3	258.7
120°	232.0	232.7	233.5	234.2	235.0	238.7	245.5	252.2	258.9	265.7	270.3
122.5°	245.1	245.7	246.4	247.0	247.7	251.3	257.7	264.0	270.4	276.8	281.3
125°	266.6	266.8	267.1	267.3	267.6	270.5	276.2	281.8	287.5	293.1	297.4
127.5°	286.3	286.3	286.3	286.4	286.5	288.9	293.5	298.1	302.7	307.3	311.3
130°	299.0	299.1	299.2	299.3	299.4	301.4	305.5	309.4	313.5	317.5	321.3
132.5°	310.8	311.1	311.5	311.9	312.3	313.9	316.8	319.7	322.5	325.5	329.4
135°	328.8	328.9	329.0	329.2	329.3	330.4	332.2	334.0	335.8	337.7	341.2
137.5°	345.2	345.3	345.5	345.6	345.8	346.3	347.1	348.0	348.8	349.6	353.0
140°	355.1	355.2	355.4	355.5	355.7	355.9	356.1	356.3	356.5	356.8	360.0
142.5°	365.0	364.9	364.7	364.6	364.4	364.4	364.6	364.8	365.0	365.0	367.8
145°	379.5	379.3	379.2	379.0	378.9	378.8	378.8	378.8	378.8	378.8	380.3
147.5°	390.8	390.8	390.8	390.7	390.7	390.7	390.8	390.9	391.0	391.1	391.6
150°	398.8	398.7	398.5	398.3	398.2	398.2	398.3	398.5	398.7	398.8	399.0
152.5°	406.5	406.2	405.9	405.6	405.2	405.1	405.3	405.5	405.6	405.8	405.9
155°	416.5	416.0	415.6	415.1	414.7	414.5	414.7	414.8	415.0	415.1	415.4
157.5°	424.1	423.9	423.6	423.3	423.1	422.9	422.9	423.0	423.0	423.0	423.2
160°	429.4	429.0	428.6	428.1	427.7	427.5	427.5	427.6	427.7	427.8	428.1
162.5°	433.8	433.3	432.8	432.3	432.0	431.8	431.9	431.9	432.0	432.1	432.4
165°	439.4	439.0	438.6	438.1	437.7	437.5	437.5	437.6	437.7	437.8	438.2
167.5°	443.7	443.3	442.8	442.3	441.9	441.7	441.8	441.9	442.0	442.0	442.5
170°	446.1	445.6	445.1	444.6	444.0	443.8	443.9	443.9	444.0	444.1	444.7
172.5°	447.7	447.2	446.7	446.2	445.6	445.4	445.5	445.7	445.8	446.0	446.5
175°	449.4	449.0	448.6	448.1	447.7	447.5	447.5	447.6	447.7	447.8	448.4
177.5°	450.3	449.9	449.5	449.2	448.8	448.7	448.7	448.8	448.8	448.9	449.3
180°	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9
2.5°	1294.9	1296.5	1298.1	1298.7	1298.5	1298.3	1298.1	1297.9
5°	1290.9	1293.2	1295.4	1296.5	1296.2	1295.9	1295.6	1295.3
7.5°	1280.2	1282.1	1284.1	1285.0	1284.7	1284.4	1284.1	1283.8
10°	1270.0	1272.0	1273.9	1274.8	1274.5	1274.2	1273.9	1273.7
12.5°	1257.9	1259.4	1260.9	1261.3	1260.7	1259.9	1259.1	1258.4
15°	1235.1	1236.8	1238.5	1238.8	1237.7	1236.5	1235.4	1234.3
17.5°	1206.1	1207.3	1208.6	1208.9	1208.2	1207.6	1206.9	1206.3
20°	1183.7	1184.6	1185.4	1185.9	1185.9	1185.9	1185.9	1185.9
22.5°	1160.8	1161.9	1162.9	1163.1	1162.4	1161.8	1161.1	1160.5
25°	1124.5	1125.7	1126.8	1126.6	1125.2	1123.8	1122.4	1121.0
27.5°	1082.3	1083.2	1083.9	1084.1	1083.5	1083.1	1082.5	1082.0
30°	1053.4	1054.0	1054.5	1054.7	1054.4	1054.1	1053.9	1053.6
32.5°	1026.0	1026.5	1027.1	1027.2	1026.9	1026.6	1026.3	1026.1
35°	981.5	982.3	983.2	983.5	983.5	983.5	983.5	983.5
37.5°	934.7	935.9	937.0	937.5	937.4	937.3	937.1	937.0
40°	903.1	904.3	905.4	906.3	906.8	907.4	908.0	908.5
42.5°	874.0	875.4	876.8	877.5	877.6	877.7	877.9	878.0
45°	827.2	829.2	831.1	832.3	832.5	832.8	833.1	833.4
47.5°	778.9	781.7	784.7	786.4	787.0	787.7	788.2	788.9
50°	746.8	749.9	753.0	755.0	755.8	756.7	757.5	758.4
52.5°	714.6	717.9	721.3	723.3	723.9	724.5	725.2	725.8
55°	664.0	667.1	670.2	672.4	673.5	674.7	675.8	676.9
57.5°	614.1	617.6	621.2	623.4	624.2	625.1	625.9	626.8
60°	579.8	584.0	588.2	590.8	591.6	592.5	593.3	594.2
62.5°	545.1	549.8	554.5	557.3	558.5	559.5	560.5	561.7
65°	493.2	497.5	501.7	504.4	505.6	506.7	507.8	509.0
67.5°	440.1	445.3	450.4	453.7	455.2	456.7	458.1	459.6
70°	403.9	409.3	414.6	418.2	419.9	421.6	423.3	425.0
72.5°	370.2	376.1	381.8	385.4	386.6	387.9	389.1	390.4
75°	319.2	324.9	330.5	334.0	335.5	336.9	338.3	339.7
77.5°	268.2	274.4	280.6	284.3	285.4	286.5	287.7	288.8
80°	237.6	243.8	250.1	253.7	254.9	256.0	257.1	258.3
82.5°	208.7	214.7	220.6	224.7	226.8	228.8	230.8	232.8
85°	168.9	175.1	181.3	185.6	187.8	190.1	192.4	194.6
87.5°	137.9	144.5	151.1	155.3	157.4	159.4	161.5	163.4
90°	123.4	130.3	137.1	141.7	143.9	146.1	148.3	150.5
92.5°	118.9	125.5	132.1	136.6	138.6	140.7	142.8	144.9
95°	111.4	118.0	124.6	128.8	130.8	132.8	134.8	136.8
97.5°	110.7	114.4	118.3	121.2	123.1	125.1	127.0	128.8
100°	129.2	124.1	119.0	117.2	118.6	120.0	121.4	122.8
102.5°	158.5	162.2	165.8	166.0	162.6	159.3	156.0	152.6
105°	180.6	186.2	191.9	195.7	197.6	199.4	201.4	203.3
107.5°	200.8	206.4	212.0	215.6	217.1	218.7	220.2	221.7
110°	213.4	218.5	223.7	227.2	229.3	231.4	233.5	235.4



TEST NUMBER: P333253-830

CATALOG NUMBER: S125DIP-S1090D365U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	225.7	230.6	235.5	238.8	240.7	242.6	244.5	246.4
115°	245.2	249.9	254.7	257.7	259.0	260.2	261.5	262.8
117.5°	263.2	267.6	271.9	275.0	276.7	278.5	280.2	282.0
120°	274.9	279.7	284.3	287.3	288.6	289.9	291.2	292.6
122.5°	285.7	290.1	294.5	297.4	298.6	299.9	301.1	302.5
125°	301.6	305.9	310.1	312.7	314.0	315.2	316.3	317.5
127.5°	315.3	319.3	323.4	325.9	327.0	328.1	329.2	330.3
130°	325.0	328.8	332.5	334.9	335.9	337.0	338.0	339.0
132.5°	333.3	337.2	341.1	343.5	344.3	345.2	345.9	346.8
135°	344.8	348.3	351.8	354.0	355.1	356.0	356.9	357.9
137.5°	356.4	359.8	363.1	365.1	365.9	366.6	367.4	368.2
140°	363.3	366.5	369.8	371.7	372.4	373.1	373.8	374.5
142.5°	370.4	373.2	375.8	377.5	378.1	378.9	379.6	380.2
145°	381.8	383.2	384.7	385.9	386.5	387.2	388.0	388.6
147.5°	392.2	392.7	393.2	393.5	393.5	393.4	393.4	393.4
150°	399.1	399.3	399.4	399.4	399.0	398.7	398.4	398.0
152.5°	406.0	406.1	406.3	406.1	405.7	405.2	404.7	404.3
155°	415.6	415.8	416.0	415.8	415.3	414.6	414.1	413.5
157.5°	423.5	423.7	424.0	423.8	423.2	422.5	422.0	421.4
160°	428.4	428.7	429.0	428.9	428.2	427.6	427.1	426.5
162.5°	432.9	433.3	433.8	433.6	432.9	432.3	431.7	431.0
165°	438.7	439.1	439.6	439.5	438.9	438.3	437.7	437.2
167.5°	443.1	443.6	444.1	444.0	443.4	442.7	442.1	441.4
170°	445.3	445.9	446.5	446.5	445.8	445.2	444.4	443.7
172.5°	447.0	447.6	448.1	448.1	447.4	446.7	446.0	445.4
175°	448.9	449.6	450.2	450.2	449.4	448.7	448.1	447.4
177.5°	449.8	450.2	450.5	450.5	450.1	449.6	449.1	448.7
180°	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4

(END OF REPORT)