

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: P333565-927

Luminaire Tested: **S125RDIP-S850D810U927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333565-927
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: S125RDIP-S850D810U927-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 810 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5141.6 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

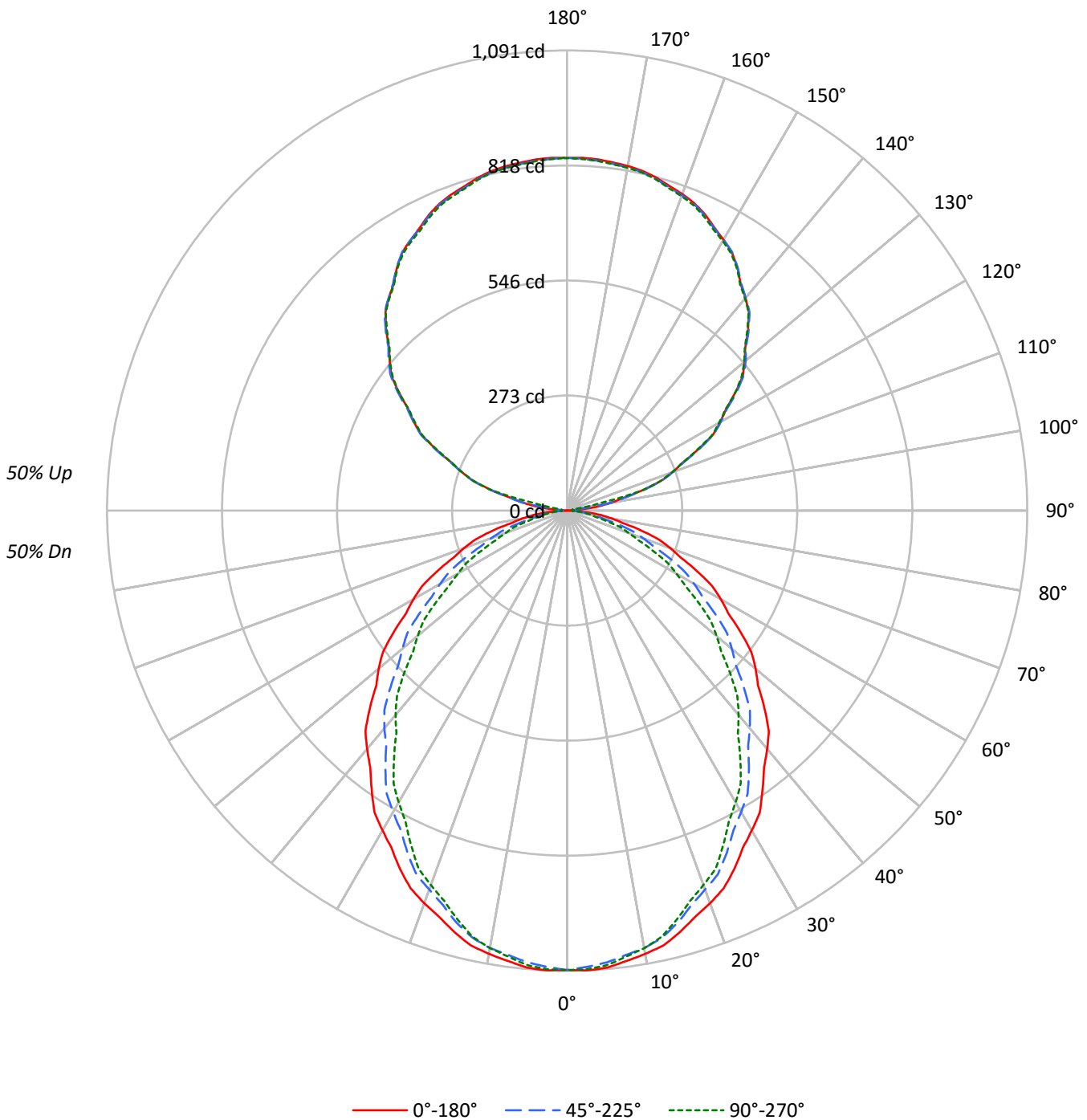
Input Watts (W): 45.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	94	90	87	90	87	83	80	73	71	69	61	60	58	50	49	48	43
2	89	82	76	71	82	76	71	66	65	61	57	54	51	49	44	42	41	36
3	82	72	65	59	75	67	61	56	57	52	48	48	44	42	39	37	35	31
4	75	64	56	50	69	60	53	47	51	46	41	43	39	36	35	32	30	27
5	69	57	49	43	63	53	46	41	46	40	36	39	34	31	32	29	26	23
6	63	51	43	38	58	48	41	36	41	36	31	35	31	27	29	26	23	20
7	59	46	39	33	54	43	36	31	37	32	28	32	27	24	27	23	21	18
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	19	16
9	51	39	31	26	47	36	29	25	31	26	22	27	23	19	23	19	17	15
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	21	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7035	7035	7035
5°	7052	6971	7014
10°	6998	6906	6906
15°	6915	6766	6711
20°	6808	6570	6491
25°	6683	6379	6238
30°	6528	6154	5957
35°	6370	5922	5643
40°	6222	5681	5334
45°	6042	5411	4997
50°	5861	5117	4646
55°	5650	4835	4271
60°	5441	4495	3867
65°	5193	4099	3406
70°	4910	3603	2936
75°	4517	3039	2443
80°	3976	2388	2049
85°	3349	1949	1830



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.4	2.0
10°-20°	286.2	5.6
20°-30°	415.1	8.1
30°-40°	473.1	9.2
40°-50°	461.1	9.0
50°-60°	388.2	7.5
60°-70°	272.1	5.3
70°-80°	139.9	2.7
80°-90°	37.1	0.7
90°-100°	30.4	0.6
100°-110°	187.2	3.6
110°-120°	339.5	6.6
120°-130°	435.7	8.5
130°-140°	468.6	9.1
140°-150°	439.8	8.6
150°-160°	355.8	6.9
160°-170°	230.1	4.5
170°-180°	79.4	1.5
0°-30°	803.8	15.6
0°-40°	1276.8	24.8
0°-60°	2126.1	41.4
0°-90°	2575.1	50.1
90°-120°	557.0	10.8
90°-150°	1901.1	37.0
90°-180°	2566.0	49.9
0°-180°	5141.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1089	1089	1089	1089	1089	
5°	1088	1084	1075	1083	1082	103
15°	1034	1029	1012	1011	1004	291
25°	938	925	895	885	875	431
35°	808	787	751	728	716	506
45°	662	636	592	561	547	510
55°	502	474	429	394	379	449
65°	340	311	268	236	223	336
75°	181	156	122	104	98	192
85°	45	31	26	26	25	51
90°	1	6	10	13	15	4
95°	35	32	10	13	13	45
105°	182	184	185	185	184	193
115°	342	345	346	343	340	339
125°	486	490	491	488	486	434
135°	606	610	609	608	604	467
145°	703	704	704	705	701	440
155°	774	771	772	773	769	357
165°	817	814	814	817	813	231
175°	836	832	833	837	832	80
180°	836	836	836	836	836	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3
2.5°	1091.2	1090.8	1090.4	1090.0	1089.5	1088.5	1087.1	1085.6	1084.2	1082.7	1084.2
5°	1087.7	1087.0	1086.2	1085.4	1084.7	1083.4	1081.3	1079.3	1077.3	1075.3	1077.1
7.5°	1077.0	1076.3	1075.5	1074.8	1074.2	1072.6	1070.2	1067.8	1065.4	1063.0	1064.2
10°	1067.1	1066.5	1066.0	1065.4	1064.9	1063.3	1060.8	1058.2	1055.7	1053.1	1053.6
12.5°	1055.9	1055.2	1054.5	1053.8	1053.1	1051.1	1047.6	1044.2	1040.8	1037.3	1037.7
15°	1034.2	1033.1	1032.0	1030.9	1029.8	1027.3	1023.5	1019.6	1015.8	1011.9	1011.8
17.5°	1009.6	1008.0	1006.3	1004.6	1002.9	999.7	994.8	990.0	985.2	980.3	979.5
20°	990.5	988.7	986.9	985.1	983.3	979.4	973.6	967.7	961.9	956.0	955.1
22.5°	969.5	967.7	965.8	964.0	962.2	958.2	952.0	945.9	939.8	933.7	931.8
25°	937.9	935.2	932.4	929.7	926.9	922.2	915.4	908.6	901.9	895.2	892.8
27.5°	901.7	898.4	895.1	891.8	888.4	883.1	875.9	868.6	861.4	854.1	850.8
30°	875.4	871.9	868.5	865.0	861.5	855.9	848.3	840.6	832.9	825.2	821.0
32.5°	849.7	845.7	841.6	837.6	833.5	827.5	819.8	811.9	804.1	796.2	791.6
35°	807.9	803.5	799.2	794.7	790.4	784.0	775.9	767.6	759.4	751.1	745.8
37.5°	766.9	761.6	756.3	750.9	745.6	738.7	730.2	721.7	713.2	704.7	698.4
40°	738.0	732.5	727.0	721.5	716.1	708.9	700.1	691.3	682.6	673.8	666.9
42.5°	707.7	702.1	696.5	690.8	685.2	677.9	668.8	659.7	650.6	641.6	634.9
45°	661.5	656.2	650.9	645.5	640.2	632.6	622.5	612.5	602.5	592.4	585.0
47.5°	613.6	608.0	602.4	596.8	591.2	583.4	573.2	563.1	552.9	542.8	535.3
50°	583.3	577.3	571.2	565.2	559.2	551.0	540.5	530.1	519.7	509.3	501.6
52.5°	550.4	544.2	538.1	531.9	525.7	517.7	507.9	498.0	488.1	478.3	470.1
55°	501.8	496.0	490.2	484.3	478.5	470.4	460.2	450.0	439.7	429.4	421.2
57.5°	452.8	446.6	440.3	434.0	427.9	419.8	409.9	400.0	390.1	380.2	372.2
60°	421.2	414.9	408.4	402.0	395.6	387.5	377.6	367.7	357.9	348.0	340.0
62.5°	387.7	381.6	375.5	369.3	363.2	355.2	345.2	335.2	325.1	315.1	307.7
65°	339.8	333.6	327.3	321.2	314.9	307.0	297.3	287.6	277.9	268.2	260.9
67.5°	292.2	286.0	279.8	273.6	267.4	259.6	250.3	241.1	231.8	222.4	215.8
70°	260.0	253.7	247.6	241.3	235.1	227.4	218.3	209.1	200.0	190.8	185.2
72.5°	228.4	222.3	216.3	210.2	204.1	196.8	188.2	179.7	171.1	162.6	157.3
75°	181.0	175.5	170.0	164.5	159.1	152.5	144.8	137.1	129.4	121.8	117.7
77.5°	134.0	129.5	125.2	120.8	116.4	111.1	105.0	98.9	92.7	86.6	83.7
80°	106.9	102.6	98.2	93.8	89.4	84.7	79.5	74.4	69.3	64.2	62.5
82.5°	80.6	76.7	72.7	68.8	64.8	61.1	57.6	54.1	50.5	47.1	46.3
85°	45.2	42.0	38.7	35.4	32.1	29.9	29.1	28.1	27.3	26.3	26.1
87.5°	15.3	14.5	13.6	12.8	12.0	11.6	11.7	11.7	11.8	11.9	12.0
90°	0.6	1.7	2.9	4.0	5.0	6.0	7.1	8.0	9.0	9.9	10.6
92.5°	9.5	8.8	8.0	7.2	6.5	6.5	7.4	8.2	9.0	9.9	10.6
95°	35.3	34.9	34.5	34.1	33.7	30.8	25.6	20.4	15.1	9.9	10.6
97.5°	73.8	74.5	75.2	76.0	76.7	71.9	61.6	51.2	40.8	30.5	26.6
100°	103.5	103.9	104.3	104.7	105.1	105.6	106.2	106.7	107.3	107.8	87.3
102.5°	133.7	134.2	134.8	135.2	135.8	136.2	136.6	136.9	137.2	137.5	133.6
105°	182.1	182.7	183.2	183.8	184.3	184.6	184.6	184.6	184.6	184.6	184.6
107.5°	232.4	232.4	232.4	232.4	232.4	232.6	232.8	233.1	233.4	233.7	233.7
110°	265.1	265.1	265.1	265.1	265.1	265.3	265.5	265.9	266.1	266.4	266.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	295.9	296.2	296.5	296.9	297.2	297.5	297.6	297.8	297.9	298.1	297.6
115°	342.0	342.7	343.3	344.0	344.8	345.2	345.3	345.4	345.5	345.7	345.2
117.5°	389.7	389.7	389.6	389.6	389.6	389.8	390.3	390.9	391.4	391.9	391.2
120°	419.4	419.3	419.1	419.0	418.8	419.0	419.4	419.9	420.3	420.6	420.4
122.5°	445.7	446.2	446.7	447.3	447.7	448.1	448.3	448.5	448.7	448.9	448.6
125°	486.3	487.3	488.2	489.3	490.2	490.7	490.7	490.7	490.7	490.7	490.1
127.5°	525.1	525.8	526.5	527.2	527.8	528.1	528.1	528.0	527.9	527.8	527.5
130°	548.9	549.6	550.2	551.0	551.7	552.1	552.2	552.3	552.5	552.6	552.2
132.5°	572.7	573.5	574.3	575.0	575.9	576.2	575.8	575.5	575.2	574.9	574.8
135°	606.5	607.4	608.2	609.0	609.8	610.1	609.8	609.5	609.3	609.0	608.7
137.5°	637.6	638.3	639.1	639.8	640.5	640.7	640.5	640.2	640.0	639.7	639.8
140°	657.9	658.2	658.5	658.8	659.0	659.1	658.9	658.9	658.7	658.5	658.9
142.5°	676.3	676.4	676.6	676.8	676.9	677.1	677.3	677.5	677.7	677.9	677.9
145°	703.1	703.5	703.7	704.0	704.3	704.4	704.4	704.4	704.4	704.4	704.6
147.5°	726.7	726.7	726.6	726.5	726.5	726.5	726.7	726.8	727.1	727.2	727.4
150°	741.6	741.3	741.0	740.8	740.5	740.5	740.8	741.0	741.3	741.6	741.9
152.5°	756.0	755.3	754.7	754.2	753.5	753.4	753.6	753.9	754.2	754.5	754.7
155°	774.4	773.6	772.8	771.9	771.1	770.8	771.1	771.3	771.7	771.9	772.3
157.5°	788.6	788.1	787.7	787.2	786.6	786.4	786.5	786.5	786.5	786.6	787.0
160°	798.6	797.7	796.9	796.1	795.3	795.0	795.0	795.2	795.4	795.4	796.0
162.5°	806.5	805.6	804.9	804.0	803.2	802.9	803.0	803.1	803.3	803.4	804.1
165°	817.1	816.3	815.5	814.7	813.8	813.5	813.7	813.8	813.9	814.0	814.9
167.5°	825.1	824.3	823.4	822.5	821.7	821.3	821.4	821.6	821.7	821.9	822.8
170°	829.6	828.5	827.6	826.6	825.7	825.3	825.4	825.5	825.7	825.9	827.0
172.5°	832.5	831.6	830.6	829.7	828.6	828.3	828.5	828.8	829.0	829.3	830.3
175°	835.8	834.9	834.1	833.3	832.4	832.1	832.2	832.3	832.5	832.7	833.8
177.5°	837.3	836.5	835.9	835.3	834.6	834.3	834.4	834.5	834.6	834.7	835.5
180°	835.8	835.8	835.8	835.8	835.8	835.8	835.8	835.8	835.8	835.8	835.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3
2.5°	1085.6	1087.1	1088.5	1089.3	1089.1	1088.9	1088.8	1088.6
5°	1079.0	1080.8	1082.6	1083.4	1083.0	1082.6	1082.3	1081.9
7.5°	1065.6	1066.8	1068.1	1068.5	1068.1	1067.7	1067.3	1066.9
10°	1054.2	1054.7	1055.3	1055.3	1054.7	1054.2	1053.6	1053.1
12.5°	1038.1	1038.5	1038.9	1038.7	1037.8	1037.0	1036.2	1035.3
15°	1011.6	1011.4	1011.2	1010.3	1008.7	1007.0	1005.4	1003.7
17.5°	978.5	977.6	976.7	975.6	974.2	972.9	971.5	970.2
20°	954.2	953.2	952.4	951.1	949.4	947.8	946.1	944.5
22.5°	930.0	928.3	926.5	924.9	923.5	922.2	920.8	919.5
25°	890.4	888.0	885.7	883.4	881.4	879.4	877.4	875.4
27.5°	847.5	844.1	840.8	838.2	836.3	834.3	832.4	830.4
30°	816.8	812.6	808.3	805.5	803.8	802.2	800.5	798.8
32.5°	787.0	782.3	777.7	774.3	772.2	770.2	768.0	766.0
35°	740.5	735.2	729.9	726.0	723.4	720.9	718.4	715.7
37.5°	692.1	685.6	679.3	674.9	672.4	669.9	667.4	665.0
40°	659.9	653.0	646.0	641.4	639.3	637.1	634.9	632.7
42.5°	628.3	621.6	615.0	610.0	606.8	603.6	600.3	597.1
45°	577.7	570.5	563.1	558.1	555.3	552.6	549.9	547.1
47.5°	527.8	520.2	512.7	507.4	504.4	501.4	498.3	495.3
50°	493.9	486.2	478.6	473.3	470.6	467.9	465.1	462.4
52.5°	461.8	453.5	445.3	439.7	437.0	434.3	431.6	428.8
55°	413.0	404.8	396.6	390.9	388.1	385.2	382.2	379.3
57.5°	364.2	356.2	348.1	342.8	340.2	337.5	335.0	332.4
60°	331.9	323.8	315.8	310.5	307.7	305.0	302.2	299.4
62.5°	300.2	292.7	285.3	280.2	277.4	274.6	272.0	269.2
65°	253.6	246.3	238.9	233.9	231.2	228.5	225.7	222.9
67.5°	209.1	202.4	195.7	191.2	189.1	186.9	184.7	182.5
70°	179.5	173.9	168.2	164.3	162.1	159.9	157.7	155.5
72.5°	152.1	146.9	141.6	138.3	136.8	135.4	134.0	132.5
75°	113.8	109.7	105.7	103.1	101.7	100.4	99.2	97.9
77.5°	80.9	78.1	75.3	73.4	72.5	71.5	70.6	69.6
80°	60.9	59.3	57.6	56.6	56.2	55.8	55.5	55.1
82.5°	45.6	44.8	44.0	43.5	43.3	43.1	42.9	42.6
85°	26.0	25.7	25.6	25.4	25.2	25.0	24.9	24.7
87.5°	12.1	12.3	12.4	12.4	12.4	12.3	12.3	12.2
90°	11.3	12.0	12.7	13.2	13.6	14.0	14.4	14.9
92.5°	11.3	12.0	12.7	13.1	13.3	13.5	13.7	13.9
95°	11.3	12.0	12.7	13.0	13.0	13.0	13.0	13.0
97.5°	22.7	18.9	15.0	13.0	13.0	13.0	13.0	13.0
100°	66.8	46.3	25.7	15.2	14.7	14.1	13.5	13.0
102.5°	129.8	125.9	122.0	115.4	106.0	96.6	87.3	78.0
105°	184.6	184.6	184.6	184.6	184.4	184.3	184.1	184.0
107.5°	233.8	233.8	233.8	233.6	233.2	232.7	232.3	232.0
110°	265.5	265.1	264.7	264.6	264.7	264.9	265.0	265.1



TEST NUMBER: P333565-927

CATALOG NUMBER: S125RDIP-S850D810U927-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	297.1	296.5	296.0	295.6	295.5	295.2	295.1	294.9
115°	344.6	344.0	343.5	342.8	342.0	341.1	340.3	339.5
117.5°	390.5	389.8	389.0	388.5	388.2	387.8	387.5	387.1
120°	420.1	419.9	419.5	419.1	418.4	417.7	417.0	416.3
122.5°	448.4	448.1	447.8	447.3	446.5	445.7	444.9	444.1
125°	489.6	489.0	488.5	488.0	487.6	487.1	486.7	486.3
127.5°	527.2	527.0	526.6	525.9	525.0	523.9	522.9	521.9
130°	551.8	551.4	551.0	550.4	549.7	549.1	548.3	547.6
132.5°	574.7	574.6	574.6	574.2	573.5	572.8	572.1	571.5
135°	608.5	608.2	607.9	607.4	606.5	605.7	604.8	604.0
137.5°	639.8	639.8	639.9	639.6	638.9	638.2	637.5	636.8
140°	659.1	659.4	659.7	659.4	658.5	657.7	656.9	656.1
142.5°	678.0	678.0	678.1	677.7	676.9	676.0	675.3	674.4
145°	704.6	704.8	705.0	704.6	703.8	703.0	702.1	701.3
147.5°	727.5	727.7	727.9	727.5	726.4	725.5	724.5	723.5
150°	742.1	742.4	742.7	742.3	741.2	740.1	738.9	737.8
152.5°	755.0	755.3	755.6	755.2	754.2	753.2	752.3	751.2
155°	772.8	773.2	773.6	773.2	772.1	771.0	769.9	768.8
157.5°	787.4	787.9	788.3	788.0	786.9	785.8	784.7	783.5
160°	796.5	797.1	797.6	797.4	796.3	795.2	794.1	793.0
162.5°	804.9	805.7	806.4	806.3	805.0	803.8	802.6	801.5
165°	815.7	816.5	817.4	817.2	816.1	815.0	813.9	812.8
167.5°	823.9	824.8	825.9	825.7	824.4	823.2	822.0	820.8
170°	828.0	829.1	830.2	830.1	828.9	827.7	826.4	825.2
172.5°	831.2	832.3	833.3	833.1	831.9	830.7	829.4	828.1
175°	834.8	835.9	837.0	836.9	835.8	834.5	833.3	832.0
177.5°	836.3	837.0	837.8	837.8	836.9	836.0	835.1	834.2
180°	835.8	835.8	835.8	835.8	835.8	835.8	835.8	835.8

(END OF REPORT)