

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: P333650

Luminaire Tested: **S125RDIW-S375D1050U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333650
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: S125RDIW-S375D1050U835-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1050 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5638.1 lumens
Efficiency: N/A
Efficacy: 148.4 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: Semi-Indirect

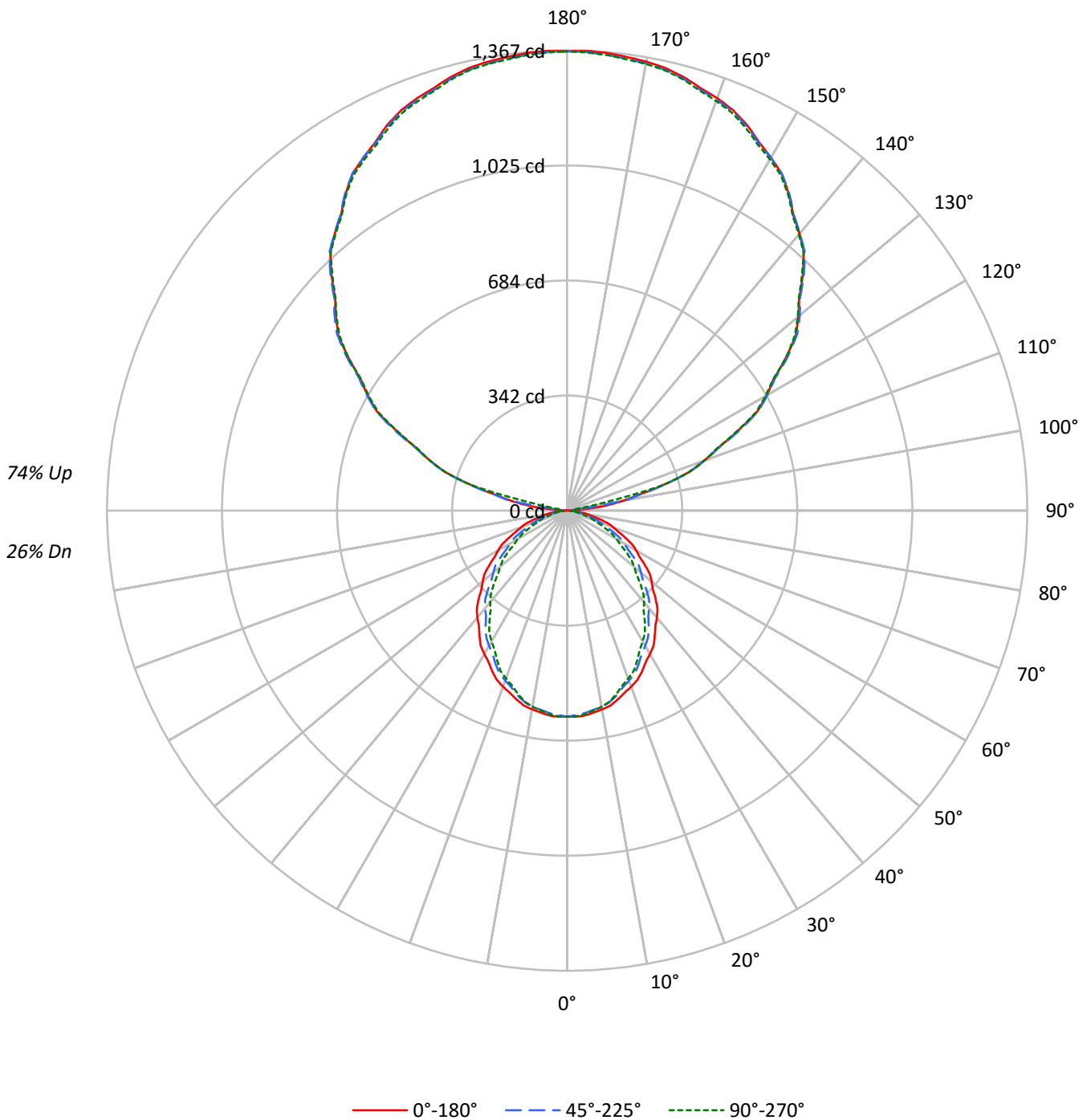
Input Watts (W): 38
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333650

CATALOG NUMBER: S125RDIW-S375D1050U835-4F0-1E-UDD-F

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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	34	34	34	26
1	92	88	85	81	82	79	76	73	61	59	57	45	44	43	30	29	29	22
2	84	77	71	66	75	69	64	60	54	50	48	40	37	36	26	25	24	18
3	77	68	61	55	68	61	55	50	47	43	40	35	32	30	24	22	21	16
4	70	60	52	47	62	54	47	42	42	38	34	31	28	26	21	19	18	14
5	64	53	46	40	57	48	41	36	38	33	29	28	25	22	19	17	16	12
6	59	48	40	34	53	43	36	31	34	29	25	25	22	20	17	15	14	10
7	55	43	35	30	49	39	32	27	31	26	22	23	20	17	16	14	12	9
8	51	39	31	26	45	35	29	24	28	23	20	21	18	15	14	12	11	8
9	47	35	28	23	42	32	26	21	25	21	18	19	16	14	13	11	10	8
10	44	32	25	21	39	29	23	19	23	19	16	18	14	12	12	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3952	3952	3952
5°	3961	3916	3940
10°	3931	3880	3880
15°	3884	3801	3770
20°	3824	3691	3647
25°	3755	3583	3504
30°	3667	3457	3347
35°	3578	3327	3170
40°	3495	3191	2996
45°	3394	3040	2807
50°	3293	2875	2609
55°	3174	2716	2399
60°	3056	2525	2173
65°	2917	2303	1913
70°	2757	2024	1648
75°	2538	1707	1372
80°	2235	1339	1153
85°	1882	1097	1030



TEST NUMBER: P333650

CATALOG NUMBER: S125RDIW-S375D1050U835-4F0-1E-UDD-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.5	1.0
10°-20°	160.8	2.9
20°-30°	233.2	4.1
30°-40°	265.7	4.7
40°-50°	259.0	4.6
50°-60°	218.0	3.9
60°-70°	152.8	2.7
70°-80°	78.6	1.4
80°-90°	22.7	0.4
90°-100°	49.6	0.9
100°-110°	305.6	5.4
110°-120°	554.2	9.8
120°-130°	711.2	12.6
130°-140°	765.0	13.6
140°-150°	718.0	12.7
150°-160°	580.8	10.3
160°-170°	375.7	6.7
170°-180°	129.6	2.3
0°-30°	451.5	8.0
0°-40°	717.3	12.7
0°-60°	1194.3	21.2
0°-90°	1448.4	25.7
90°-120°	909.3	16.1
90°-150°	3103.6	55.0
90°-180°	4190.0	74.3
0°-180°	5638.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	612	612	612	612	612	
5°	611	609	604	608	608	58
15°	581	578	568	568	564	164
25°	527	519	503	497	492	242
35°	454	442	422	409	402	284
45°	372	358	333	315	307	287
55°	282	267	241	221	213	252
65°	191	175	151	133	125	189
75°	102	88	68	59	55	108
85°	25	17	15	14	14	29
90°	1	9	16	21	24	4
95°	58	53	16	21	21	73
105°	297	301	301	301	300	315
115°	558	563	564	560	554	553
125°	794	801	801	797	794	709
135°	990	996	994	992	986	763
145°	1148	1150	1150	1151	1145	718
155°	1264	1259	1260	1263	1255	582
165°	1334	1328	1329	1334	1327	377
175°	1364	1359	1359	1366	1358	130
180°	1364	1364	1364	1364	1364	



TEST NUMBER: P333650

CATALOG NUMBER: S125RDIW-S375D1050U835-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9
2.5°	613.0	612.8	612.5	612.3	612.0	611.5	610.7	609.8	609.0	608.2	609.0
5°	611.0	610.6	610.2	609.7	609.3	608.6	607.4	606.3	605.2	604.0	605.1
7.5°	605.0	604.6	604.2	603.8	603.4	602.5	601.2	599.8	598.5	597.1	597.8
10°	599.4	599.1	598.8	598.5	598.2	597.3	595.9	594.4	593.0	591.6	591.9
12.5°	593.1	592.7	592.4	592.0	591.6	590.4	588.5	586.6	584.6	582.7	582.9
15°	580.9	580.3	579.7	579.1	578.5	577.1	574.9	572.8	570.6	568.5	568.4
17.5°	567.2	566.2	565.3	564.3	563.4	561.6	558.8	556.1	553.4	550.7	550.2
20°	556.4	555.4	554.4	553.4	552.3	550.2	546.9	543.6	540.3	537.0	536.5
22.5°	544.6	543.6	542.6	541.5	540.5	538.3	534.8	531.4	527.9	524.5	523.5
25°	526.9	525.3	523.8	522.2	520.7	518.0	514.2	510.4	506.6	502.8	501.5
27.5°	506.5	504.7	502.8	500.9	499.0	496.1	492.0	487.9	483.9	479.8	477.9
30°	491.7	489.8	487.8	485.9	483.9	480.8	476.5	472.2	467.9	463.5	461.2
32.5°	477.3	475.0	472.8	470.5	468.2	464.9	460.5	456.1	451.7	447.3	444.7
35°	453.8	451.4	448.9	446.4	444.0	440.4	435.8	431.2	426.6	422.0	419.0
37.5°	430.8	427.8	424.8	421.8	418.8	414.9	410.2	405.4	400.7	395.9	392.3
40°	414.6	411.5	408.4	405.3	402.2	398.2	393.3	388.4	383.4	378.5	374.6
42.5°	397.5	394.4	391.2	388.1	384.9	380.8	375.7	370.6	365.5	360.4	356.7
45°	371.6	368.6	365.6	362.6	359.7	355.3	349.7	344.1	338.4	332.8	328.6
47.5°	344.7	341.5	338.4	335.2	332.1	327.7	322.0	316.3	310.6	304.9	300.7
50°	327.7	324.3	320.9	317.5	314.1	309.5	303.6	297.8	291.9	286.1	281.8
52.5°	309.2	305.7	302.2	298.8	295.3	290.8	285.3	279.7	274.2	268.7	264.1
55°	281.9	278.6	275.3	272.1	268.8	264.3	258.5	252.7	247.0	241.2	236.6
57.5°	254.4	250.9	247.3	243.8	240.3	235.8	230.2	224.7	219.2	213.6	209.1
60°	236.6	233.0	229.4	225.8	222.2	217.7	212.1	206.6	201.0	195.5	191.0
62.5°	217.8	214.3	210.9	207.5	204.0	199.5	193.9	188.3	182.6	177.0	172.8
65°	190.9	187.4	183.9	180.4	176.9	172.4	167.0	161.6	156.1	150.7	146.6
67.5°	164.2	160.7	157.2	153.7	150.2	145.8	140.6	135.4	130.2	125.0	121.2
70°	146.0	142.6	139.1	135.6	132.1	127.8	122.6	117.5	112.4	107.2	104.0
72.5°	128.3	124.9	121.5	118.1	114.7	110.5	105.7	100.9	96.1	91.3	88.4
75°	101.7	98.6	95.5	92.4	89.4	85.7	81.3	77.0	72.7	68.4	66.1
77.5°	75.2	72.8	70.3	67.8	65.4	62.4	59.0	55.5	52.1	48.6	47.0
80°	60.1	57.6	55.2	52.7	50.2	47.6	44.7	41.8	38.9	36.0	35.1
82.5°	45.3	43.1	40.9	38.6	36.4	34.3	32.4	30.4	28.4	26.4	26.0
85°	25.4	23.6	21.7	19.9	18.0	16.8	16.3	15.8	15.3	14.8	14.7
87.5°	8.7	8.5	8.3	8.1	7.8	7.9	8.1	8.3	8.5	8.8	9.0
90°	1.0	2.8	4.6	6.4	8.2	9.9	11.5	13.0	14.6	16.2	17.3
92.5°	15.6	14.3	13.1	11.8	10.5	10.6	12.0	13.4	14.8	16.2	17.3
95°	57.6	57.0	56.3	55.6	55.0	50.3	41.8	33.3	24.7	16.2	17.3
97.5°	120.4	121.6	122.8	124.0	125.2	117.4	100.5	83.6	66.7	49.8	43.4
100°	168.9	169.6	170.2	170.9	171.6	172.4	173.3	174.2	175.1	176.0	142.5
102.5°	218.3	219.1	220.0	220.8	221.7	222.4	222.9	223.4	224.0	224.5	218.2
105°	297.3	298.2	299.1	300.0	300.9	301.4	301.4	301.4	301.4	301.4	301.4
107.5°	379.5	379.5	379.5	379.5	379.5	379.7	380.1	380.6	381.0	381.5	381.5
110°	432.9	432.9	432.9	432.9	432.9	433.1	433.5	434.0	434.4	434.9	434.2



TEST NUMBER: P333650

CATALOG NUMBER: S125RDIW-S375D1050U835-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	483.0	483.6	484.1	484.6	485.2	485.6	485.9	486.1	486.4	486.7	485.8
115°	558.3	559.4	560.5	561.6	562.8	563.4	563.7	563.9	564.1	564.3	563.4
117.5°	636.2	636.1	636.1	636.0	636.0	636.4	637.2	638.1	638.9	639.8	638.6
120°	684.7	684.5	684.2	684.0	683.8	684.0	684.7	685.4	686.0	686.7	686.3
122.5°	727.6	728.4	729.3	730.1	731.0	731.6	731.9	732.2	732.5	732.8	732.4
125°	793.9	795.5	797.1	798.6	800.2	801.0	801.0	801.0	801.0	801.0	800.1
127.5°	857.2	858.4	859.5	860.6	861.7	862.2	862.1	862.0	861.8	861.7	861.2
130°	896.1	897.2	898.3	899.4	900.6	901.2	901.5	901.7	901.9	902.1	901.5
132.5°	934.9	936.2	937.5	938.8	940.1	940.5	940.0	939.5	939.0	938.6	938.4
135°	990.1	991.5	992.8	994.2	995.5	996.0	995.5	995.1	994.6	994.2	993.7
137.5°	1040.9	1042.1	1043.2	1044.4	1045.6	1046.0	1045.6	1045.2	1044.7	1044.3	1044.4
140°	1074.1	1074.5	1075.0	1075.4	1075.9	1076.0	1075.8	1075.5	1075.3	1075.1	1075.5
142.5°	1104.0	1104.3	1104.6	1104.8	1105.1	1105.4	1105.7	1106.0	1106.3	1106.6	1106.7
145°	1147.9	1148.4	1148.8	1149.3	1149.7	1149.9	1149.9	1149.9	1149.9	1149.9	1150.2
147.5°	1186.3	1186.3	1186.2	1186.1	1186.0	1186.1	1186.3	1186.6	1186.9	1187.1	1187.4
150°	1210.6	1210.2	1209.7	1209.3	1208.8	1208.8	1209.3	1209.7	1210.2	1210.6	1211.1
152.5°	1234.1	1233.1	1232.1	1231.1	1230.1	1229.9	1230.3	1230.8	1231.2	1231.6	1232.1
155°	1264.2	1262.9	1261.5	1260.2	1258.8	1258.4	1258.8	1259.3	1259.7	1260.2	1260.8
157.5°	1287.5	1286.7	1285.9	1285.1	1284.2	1283.9	1283.9	1283.9	1284.0	1284.0	1284.8
160°	1303.7	1302.3	1301.0	1299.6	1298.3	1297.7	1297.9	1298.2	1298.4	1298.6	1299.5
162.5°	1316.6	1315.3	1313.9	1312.6	1311.2	1310.6	1310.9	1311.1	1311.3	1311.5	1312.8
165°	1334.0	1332.7	1331.3	1330.0	1328.6	1328.0	1328.3	1328.5	1328.7	1328.9	1330.3
167.5°	1346.9	1345.6	1344.2	1342.8	1341.4	1340.8	1341.0	1341.2	1341.5	1341.7	1343.3
170°	1354.2	1352.7	1351.1	1349.5	1347.9	1347.3	1347.5	1347.7	1347.9	1348.2	1350.0
172.5°	1359.1	1357.5	1355.9	1354.4	1352.8	1352.2	1352.6	1353.0	1353.4	1353.8	1355.4
175°	1364.3	1363.0	1361.6	1360.3	1358.9	1358.4	1358.6	1358.8	1359.1	1359.3	1361.1
177.5°	1366.8	1365.7	1364.6	1363.5	1362.5	1362.0	1362.2	1362.4	1362.5	1362.7	1364.0
180°	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3



TEST NUMBER: P333650

CATALOG NUMBER: S125RDIW-S375D1050U835-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9
2.5°	609.8	610.7	611.5	611.9	611.8	611.7	611.6	611.5
5°	606.1	607.1	608.1	608.6	608.4	608.1	607.9	607.7
7.5°	598.5	599.3	600.0	600.2	600.0	599.8	599.6	599.3
10°	592.2	592.5	592.8	592.8	592.5	592.2	591.9	591.6
12.5°	583.1	583.4	583.6	583.5	583.0	582.5	582.1	581.6
15°	568.2	568.1	568.0	567.5	566.6	565.7	564.8	563.8
17.5°	549.7	549.2	548.7	548.0	547.3	546.5	545.7	545.0
20°	536.0	535.5	535.0	534.3	533.3	532.4	531.5	530.6
22.5°	522.4	521.4	520.4	519.5	518.8	518.0	517.3	516.5
25°	500.2	498.8	497.5	496.3	495.1	494.0	492.9	491.7
27.5°	476.1	474.2	472.3	470.9	469.8	468.7	467.6	466.5
30°	458.8	456.5	454.1	452.5	451.5	450.6	449.7	448.8
32.5°	442.1	439.5	436.8	435.0	433.8	432.6	431.4	430.3
35°	416.0	413.0	410.0	407.8	406.4	405.0	403.5	402.1
37.5°	388.7	385.2	381.6	379.1	377.7	376.3	374.9	373.5
40°	370.7	366.8	362.9	360.3	359.1	357.9	356.6	355.4
42.5°	352.9	349.2	345.4	342.7	340.9	339.0	337.2	335.4
45°	324.5	320.4	316.3	313.5	312.0	310.4	308.9	307.3
47.5°	296.5	292.2	288.0	285.0	283.3	281.6	279.9	278.2
50°	277.4	273.1	268.8	265.9	264.4	262.8	261.3	259.7
52.5°	259.4	254.8	250.1	247.0	245.5	244.0	242.4	240.9
55°	232.0	227.4	222.8	219.6	218.0	216.3	214.7	213.1
57.5°	204.6	200.1	195.5	192.5	191.1	189.6	188.2	186.7
60°	186.5	181.9	177.4	174.4	172.8	171.3	169.8	168.2
62.5°	168.6	164.4	160.2	157.4	155.8	154.3	152.8	151.2
65°	142.4	138.3	134.2	131.4	129.9	128.3	126.8	125.2
67.5°	117.4	113.7	109.9	107.4	106.2	105.0	103.7	102.5
70°	100.9	97.7	94.5	92.3	91.0	89.8	88.6	87.3
72.5°	85.4	82.5	79.6	77.7	76.9	76.1	75.2	74.4
75°	63.9	61.6	59.4	57.9	57.2	56.4	55.7	55.0
77.5°	45.5	43.9	42.3	41.2	40.7	40.2	39.6	39.1
80°	34.2	33.3	32.4	31.8	31.6	31.4	31.2	31.0
82.5°	25.6	25.1	24.7	24.4	24.3	24.2	24.1	23.9
85°	14.6	14.5	14.4	14.3	14.2	14.1	14.0	13.9
87.5°	9.2	9.5	9.7	9.8	9.9	9.9	10.0	10.0
90°	18.4	19.6	20.7	21.6	22.3	22.9	23.6	24.3
92.5°	18.4	19.6	20.7	21.4	21.7	22.0	22.3	22.7
95°	18.4	19.6	20.7	21.2	21.2	21.2	21.2	21.2
97.5°	37.1	30.7	24.4	21.2	21.2	21.2	21.2	21.2
100°	109.0	75.5	42.0	24.8	23.9	23.0	22.1	21.2
102.5°	211.8	205.5	199.2	188.4	173.1	157.8	142.5	127.2
105°	301.4	301.4	301.4	301.3	301.1	300.8	300.6	300.4
107.5°	381.6	381.6	381.7	381.4	380.7	380.0	379.3	378.7
110°	433.5	432.9	432.2	432.0	432.2	432.4	432.6	432.9



TEST NUMBER: P333650

CATALOG NUMBER: S125RDIW-S375D1050U835-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	485.0	484.1	483.3	482.7	482.4	482.0	481.7	481.4
115°	562.5	561.6	560.7	559.6	558.3	556.9	555.6	554.2
117.5°	637.5	636.3	635.1	634.2	633.7	633.1	632.5	631.9
120°	685.8	685.4	684.9	684.1	683.0	681.9	680.8	679.6
122.5°	731.9	731.5	731.0	730.2	728.9	727.6	726.3	725.0
125°	799.2	798.3	797.4	796.6	796.0	795.3	794.6	793.9
127.5°	860.7	860.2	859.7	858.6	857.0	855.3	853.6	852.0
130°	900.8	900.1	899.4	898.5	897.4	896.3	895.2	894.1
132.5°	938.3	938.1	938.0	937.4	936.3	935.1	934.0	932.9
135°	993.3	992.8	992.4	991.5	990.1	988.8	987.4	986.1
137.5°	1044.5	1044.6	1044.7	1044.2	1043.0	1041.8	1040.7	1039.5
140°	1076.0	1076.4	1076.9	1076.4	1075.1	1073.7	1072.4	1071.0
142.5°	1106.8	1106.9	1107.0	1106.4	1105.0	1103.7	1102.3	1101.0
145°	1150.4	1150.6	1150.8	1150.3	1148.9	1147.6	1146.2	1144.9
147.5°	1187.7	1188.0	1188.2	1187.6	1185.9	1184.3	1182.7	1181.1
150°	1211.5	1212.0	1212.4	1211.7	1209.9	1208.1	1206.3	1204.5
152.5°	1232.5	1233.0	1233.4	1232.9	1231.2	1229.6	1228.0	1226.4
155°	1261.5	1262.2	1262.9	1262.3	1260.5	1258.7	1256.9	1255.1
157.5°	1285.5	1286.2	1286.9	1286.4	1284.6	1282.8	1281.0	1279.2
160°	1300.4	1301.3	1302.2	1301.7	1300.0	1298.2	1296.4	1294.6
162.5°	1314.1	1315.3	1316.6	1316.2	1314.2	1312.3	1310.3	1308.3
165°	1331.6	1333.0	1334.3	1334.1	1332.3	1330.5	1328.7	1326.9
167.5°	1344.9	1346.5	1348.2	1348.0	1345.9	1343.9	1341.9	1339.9
170°	1351.8	1353.6	1355.4	1355.2	1353.2	1351.2	1349.2	1347.1
172.5°	1357.1	1358.7	1360.3	1360.1	1358.1	1356.0	1354.0	1352.0
175°	1362.9	1364.7	1366.5	1366.4	1364.3	1362.3	1360.3	1358.3
177.5°	1365.2	1366.5	1367.8	1367.7	1366.2	1364.8	1363.4	1361.9
180°	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3

(END OF REPORT)