

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: P242928

Luminaire Tested: **S125RDR-S375D935-X4F0-XX-UDD-A-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242928
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-32)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDR-S375D935-X4F0-XX-UDD-A-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1186.3 lumens
Efficiency: N/A
Efficacy: 102.3 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.21 / 1.48
Luminous Opening: Rectangular (W 3.88' x L: 0.39' x H: 0')
CIE Type: Direct

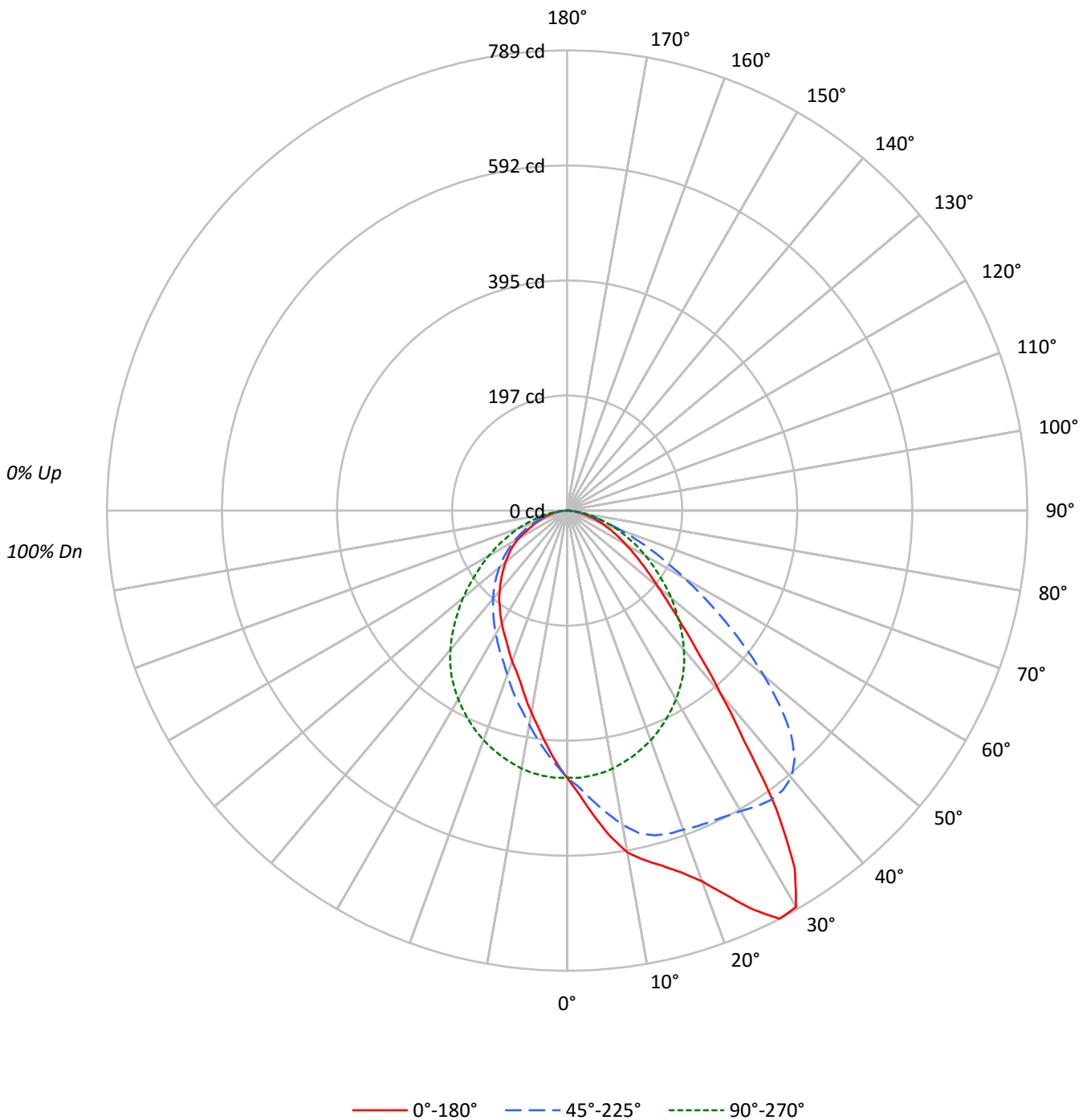
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P242928

CATALOG NUMBER: S125RDR-S375D935-X4F0-XX-UDD-A-W

Luminous Intensity Polar Plot





TEST NUMBER: P242928

CATALOG NUMBER: S125RDR-S375D935-X4F0-XX-UDD-A-W

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	92	83	75	69	90	81	74	69	78	72	67	76	70	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55
5	79	66	58	52	77	65	57	51	63	56	51	61	55	50	60	54	50	48
6	73	60	52	45	71	59	51	45	57	50	45	56	49	44	54	49	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37
8	63	50	42	36	61	49	42	36	48	41	36	47	40	36	46	40	35	34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30
10	55	42	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	3254	3254	3254
5°	3744	3258	2878
10°	4295	3242	2540
15°	4639	3209	2257
20°	5115	3170	2084
25°	5919	3119	1934
30°	6442	3065	1836
35°	5434	3002	1745
40°	3795	2889	1667
45°	2815	2737	1591
50°	2245	2580	1526
55°	1905	2383	1467
60°	1646	2208	1373
65°	1466	2016	1182
70°	1288	1847	1079
75°	1115	1601	1011
80°	847	1347	847
85°	701	1060	799



TEST NUMBER: P242928

CATALOG NUMBER: S125RDR-S375D935-X4F0-XX-UDD-A-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.9	3.7
10°-20°	128.7	10.9
20°-30°	204.1	17.2
30°-40°	246.6	20.8
40°-50°	219.6	18.5
50°-60°	168.4	14.2
60°-70°	109.4	9.2
70°-80°	53.1	4.5
80°-90°	12.5	1.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	376.7	31.8
0°-40°	623.4	52.5
0°-60°	1011.4	85.3
0°-90°	1186.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1186.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	458	458	458	458	458	
5°	525	499	457	415	403	52
15°	630	576	436	336	307	180
25°	755	587	398	270	247	347
35°	626	607	346	220	201	380
45°	280	543	272	175	158	222
55°	154	330	192	128	118	139
65°	87	157	120	82	70	87
75°	41	55	58	41	37	43
85°	9	9	13	10	10	10
90°	0	0	0	0	0	



TEST NUMBER: P242928

CATALOG NUMBER: S125RDR-S375D935-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9
2.5°	487.6	487.2	487.9	485.9	486.1	482.9	482.9	480.4	477.2	474.8	473.6
5°	524.8	525.1	524.4	521.6	519.7	516.9	513.7	508.0	503.3	498.8	495.3
7.5°	562.7	563.1	560.7	560.1	555.2	552.2	545.1	537.7	531.3	522.9	516.9
10°	595.1	594.9	592.2	590.2	586.0	580.8	573.8	564.8	556.3	546.9	537.9
12.5°	613.9	613.3	612.9	610.3	606.5	602.0	596.4	587.5	576.6	566.1	555.2
15°	630.4	629.1	626.6	623.4	618.0	612.5	606.0	598.1	588.1	576.5	566.7
17.5°	650.3	650.5	646.8	643.4	636.2	627.2	617.4	605.4	592.6	580.8	571.0
20°	676.3	675.7	671.9	663.3	654.8	642.8	631.2	615.6	599.0	582.3	569.3
22.5°	713.5	711.8	707.8	695.8	681.5	665.2	645.8	625.9	605.0	585.5	567.4
25°	754.8	753.7	746.0	732.8	714.4	690.5	667.2	641.1	612.4	587.4	566.7
27.5°	789.0	786.8	779.8	767.4	749.4	723.6	691.5	657.7	623.4	590.6	562.2
30°	784.9	787.7	787.0	781.9	769.1	746.6	717.4	678.1	635.5	595.1	559.5
32.5°	725.9	728.3	736.8	750.5	754.6	749.0	729.1	693.6	649.0	601.6	557.5
35°	626.3	629.6	642.4	662.5	688.9	710.8	715.4	695.8	656.2	606.7	555.4
37.5°	499.6	521.6	530.2	550.7	592.1	632.1	666.9	674.8	653.3	605.6	553.0
40°	409.0	413.5	432.7	456.5	490.0	532.1	587.5	627.6	628.9	598.1	545.1
42.5°	335.3	341.3	353.0	370.8	398.3	440.4	498.1	554.1	584.4	577.4	534.7
45°	280.1	284.4	294.0	308.6	330.6	365.4	414.6	475.7	524.2	543.2	514.6
47.5°	236.8	239.1	247.9	259.8	276.7	303.0	343.0	398.3	456.0	494.5	487.0
50°	203.0	205.6	212.0	220.5	234.2	255.6	286.1	330.2	390.2	440.0	450.0
52.5°	176.7	178.7	182.1	190.0	200.7	216.0	239.1	278.0	330.4	384.2	410.5
55°	153.7	155.3	158.4	163.0	172.0	183.8	205.1	232.7	276.3	329.7	363.5
57.5°	134.2	135.0	136.8	141.3	147.9	156.8	172.9	198.1	229.7	279.9	317.1
60°	115.8	116.5	119.2	122.0	126.9	134.8	146.8	163.1	193.2	232.9	270.7
62.5°	101.1	101.5	102.2	105.1	109.2	114.8	123.7	136.3	158.6	192.3	227.4
65°	87.2	87.4	87.8	90.0	92.7	97.2	103.4	112.8	130.8	157.1	188.7
67.5°	73.3	73.7	75.0	75.7	78.9	81.2	85.1	92.7	106.6	125.4	150.9
70°	62.0	61.8	63.2	64.1	65.0	67.9	70.3	76.1	84.0	97.5	118.0
72.5°	51.5	50.9	51.3	51.5	52.8	54.5	57.0	60.0	65.6	73.9	88.3
75°	40.6	40.8	40.8	41.2	42.1	42.9	43.6	45.5	48.9	55.1	63.5
77.5°	30.4	30.1	31.0	31.0	31.8	32.7	33.3	34.0	35.3	38.2	43.2
80°	20.7	20.7	20.9	21.4	21.2	21.6	22.6	23.3	25.0	26.5	28.0
82.5°	14.7	14.5	14.7	14.7	14.7	15.0	15.2	15.2	15.6	16.2	17.1
85°	8.6	8.6	8.8	8.8	9.0	9.0	9.2	9.2	9.2	9.4	9.6
87.5°	4.1	3.9	3.8	3.8	3.9	4.3	4.1	3.9	3.9	3.9	4.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P242928

CATALOG NUMBER: S125RDR-S375D935-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9
2.5°	473.6	472.3	469.9	467.6	464.8	462.4	460.7	458.6	456.0	452.8	450.2
5°	491.3	487.2	481.7	477.0	471.0	466.3	461.4	456.7	452.0	446.0	440.8
7.5°	510.9	502.8	495.3	485.5	476.7	468.9	461.4	453.7	446.4	438.1	430.4
10°	528.5	518.2	506.7	493.6	481.5	470.1	459.6	449.2	438.3	428.7	418.4
12.5°	545.1	531.0	517.4	500.0	484.9	470.3	456.2	442.6	430.8	417.6	406.4
15°	553.7	540.6	525.9	505.6	485.5	468.6	452.8	436.1	421.6	407.7	395.3
17.5°	558.8	544.9	528.0	508.2	486.6	465.6	445.6	427.8	411.2	395.3	381.5
20°	556.5	543.2	525.7	507.1	483.6	461.4	439.4	419.1	400.2	383.1	368.2
22.5°	551.1	537.2	520.4	500.5	478.5	454.7	430.8	408.8	388.7	370.8	354.3
25°	545.6	526.8	509.5	490.4	469.1	445.8	421.6	397.7	376.5	358.4	340.8
27.5°	540.4	517.6	496.2	477.8	455.0	434.0	410.3	385.7	363.5	345.3	327.2
30°	532.7	506.4	482.1	460.5	439.3	419.5	397.3	373.5	350.5	331.6	313.1
32.5°	523.1	494.7	467.4	441.7	421.4	401.8	382.3	359.7	337.6	317.8	299.0
35°	515.4	479.7	450.7	424.2	401.5	382.5	364.4	346.0	323.7	303.4	285.1
37.5°	504.7	465.4	432.7	403.7	380.0	361.2	346.8	329.3	308.4	288.7	271.8
40°	495.1	449.6	412.9	384.4	359.2	339.1	325.7	311.4	292.8	274.6	257.7
42.5°	482.3	435.1	393.0	362.9	337.6	318.4	304.9	292.8	278.0	261.1	242.7
45°	464.8	415.6	372.5	340.6	315.0	296.0	283.4	272.3	260.5	244.7	228.9
47.5°	444.0	397.0	351.7	316.5	291.9	274.0	261.6	252.4	243.8	230.1	214.1
50°	417.8	372.9	328.9	295.1	268.4	251.7	240.2	233.3	225.5	213.3	200.5
52.5°	387.0	348.1	305.2	270.5	245.7	230.2	219.3	212.4	206.4	197.0	184.9
55°	354.3	319.1	279.7	248.3	225.2	209.4	198.9	192.3	188.5	180.1	170.5
57.5°	317.3	290.2	254.5	223.9	203.0	187.2	179.3	173.5	169.2	163.0	155.8
60°	278.2	260.5	229.3	200.5	181.8	166.9	159.9	155.3	151.3	146.2	141.0
62.5°	238.5	226.9	200.7	177.1	160.1	148.3	141.9	137.8	133.1	130.1	125.0
65°	203.9	192.5	173.7	154.3	138.3	128.4	123.7	119.9	117.1	113.3	109.8
67.5°	165.6	160.3	146.4	131.9	120.3	110.7	106.6	103.6	100.4	98.1	95.5
70°	130.8	128.6	119.4	110.5	99.8	93.8	90.0	88.9	84.8	82.5	80.8
72.5°	100.0	99.2	94.9	89.5	82.7	77.6	74.2	72.9	70.7	69.0	68.0
75°	72.7	73.1	72.2	68.2	65.4	62.0	59.0	58.3	56.4	54.9	53.9
77.5°	49.6	51.5	51.1	50.9	49.6	47.2	45.9	45.3	43.2	42.7	42.5
80°	31.6	33.6	35.5	35.3	35.0	34.4	33.5	32.9	32.0	31.4	31.0
82.5°	18.4	20.3	21.8	23.1	23.1	22.6	22.0	21.8	21.8	21.4	21.4
85°	10.0	10.3	10.9	12.2	13.2	13.3	13.2	13.0	12.4	12.6	12.8
87.5°	4.3	4.3	4.5	4.5	4.3	5.3	5.8	6.0	5.6	5.3	4.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P242928

CATALOG NUMBER: S125RDR-S375D935-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9
2.5°	448.3	445.6	443.8	440.0	437.4	436.2	434.2	433.6	435.7	434.2	434.0
5°	436.8	431.4	427.0	422.7	418.0	415.0	410.5	409.7	408.6	406.9	406.5
7.5°	423.5	416.7	411.6	404.5	398.7	394.0	388.3	386.1	384.9	382.9	379.5
10°	409.9	401.5	394.0	386.8	379.1	372.9	367.3	362.9	360.1	357.5	356.4
12.5°	396.6	387.9	377.8	368.8	359.9	352.8	346.4	344.0	340.8	337.6	334.6
15°	382.7	371.2	360.7	350.7	343.4	335.9	329.9	325.7	321.0	319.7	314.6
17.5°	367.8	357.1	344.7	334.0	325.7	317.8	311.3	306.4	302.8	297.7	295.3
20°	354.1	340.8	328.7	319.1	309.8	300.0	293.2	289.3	285.9	281.9	280.1
22.5°	339.4	326.5	314.1	302.4	292.8	283.2	278.9	274.8	270.8	267.3	264.6
25°	325.2	312.0	299.0	287.4	277.4	270.5	264.8	260.1	258.1	254.5	251.9
27.5°	310.9	297.0	283.8	271.6	263.9	256.9	252.4	248.7	244.7	241.5	239.1
30°	297.2	282.9	268.2	259.0	250.7	244.2	239.1	235.5	232.7	229.9	228.2
32.5°	283.4	268.6	256.0	245.8	238.1	232.7	227.4	224.0	221.0	217.8	215.8
35°	268.6	253.6	243.0	233.3	225.5	220.3	216.7	211.8	209.4	207.1	205.1
37.5°	255.2	241.0	229.3	220.8	213.7	208.6	203.9	201.5	198.3	196.4	194.7
40°	240.2	227.4	217.1	208.1	203.2	197.4	193.0	189.6	187.4	184.8	182.9
42.5°	226.7	215.0	205.1	197.2	190.8	186.1	181.9	178.6	175.6	173.9	172.4
45°	214.1	202.2	192.5	184.9	179.3	174.6	170.3	168.6	164.8	162.6	161.8
47.5°	200.9	190.2	180.6	173.7	167.8	163.5	159.4	155.6	153.7	151.5	150.4
50°	187.6	177.4	168.6	161.8	156.2	151.3	147.5	145.3	142.5	140.4	138.9
52.5°	174.2	165.0	156.2	149.8	145.1	140.2	135.9	133.6	131.0	129.9	128.9
55°	161.6	151.7	144.2	137.8	132.7	128.2	124.2	122.0	120.3	119.0	118.6
57.5°	147.2	139.1	131.9	126.3	120.9	116.5	113.0	110.9	109.4	109.2	107.9
60°	133.1	125.9	119.5	113.3	108.8	104.9	101.9	99.4	97.9	97.7	97.4
62.5°	119.0	112.2	106.4	101.1	97.2	93.4	90.6	87.8	87.0	85.9	85.0
65°	105.1	98.9	94.0	89.7	85.3	82.1	79.3	77.6	75.6	74.4	72.4
67.5°	91.3	86.3	81.6	78.0	74.4	71.2	68.8	66.3	64.8	63.9	62.2
70°	77.8	74.1	69.4	65.4	62.8	60.3	58.5	55.6	54.7	53.9	53.2
72.5°	65.0	61.8	58.1	55.1	52.4	50.2	47.9	47.0	46.0	45.3	44.9
75°	53.2	50.0	46.6	44.4	42.5	40.6	39.5	38.5	38.2	38.0	37.2
77.5°	41.4	39.5	36.7	34.6	33.3	32.5	31.4	31.0	31.2	30.3	30.1
80°	29.9	28.9	26.7	25.9	25.0	24.2	23.7	22.7	21.8	21.4	20.9
82.5°	20.3	19.4	18.8	17.5	16.7	16.4	15.8	15.6	16.0	15.4	15.2
85°	11.8	10.9	10.5	10.3	10.0	10.3	10.1	10.0	9.8	9.6	9.8
87.5°	4.7	4.7	4.5	4.9	4.3	4.5	4.5	4.3	4.3	4.3	4.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P242928

CATALOG NUMBER: S125RDR-S375D935-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	457.9	457.9	457.9	457.9
2.5°	433.8	431.7	431.2	431.9
5°	404.7	402.8	403.7	403.4
7.5°	380.0	377.6	374.8	375.5
10°	353.9	352.0	350.9	351.9
12.5°	331.9	331.0	330.0	329.3
15°	312.4	310.1	309.2	306.7
17.5°	293.6	292.8	290.4	288.7
20°	277.2	276.5	274.0	275.5
22.5°	263.7	261.8	261.4	260.5
25°	251.1	248.7	247.7	246.6
27.5°	238.3	237.0	235.7	235.3
30°	225.9	224.6	223.7	223.7
32.5°	214.8	213.9	213.0	212.8
35°	204.1	202.6	202.2	201.1
37.5°	192.8	191.5	191.5	191.7
40°	182.1	181.2	181.0	179.7
42.5°	170.7	170.3	169.5	169.2
45°	160.5	159.2	159.2	158.3
47.5°	149.8	148.7	148.9	147.7
50°	139.1	138.5	138.3	138.0
52.5°	128.4	128.2	129.1	128.2
55°	119.0	118.4	119.5	118.4
57.5°	107.9	107.5	108.6	107.9
60°	97.0	95.9	96.4	96.6
62.5°	84.0	83.5	83.8	82.7
65°	72.0	71.4	70.7	70.3
67.5°	62.6	60.9	60.9	61.3
70°	52.1	52.1	51.9	51.9
72.5°	44.7	44.5	44.2	44.0
75°	37.2	37.4	37.0	36.8
77.5°	29.1	28.2	28.6	28.2
80°	20.9	20.7	21.2	20.7
82.5°	15.4	15.2	15.4	15.0
85°	10.0	9.8	9.6	9.8
87.5°	4.3	4.1	4.1	4.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)