

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: P333344-840

Luminaire Tested: **S125DIW-S375D470U840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333344-840
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: S125DIW-S375D470U840-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3428.9 lumens
Efficiency: N/A
Efficacy: 149.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

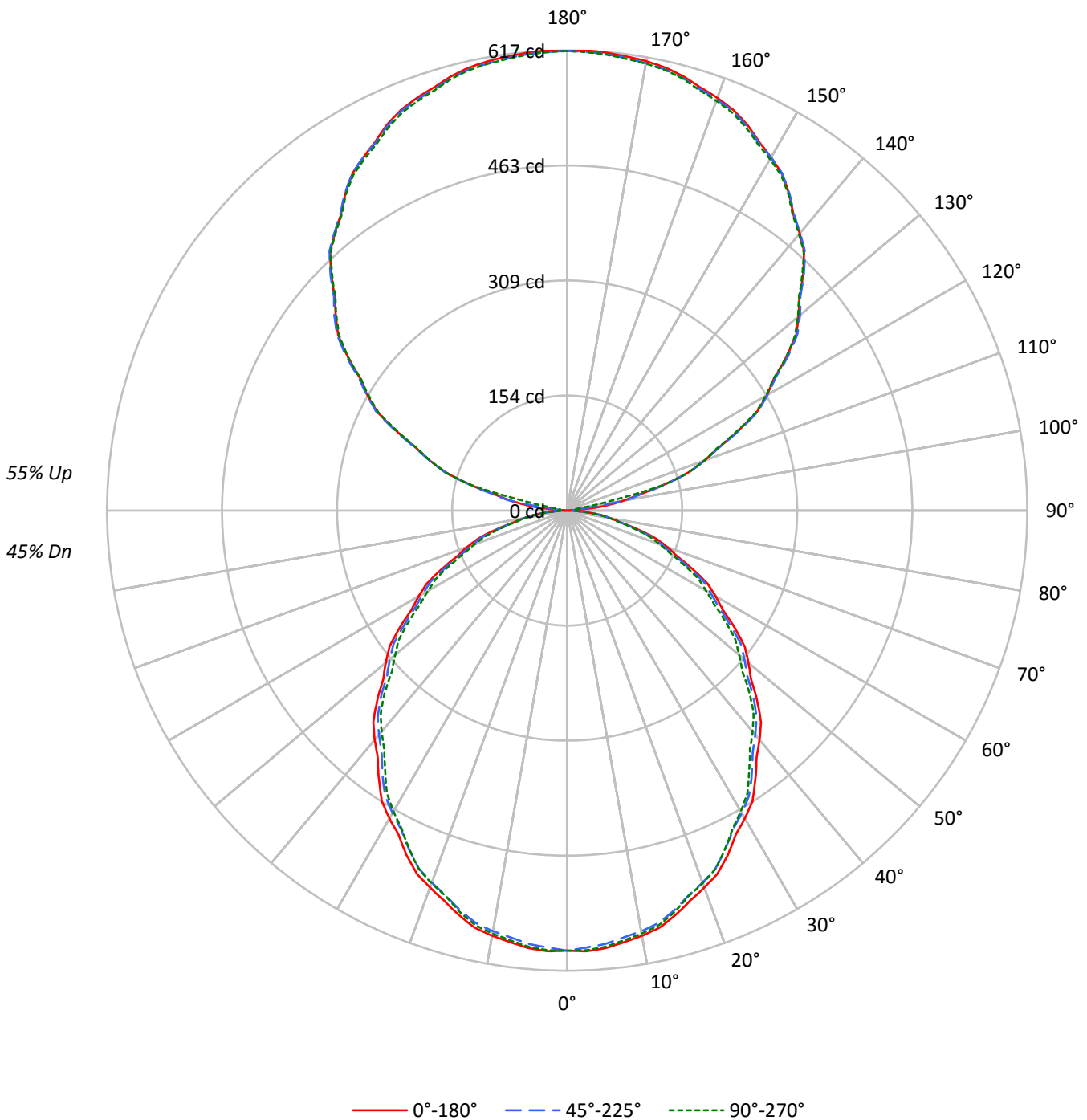
Input Watts (W): 23
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333344-840

CATALOG NUMBER: S125DIW-S375D470U840-4F0-1E-UDD-F

Luminous Intensity Polar Plot





TEST NUMBER: P333344-840

CATALOG NUMBER: S125DIW-S375D470U840-4F0-1E-UDD-F

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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	97	92	88	85	88	85	81	78	70	68	66	57	56	54	45	44	43	38
2	88	80	74	69	80	74	69	64	62	58	54	50	48	45	40	38	36	31
3	80	71	63	58	73	65	59	54	54	50	46	44	41	38	35	33	31	27
4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	31	29	27	23
5	67	56	48	42	61	51	44	39	43	38	34	35	31	28	28	25	23	20
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	20	17
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	23	20	18	15
8	53	41	33	28	49	38	31	26	32	27	23	27	22	19	22	18	16	14
9	49	37	30	25	45	35	28	23	29	24	20	24	20	17	20	17	15	12
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3810	3810	3810
5°	3818	3782	3806
10°	3796	3756	3777
15°	3754	3710	3726
20°	3696	3647	3654
25°	3632	3572	3569
30°	3554	3491	3473
35°	3470	3404	3356
40°	3384	3309	3262
45°	3291	3222	3159
50°	3189	3118	3024
55°	3090	3001	2916
60°	2971	2882	2780
65°	2832	2740	2647
70°	2696	2574	2485
75°	2458	2376	2293
80°	2187	2153	2101
85°	1904	1941	1830



TEST NUMBER: P333344-840

CATALOG NUMBER: S125DIW-S375D470U840-4F0-1E-UDD-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.6	1.6
10°-20°	157.1	4.6
20°-30°	232.0	6.8
30°-40°	270.7	7.9
40°-50°	271.9	7.9
50°-60°	238.7	7.0
60°-70°	177.8	5.2
70°-80°	101.7	3.0
80°-90°	30.9	0.9
90°-100°	22.4	0.7
100°-110°	138.0	4.0
110°-120°	250.3	7.3
120°-130°	321.3	9.4
130°-140°	345.6	10.1
140°-150°	324.4	9.5
150°-160°	262.4	7.7
160°-170°	169.7	4.9
170°-180°	58.5	1.7
0°-30°	444.7	13.0
0°-40°	715.5	20.9
0°-60°	1226.0	35.8
0°-90°	1536.4	44.8
90°-120°	410.7	12.0
90°-150°	1401.9	40.9
90°-180°	1893.0	55.2
0°-180°	3428.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	590	590	590	590	590	
5°	589	588	583	587	587	56
15°	562	560	555	557	557	158
25°	510	507	501	502	501	234
35°	440	438	432	429	426	275
45°	360	358	353	348	346	278
55°	274	273	266	262	259	245
65°	185	184	179	175	173	184
75°	98	98	95	94	92	105
85°	26	26	26	26	25	29
90°	0	4	7	10	11	3
95°	26	24	7	9	10	33
105°	134	136	136	136	136	142
115°	252	254	255	253	250	250
125°	359	362	362	360	359	320
135°	447	450	449	448	446	345
145°	519	519	520	520	517	324
155°	571	569	569	570	567	263
165°	603	600	600	603	599	170
175°	616	614	614	617	614	59
180°	616	616	616	616	616	



TEST NUMBER: P333344-840

CATALOG NUMBER: S125DIW-S375D470U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0
2.5°	591.4	591.2	591.0	590.7	590.5	589.9	589.1	588.2	587.4	586.5	587.4
5°	589.0	588.8	588.5	588.3	588.1	587.5	586.5	585.5	584.4	583.4	584.3
7.5°	583.6	583.4	583.2	583.0	582.8	582.1	581.0	579.8	578.7	577.5	578.5
10°	578.8	578.6	578.3	578.1	577.9	577.2	576.1	574.9	573.8	572.7	573.5
12.5°	572.8	572.4	572.0	571.7	571.3	570.6	569.5	568.5	567.3	566.3	566.9
15°	561.5	561.2	560.9	560.6	560.2	559.5	558.4	557.2	556.0	554.9	555.4
17.5°	548.5	548.1	547.5	547.1	546.6	545.8	544.6	543.5	542.3	541.1	541.8
20°	537.7	537.5	537.2	537.0	536.8	536.0	534.7	533.3	532.0	530.7	531.4
22.5°	526.8	526.4	526.0	525.7	525.3	524.5	523.2	522.0	520.7	519.5	520.0
25°	509.7	509.2	508.6	508.1	507.6	506.6	505.3	503.9	502.6	501.3	501.5
27.5°	489.6	489.3	489.0	488.7	488.4	487.5	486.1	484.7	483.3	481.9	482.0
30°	476.6	476.3	475.8	475.5	475.2	474.3	472.8	471.2	469.7	468.1	467.9
32.5°	462.3	461.8	461.4	460.9	460.4	459.5	458.1	456.7	455.3	453.9	453.5
35°	440.1	439.7	439.3	438.9	438.5	437.5	436.1	434.6	433.1	431.7	431.2
37.5°	417.1	416.6	416.1	415.5	415.0	414.0	412.6	411.3	409.9	408.6	407.8
40°	401.4	400.8	400.3	399.8	399.3	398.3	396.9	395.5	393.9	392.5	391.6
42.5°	384.6	384.2	383.7	383.2	382.8	381.9	380.4	379.0	377.5	376.1	375.3
45°	360.3	359.9	359.5	359.1	358.6	357.8	356.6	355.4	354.1	352.8	351.6
47.5°	334.2	334.2	334.2	334.3	334.3	333.6	332.0	330.5	329.0	327.5	326.3
50°	317.4	317.1	316.8	316.4	316.1	315.4	314.1	312.9	311.6	310.3	309.0
52.5°	300.2	299.9	299.7	299.5	299.3	298.5	297.2	295.9	294.5	293.2	292.1
55°	274.4	274.1	273.8	273.5	273.2	272.3	270.8	269.4	267.9	266.5	265.6
57.5°	247.3	247.1	246.9	246.8	246.6	245.9	244.7	243.5	242.3	241.1	239.8
60°	230.0	229.6	229.2	228.8	228.4	227.6	226.5	225.4	224.2	223.1	222.1
62.5°	212.2	211.9	211.5	211.2	210.9	210.2	209.2	208.2	207.2	206.3	205.2
65°	185.3	185.1	184.9	184.7	184.5	183.8	182.7	181.5	180.4	179.3	178.2
67.5°	159.3	158.9	158.3	157.9	157.5	156.8	156.0	155.1	154.3	153.5	152.7
70°	142.8	142.3	141.8	141.3	140.8	140.0	139.1	138.1	137.2	136.3	135.6
72.5°	124.9	124.5	124.2	123.8	123.5	123.0	122.4	121.8	121.2	120.6	119.9
75°	98.5	98.3	98.1	97.9	97.7	97.3	96.7	96.2	95.7	95.2	94.9
77.5°	74.1	74.0	73.9	73.8	73.8	73.6	73.3	73.0	72.7	72.4	72.2
80°	58.8	58.8	58.8	58.8	58.8	58.7	58.5	58.3	58.1	57.9	57.8
82.5°	45.3	45.2	45.0	44.8	44.7	44.6	44.5	44.5	44.4	44.4	44.2
85°	25.7	25.8	25.9	26.0	26.1	26.2	26.2	26.2	26.2	26.2	26.1
87.5°	10.2	10.3	10.5	10.7	10.8	10.9	11.0	11.0	11.1	11.2	11.3
90°	0.5	1.3	2.1	2.9	3.7	4.4	5.2	5.9	6.6	7.3	7.8
92.5°	7.1	6.5	5.9	5.4	4.7	4.7	5.5	6.1	6.7	7.3	7.8
95°	26.1	25.8	25.4	25.1	24.8	22.7	18.9	15.0	11.2	7.3	7.8
97.5°	54.3	54.9	55.4	56.0	56.6	53.0	45.3	37.8	30.1	22.5	19.6
100°	76.2	76.6	77.0	77.3	77.6	77.9	78.3	78.7	79.1	79.5	64.3
102.5°	98.6	99.0	99.4	99.8	100.2	100.5	100.7	100.9	101.2	101.4	98.6
105°	134.3	134.7	135.1	135.5	135.9	136.1	136.1	136.1	136.1	136.1	136.1
107.5°	171.4	171.4	171.4	171.4	171.4	171.5	171.7	171.9	172.1	172.3	172.4
110°	195.5	195.5	195.5	195.5	195.5	195.6	195.8	196.0	196.2	196.4	196.1



TEST NUMBER: P333344-840

CATALOG NUMBER: S125DIW-S375D470U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	218.2	218.4	218.6	218.9	219.1	219.3	219.4	219.6	219.7	219.8	219.4
115°	252.2	252.7	253.2	253.7	254.2	254.5	254.6	254.7	254.8	254.9	254.5
117.5°	287.4	287.3	287.3	287.3	287.3	287.5	287.8	288.2	288.6	289.0	288.5
120°	309.3	309.2	309.1	309.0	308.9	309.0	309.3	309.6	309.9	310.2	310.0
122.5°	328.7	329.0	329.4	329.8	330.2	330.4	330.6	330.7	330.9	331.0	330.8
125°	358.6	359.3	360.0	360.7	361.4	361.8	361.8	361.8	361.8	361.8	361.4
127.5°	387.2	387.8	388.3	388.8	389.3	389.5	389.4	389.4	389.3	389.2	389.0
130°	404.8	405.3	405.8	406.3	406.8	407.1	407.2	407.3	407.4	407.5	407.2
132.5°	422.3	422.9	423.5	424.0	424.6	424.9	424.6	424.4	424.1	423.9	423.9
135°	447.3	447.9	448.5	449.1	449.7	449.9	449.7	449.5	449.3	449.1	448.9
137.5°	470.2	470.7	471.2	471.8	472.3	472.5	472.3	472.1	471.9	471.7	471.8
140°	485.1	485.3	485.5	485.7	485.9	486.0	485.9	485.8	485.7	485.6	485.8
142.5°	498.7	498.9	499.0	499.1	499.2	499.3	499.5	499.6	499.8	499.9	499.9
145°	518.6	518.8	519.0	519.2	519.4	519.5	519.5	519.5	519.5	519.5	519.6
147.5°	535.9	535.8	535.8	535.7	535.7	535.7	535.9	536.0	536.1	536.2	536.3
150°	546.8	546.6	546.4	546.2	546.0	546.0	546.2	546.4	546.6	546.8	547.0
152.5°	557.4	557.0	556.5	556.1	555.6	555.5	555.7	555.9	556.1	556.3	556.5
155°	571.1	570.5	569.9	569.3	568.7	568.5	568.7	568.9	569.1	569.3	569.6
157.5°	581.6	581.2	580.9	580.5	580.1	580.0	580.0	580.0	580.0	580.1	580.4
160°	588.9	588.2	587.6	587.0	586.4	586.2	586.3	586.4	586.5	586.6	587.0
162.5°	594.7	594.1	593.5	592.9	592.3	592.1	592.2	592.3	592.4	592.5	593.0
165°	602.6	602.0	601.4	600.8	600.2	599.9	600.0	600.1	600.2	600.3	600.9
167.5°	608.4	607.8	607.2	606.5	605.9	605.6	605.7	605.8	605.9	606.0	606.8
170°	611.8	611.1	610.3	609.6	608.8	608.5	608.6	608.7	608.8	608.9	609.8
172.5°	613.9	613.2	612.5	611.8	611.1	610.9	611.0	611.2	611.4	611.6	612.3
175°	616.3	615.7	615.1	614.5	613.9	613.6	613.7	613.8	613.9	614.0	614.8
177.5°	617.4	616.9	616.4	615.9	615.4	615.2	615.3	615.4	615.5	615.6	616.1
180°	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3



TEST NUMBER: P333344-840

CATALOG NUMBER: S125DIW-S375D470U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0
2.5°	588.2	589.1	589.9	590.3	590.2	590.1	590.1	590.0
5°	585.2	586.2	587.1	587.5	587.4	587.3	587.2	587.1
7.5°	579.4	580.3	581.2	581.6	581.5	581.4	581.3	581.2
10°	574.3	575.1	576.0	576.3	576.2	576.1	576.0	575.9
12.5°	567.6	568.4	569.0	569.3	569.3	569.3	569.3	569.2
15°	555.9	556.4	557.0	557.2	557.2	557.2	557.2	557.2
17.5°	542.4	543.0	543.7	543.7	543.2	542.7	542.2	541.7
20°	532.1	532.8	533.5	533.7	533.1	532.6	532.1	531.6
22.5°	520.4	520.9	521.4	521.4	521.1	520.7	520.4	520.0
25°	501.7	501.9	502.1	502.0	501.7	501.4	501.1	500.8
27.5°	482.0	482.0	482.1	482.0	481.6	481.3	481.0	480.7
30°	467.7	467.5	467.3	467.1	466.8	466.5	466.1	465.7
32.5°	453.2	452.8	452.4	452.0	451.4	450.8	450.3	449.7
35°	430.7	430.2	429.6	429.0	428.2	427.3	426.5	425.7
37.5°	407.1	406.3	405.5	404.9	404.3	403.9	403.4	402.9
40°	390.6	389.7	388.8	388.2	387.9	387.5	387.2	386.9
42.5°	374.4	373.5	372.6	372.0	371.5	371.0	370.6	370.1
45°	350.3	349.1	347.9	347.1	346.8	346.5	346.2	345.9
47.5°	325.0	323.8	322.4	321.4	320.7	320.0	319.3	318.6
50°	307.7	306.3	305.0	304.0	303.2	302.5	301.7	301.0
52.5°	290.8	289.6	288.4	287.5	286.7	285.9	285.1	284.3
55°	264.6	263.7	262.8	262.0	261.3	260.4	259.7	259.0
57.5°	238.6	237.4	236.2	235.4	235.0	234.6	234.2	233.8
60°	221.1	219.9	218.9	218.0	217.3	216.6	215.9	215.2
62.5°	204.1	202.9	201.8	201.0	200.5	199.9	199.2	198.7
65°	177.3	176.4	175.5	174.8	174.4	174.0	173.6	173.2
67.5°	151.9	151.1	150.3	149.8	149.6	149.3	149.1	148.8
70°	135.0	134.4	133.8	133.3	132.9	132.5	132.0	131.6
72.5°	119.2	118.5	117.8	117.2	116.8	116.4	115.9	115.5
75°	94.6	94.3	93.9	93.6	93.2	92.8	92.4	91.9
77.5°	72.1	71.9	71.7	71.5	71.2	70.9	70.6	70.3
80°	57.7	57.6	57.5	57.3	57.1	56.9	56.7	56.5
82.5°	44.0	43.8	43.7	43.5	43.5	43.5	43.4	43.4
85°	26.0	25.9	25.8	25.5	25.3	25.1	24.9	24.7
87.5°	11.4	11.5	11.6	11.6	11.5	11.4	11.2	11.1
90°	8.3	8.8	9.3	9.8	10.1	10.4	10.7	11.0
92.5°	8.3	8.8	9.3	9.7	9.8	10.0	10.1	10.2
95°	8.3	8.8	9.3	9.6	9.6	9.6	9.6	9.6
97.5°	16.8	13.9	11.0	9.6	9.6	9.6	9.6	9.6
100°	49.3	34.1	19.0	11.2	10.8	10.4	10.0	9.6
102.5°	95.7	92.8	90.0	85.1	78.2	71.3	64.3	57.5
105°	136.1	136.1	136.1	136.1	136.0	135.9	135.8	135.7
107.5°	172.4	172.4	172.4	172.3	172.0	171.7	171.4	171.1
110°	195.8	195.5	195.2	195.1	195.2	195.3	195.4	195.5



TEST NUMBER: P333344-840

CATALOG NUMBER: S125DIW-S375D470U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	219.0	218.6	218.3	218.0	217.9	217.7	217.6	217.4
115°	254.1	253.7	253.3	252.8	252.2	251.6	251.0	250.3
117.5°	287.9	287.4	286.9	286.5	286.2	286.0	285.7	285.5
120°	309.8	309.6	309.4	309.0	308.5	308.0	307.5	307.0
122.5°	330.6	330.4	330.2	329.8	329.2	328.6	328.1	327.5
125°	361.0	360.6	360.2	359.8	359.5	359.2	358.9	358.6
127.5°	388.8	388.6	388.4	387.9	387.1	386.4	385.6	384.9
130°	406.9	406.6	406.3	405.9	405.4	404.9	404.3	403.8
132.5°	423.8	423.7	423.7	423.4	422.9	422.4	421.9	421.4
135°	448.7	448.5	448.3	447.9	447.3	446.7	446.1	445.5
137.5°	471.8	471.9	471.9	471.7	471.1	470.6	470.1	469.6
140°	486.0	486.3	486.5	486.3	485.6	485.0	484.4	483.8
142.5°	500.0	500.0	500.1	499.8	499.2	498.6	498.0	497.4
145°	519.7	519.8	519.9	519.6	519.0	518.4	517.8	517.2
147.5°	536.5	536.6	536.7	536.4	535.7	535.0	534.2	533.5
150°	547.2	547.4	547.6	547.3	546.5	545.7	544.9	544.1
152.5°	556.7	556.9	557.1	556.9	556.1	555.4	554.7	554.0
155°	569.9	570.2	570.5	570.2	569.4	568.6	567.7	566.9
157.5°	580.7	581.0	581.3	581.1	580.3	579.5	578.7	577.8
160°	587.4	587.8	588.2	588.0	587.2	586.4	585.6	584.8
162.5°	593.6	594.2	594.7	594.6	593.7	592.8	591.9	591.0
165°	601.6	602.2	602.8	602.7	601.9	601.0	600.2	599.4
167.5°	607.5	608.2	608.9	608.9	607.9	607.0	606.1	605.2
170°	610.6	611.5	612.3	612.2	611.3	610.4	609.5	608.5
172.5°	613.0	613.7	614.5	614.4	613.5	612.6	611.7	610.8
175°	615.6	616.4	617.2	617.2	616.3	615.4	614.5	613.6
177.5°	616.7	617.2	617.8	617.8	617.1	616.5	615.8	615.2
180°	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3

(END OF REPORT)