

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: P333342-830

Luminaire Tested: **S125DIW-S375D470U830-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333342-830
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: S125DIW-S375D470U830-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3143.8 lumens
Efficiency: N/A
Efficacy: 136.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

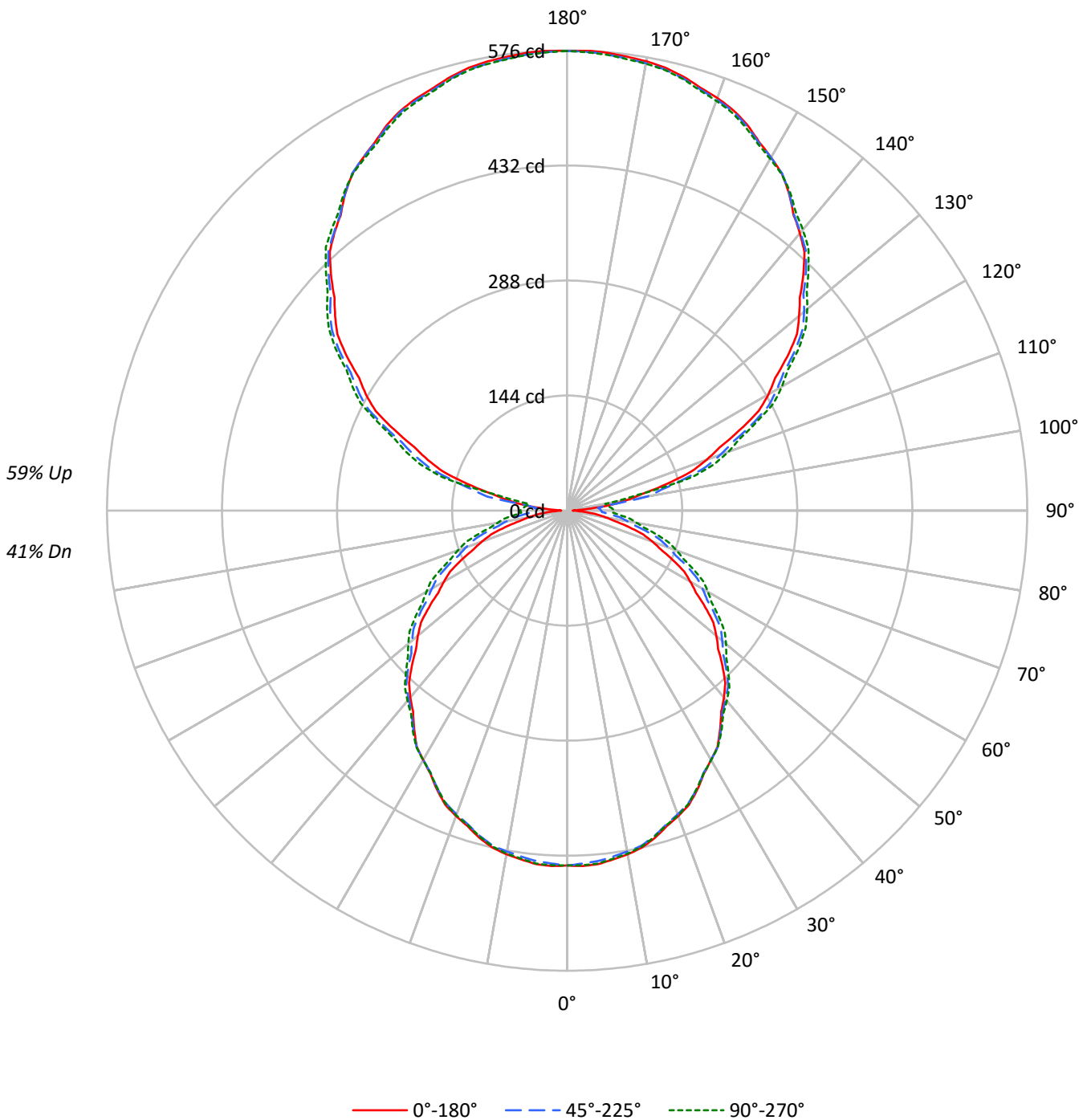
Input Watts (W): 23
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333342-830

CATALOG NUMBER: S125DIW-S375D470U830-4F0-1E-UDD-D

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	105	105	105	105	96	96	96	96	78	78	78	63	63	63	48	48	48	41
1	95	91	87	83	87	83	79	76	68	65	63	54	52	51	41	40	39	33
2	86	79	72	67	78	72	66	62	59	55	52	47	44	42	36	34	33	27
3	79	69	62	56	71	63	57	51	52	47	43	41	38	35	32	29	27	23
4	72	61	53	47	65	56	49	43	46	41	37	37	33	30	28	26	23	20
5	66	54	46	40	60	50	42	37	41	35	31	33	29	26	25	23	20	17
6	61	48	40	34	55	44	37	32	37	31	27	30	26	22	23	20	18	15
7	56	44	36	30	51	40	33	28	33	28	24	27	23	20	21	18	16	13
8	52	39	32	26	47	36	29	25	30	25	21	25	21	18	19	16	14	12
9	48	36	29	23	44	33	26	22	28	22	19	23	19	16	18	15	13	10
10	45	33	26	21	41	30	24	20	25	20	17	21	17	14	16	14	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2869	2869	2869
5°	2875	2817	2826
10°	2855	2766	2762
15°	2821	2706	2681
20°	2776	2631	2601
25°	2721	2552	2502
30°	2654	2464	2411
35°	2593	2384	2329
40°	2531	2299	2245
45°	2459	2226	2171
50°	2391	2147	2106
55°	2309	2073	2030
60°	2220	1989	1951
65°	2128	1900	1864
70°	2024	1779	1773
75°	1855	1662	1662
80°	1636	1521	1540
85°	1430	1424	1502



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.0	1.3
10°-20°	119.3	3.8
20°-30°	177.4	5.6
30°-40°	210.1	6.7
40°-50°	217.2	6.9
50°-60°	200.1	6.4
60°-70°	161.8	5.1
70°-80°	108.3	3.4
80°-90°	57.4	1.8
90°-100°	52.4	1.7
100°-110°	152.1	4.8
110°-120°	249.2	7.9
120°-130°	308.7	9.8
130°-140°	326.4	10.4
140°-150°	303.5	9.7
150°-160°	244.9	7.8
160°-170°	158.4	5.0
170°-180°	54.6	1.7
0°-30°	338.7	10.8
0°-40°	548.8	17.5
0°-60°	966.1	30.7
0°-90°	1293.5	41.1
90°-120°	453.7	14.4
90°-150°	1392.3	44.3
90°-180°	1850.0	58.8
0°-180°	3143.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	444	444	444	444	444	
5°	444	443	440	444	444	42
15°	424	424	422	424	422	119
25°	386	387	384	386	384	177
35°	334	336	336	337	337	209
45°	275	280	282	285	285	212
55°	211	218	225	230	232	189
65°	146	156	166	172	174	144
75°	80	92	105	114	116	85
85°	24	38	54	63	67	26
90°	7	25	42	54	59	6
95°	30	39	39	50	53	35
105°	129	138	151	159	162	137
115°	238	244	255	261	261	236
125°	336	339	348	353	354	300
135°	418	420	423	427	427	322
145°	484	485	485	487	487	303
155°	533	531	531	532	529	245
165°	562	560	560	563	559	159
175°	575	573	573	576	573	55
180°	575	575	575	575	575	



TEST NUMBER: P333342-830

CATALOG NUMBER: S125DIW-S375D470U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	445.4	445.2	445.1	444.9	444.8	444.4	443.8	443.3	442.8	442.2	442.8
5°	444.3	444.1	443.9	443.7	443.6	443.1	442.4	441.8	441.1	440.4	441.2
7.5°	440.4	440.4	440.3	440.2	440.1	439.7	439.0	438.3	437.6	436.9	437.6
10°	436.9	436.9	436.9	436.9	436.9	436.5	435.7	435.0	434.2	433.4	434.1
12.5°	432.1	432.2	432.2	432.3	432.3	432.1	431.5	430.8	430.2	429.6	430.1
15°	424.2	424.3	424.4	424.6	424.7	424.3	423.7	423.0	422.4	421.7	422.3
17.5°	414.2	414.3	414.5	414.7	414.9	414.7	414.1	413.3	412.6	412.0	412.5
20°	406.9	407.1	407.3	407.5	407.6	407.4	406.7	406.0	405.4	404.6	405.0
22.5°	398.5	398.9	399.2	399.5	399.9	399.6	398.9	398.1	397.4	396.6	397.0
25°	385.5	385.8	386.1	386.3	386.6	386.5	386.0	385.4	384.7	384.2	384.6
27.5°	371.1	371.5	371.9	372.3	372.8	372.7	372.0	371.4	370.7	370.0	370.2
30°	360.2	360.8	361.4	362.0	362.6	362.6	362.0	361.4	360.8	360.2	360.4
32.5°	350.5	351.0	351.5	352.0	352.5	352.5	352.1	351.7	351.3	350.8	351.0
35°	333.7	334.3	335.1	335.7	336.4	336.6	336.3	336.0	335.7	335.5	335.7
37.5°	316.9	317.4	318.1	318.7	319.3	319.6	319.5	319.4	319.3	319.2	319.6
40°	305.4	306.1	306.9	307.6	308.5	308.8	308.7	308.6	308.5	308.4	308.8
42.5°	292.8	293.8	294.8	295.9	296.8	297.5	297.7	297.8	298.1	298.3	298.8
45°	274.8	276.0	277.0	278.1	279.1	279.9	280.4	280.9	281.3	281.8	282.5
47.5°	256.5	257.5	258.4	259.5	260.4	261.4	262.2	263.0	263.8	264.7	265.7
50°	243.9	245.0	246.1	247.1	248.2	249.3	250.3	251.4	252.4	253.5	254.6
52.5°	230.7	232.0	233.3	234.6	235.9	237.1	238.5	239.8	241.1	242.3	243.6
55°	211.2	212.8	214.3	215.9	217.4	219.0	220.6	222.1	223.7	225.2	226.3
57.5°	191.4	193.2	195.1	197.0	198.9	200.7	202.5	204.2	206.0	207.7	209.0
60°	178.1	180.1	182.0	184.0	185.9	187.8	189.7	191.7	193.7	195.6	197.0
62.5°	165.2	167.2	169.2	171.1	173.1	175.0	177.1	179.2	181.3	183.4	185.0
65°	145.5	147.7	150.0	152.1	154.4	156.7	159.0	161.4	163.6	166.0	167.4
67.5°	126.9	129.0	131.1	133.3	135.4	137.7	140.1	142.4	144.8	147.1	148.9
70°	113.3	115.5	117.7	119.9	122.2	124.5	127.1	129.6	132.1	134.6	136.5
72.5°	100.0	102.4	104.6	106.9	109.2	111.8	114.5	117.3	120.0	122.7	124.8
75°	80.1	82.7	85.2	87.7	90.2	93.0	96.1	99.2	102.4	105.4	107.4
77.5°	61.1	64.0	66.9	69.7	72.7	75.6	78.6	81.6	84.5	87.6	89.7
80°	49.2	52.1	55.0	58.0	60.8	63.9	67.2	70.5	73.8	77.1	79.3
82.5°	38.5	41.5	44.6	47.6	50.6	53.9	57.2	60.6	64.0	67.3	69.4
85°	23.9	27.1	30.3	33.6	36.8	40.1	43.5	46.8	50.2	53.5	55.7
87.5°	13.7	17.0	20.2	23.5	26.7	30.0	33.5	36.9	40.2	43.7	46.0
90°	7.4	11.2	15.1	18.9	22.8	26.8	30.6	34.6	38.5	42.5	45.2
92.5°	12.8	15.2	17.5	19.9	22.1	25.4	29.3	33.3	37.2	41.2	43.7
95°	30.0	32.2	34.4	36.7	38.9	39.9	39.6	39.2	38.9	38.6	41.2
97.5°	55.9	58.6	61.5	64.2	67.0	66.4	62.5	58.5	54.6	50.6	50.0
100°	76.0	78.3	80.7	82.9	85.3	88.1	91.6	95.1	98.6	102.1	90.0
102.5°	96.4	98.7	100.9	103.2	105.4	108.1	111.4	114.6	117.9	121.1	120.5
105°	129.3	131.2	133.2	135.1	137.0	139.4	142.3	145.2	148.2	151.0	153.0
107.5°	163.3	164.7	166.0	167.3	168.6	170.8	173.8	176.7	179.7	182.7	184.6
110°	185.6	186.7	187.8	189.1	190.2	192.2	195.1	198.0	201.0	203.9	205.4



TEST NUMBER: P333342-830

CATALOG NUMBER: S125DIW-S375D470U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	206.7	207.8	209.1	210.2	211.3	213.3	216.0	218.8	221.5	224.2	225.6
115°	238.0	239.1	240.3	241.5	242.6	244.5	247.0	249.7	252.3	255.0	256.3
117.5°	270.4	270.8	271.3	271.6	272.1	273.7	276.4	279.2	281.9	284.6	285.8
120°	290.9	291.1	291.2	291.4	291.6	292.9	295.5	298.0	300.5	303.0	304.4
122.5°	308.6	309.1	309.5	310.1	310.6	312.0	314.2	316.5	318.8	321.1	322.4
125°	336.5	337.1	337.6	338.2	338.7	340.0	342.0	343.8	345.8	347.7	348.9
127.5°	362.7	363.1	363.4	363.8	364.2	365.1	366.7	368.3	369.8	371.3	372.5
130°	379.1	379.5	379.8	380.2	380.6	381.5	383.0	384.5	385.9	387.3	388.4
132.5°	395.1	395.7	396.2	396.7	397.3	397.9	398.8	399.6	400.4	401.2	402.6
135°	418.3	418.8	419.2	419.7	420.2	420.7	421.1	421.7	422.2	422.6	423.7
137.5°	439.6	440.1	440.5	440.9	441.3	441.6	441.8	441.9	442.1	442.2	443.4
140°	453.3	453.5	453.6	453.8	454.0	454.1	454.1	454.1	454.1	454.1	455.3
142.5°	465.9	465.9	466.0	466.0	466.0	466.1	466.3	466.5	466.6	466.7	467.7
145°	484.4	484.5	484.6	484.7	484.7	484.8	484.8	484.8	484.8	484.8	485.4
147.5°	500.2	500.1	500.1	500.0	500.0	500.0	500.2	500.3	500.4	500.5	500.8
150°	510.4	510.2	510.0	509.8	509.6	509.6	509.8	510.0	510.2	510.4	510.6
152.5°	520.3	519.9	519.4	519.1	518.6	518.5	518.7	518.9	519.1	519.2	519.4
155°	533.0	532.4	531.9	531.3	530.7	530.6	530.7	530.9	531.1	531.3	531.6
157.5°	542.8	542.4	542.2	541.8	541.4	541.3	541.3	541.3	541.3	541.4	541.7
160°	549.6	549.0	548.5	547.9	547.3	547.1	547.2	547.3	547.4	547.5	547.9
162.5°	555.1	554.5	553.9	553.4	552.8	552.6	552.7	552.8	552.9	553.0	553.5
165°	562.4	561.8	561.3	560.7	560.2	559.9	560.0	560.1	560.2	560.2	560.8
167.5°	567.9	567.3	566.8	566.1	565.5	565.2	565.3	565.4	565.5	565.6	566.4
170°	571.0	570.3	569.6	568.9	568.3	568.0	568.1	568.2	568.3	568.4	569.1
172.5°	573.0	572.3	571.7	571.0	570.3	570.1	570.2	570.4	570.6	570.8	571.5
175°	575.2	574.7	574.1	573.5	573.0	572.7	572.8	572.9	573.0	573.1	573.8
177.5°	576.3	575.8	575.3	574.9	574.4	574.2	574.3	574.4	574.5	574.6	575.0
180°	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2



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CATALOG NUMBER: S125DIW-S375D470U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	443.3	443.8	444.4	444.6	444.5	444.5	444.4	444.3
5°	442.0	442.7	443.5	443.8	443.7	443.7	443.6	443.5
7.5°	438.3	438.9	439.6	439.9	439.8	439.7	439.6	439.5
10°	434.8	435.5	436.1	436.4	436.3	436.2	436.1	436.0
12.5°	430.6	431.1	431.7	431.8	431.6	431.3	431.0	430.8
15°	422.8	423.4	424.0	424.0	423.7	423.3	422.9	422.5
17.5°	412.9	413.3	413.8	413.9	413.7	413.4	413.2	412.9
20°	405.3	405.6	405.9	406.0	406.0	406.0	406.0	406.0
22.5°	397.4	397.8	398.1	398.2	397.9	397.8	397.5	397.3
25°	384.9	385.4	385.8	385.7	385.2	384.7	384.3	383.8
27.5°	370.5	370.8	371.1	371.2	371.0	370.8	370.6	370.4
30°	360.6	360.8	361.0	361.1	361.0	360.9	360.8	360.7
32.5°	351.2	351.4	351.6	351.7	351.6	351.5	351.4	351.3
35°	336.0	336.3	336.6	336.7	336.7	336.7	336.7	336.7
37.5°	320.0	320.4	320.7	320.9	320.9	320.8	320.8	320.7
40°	309.2	309.5	310.0	310.3	310.5	310.7	310.9	311.0
42.5°	299.3	299.7	300.2	300.4	300.5	300.5	300.5	300.6
45°	283.2	283.9	284.6	284.9	285.0	285.1	285.2	285.3
47.5°	266.6	267.7	268.6	269.2	269.5	269.7	269.8	270.0
50°	255.6	256.7	257.8	258.4	258.7	259.0	259.3	259.6
52.5°	244.7	245.8	246.9	247.6	247.8	248.1	248.3	248.5
55°	227.3	228.4	229.5	230.2	230.5	230.9	231.4	231.8
57.5°	210.2	211.4	212.6	213.4	213.7	214.0	214.3	214.6
60°	198.5	199.9	201.4	202.3	202.6	202.8	203.1	203.4
62.5°	186.6	188.2	189.8	190.8	191.1	191.5	191.9	192.3
65°	168.9	170.3	171.7	172.7	173.1	173.4	173.9	174.3
67.5°	150.7	152.4	154.2	155.3	155.8	156.4	156.8	157.3
70°	138.3	140.2	141.9	143.2	143.7	144.3	144.9	145.5
72.5°	126.8	128.8	130.7	132.0	132.3	132.8	133.2	133.7
75°	109.3	111.2	113.2	114.3	114.9	115.4	115.8	116.3
77.5°	91.8	94.0	96.0	97.4	97.7	98.1	98.5	98.9
80°	81.3	83.5	85.6	86.9	87.3	87.7	88.0	88.4
82.5°	71.4	73.5	75.6	76.9	77.7	78.3	79.0	79.7
85°	57.9	59.9	62.1	63.5	64.3	65.1	65.9	66.6
87.5°	48.4	50.7	53.0	54.5	55.2	56.0	56.7	57.5
90°	48.0	50.6	53.3	55.1	56.2	57.1	58.1	59.0
92.5°	46.4	49.0	51.7	53.3	54.2	55.0	55.8	56.6
95°	43.8	46.5	49.0	50.7	51.4	52.0	52.7	53.3
97.5°	49.3	48.6	48.1	48.1	48.7	49.4	50.0	50.7
100°	77.9	65.8	53.7	47.8	48.0	48.2	48.4	48.6
102.5°	119.7	118.9	118.3	115.0	109.1	103.3	97.4	91.5
105°	154.9	156.8	158.7	160.0	160.6	161.2	161.7	162.4
107.5°	186.6	188.5	190.5	191.6	191.9	192.2	192.6	192.8
110°	207.0	208.5	210.0	211.2	212.0	212.7	213.5	214.3



TEST NUMBER: P333342-830

CATALOG NUMBER: S125DIW-S375D470U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	227.1	228.5	229.9	230.8	231.4	232.0	232.5	233.0
115°	257.7	259.0	260.3	261.1	261.1	261.1	261.1	261.1
117.5°	286.9	288.1	289.3	290.0	290.5	290.9	291.2	291.7
120°	305.9	307.4	308.9	309.6	309.7	309.8	310.0	310.1
122.5°	323.9	325.2	326.6	327.3	327.3	327.3	327.4	327.4
125°	350.1	351.2	352.4	353.1	353.3	353.5	353.7	353.9
127.5°	373.7	374.9	376.2	376.7	376.6	376.5	376.4	376.2
130°	389.5	390.5	391.6	392.1	392.2	392.2	392.2	392.2
132.5°	403.9	405.2	406.4	407.1	407.0	407.0	406.9	406.8
135°	424.8	425.8	426.9	427.4	427.3	427.3	427.2	427.1
137.5°	444.6	445.7	447.0	447.5	447.3	447.2	447.1	447.0
140°	456.7	457.9	459.1	459.7	459.5	459.3	459.1	458.9
142.5°	468.6	469.6	470.5	470.9	470.7	470.5	470.3	470.2
145°	486.0	486.5	487.1	487.3	487.1	487.0	486.8	486.6
147.5°	501.1	501.3	501.6	501.4	501.0	500.5	499.9	499.5
150°	510.8	511.0	511.1	511.0	510.3	509.6	509.0	508.3
152.5°	519.6	519.8	520.0	519.8	519.2	518.5	517.8	517.2
155°	531.9	532.2	532.4	532.2	531.4	530.7	529.9	529.1
157.5°	542.0	542.2	542.5	542.3	541.6	540.8	540.1	539.3
160°	548.3	548.7	549.0	548.8	548.1	547.3	546.6	545.8
162.5°	554.0	554.6	555.1	555.0	554.1	553.3	552.4	551.6
165°	561.5	562.0	562.6	562.5	561.8	560.9	560.2	559.4
167.5°	567.0	567.7	568.4	568.4	567.4	566.6	565.7	564.9
170°	569.9	570.7	571.5	571.4	570.5	569.7	568.8	568.0
172.5°	572.1	572.8	573.5	573.4	572.6	571.7	570.9	570.0
175°	574.6	575.3	576.1	576.1	575.2	574.4	573.5	572.7
177.5°	575.6	576.1	576.6	576.6	576.0	575.4	574.8	574.2
180°	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2

(END OF REPORT)