

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: P333129-830

Luminaire Tested: **S125DIP-S375D590U830-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333129-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S375D590U830-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3377.5 lumens
Efficiency: N/A
Efficacy: 131.9 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: Semi-Indirect

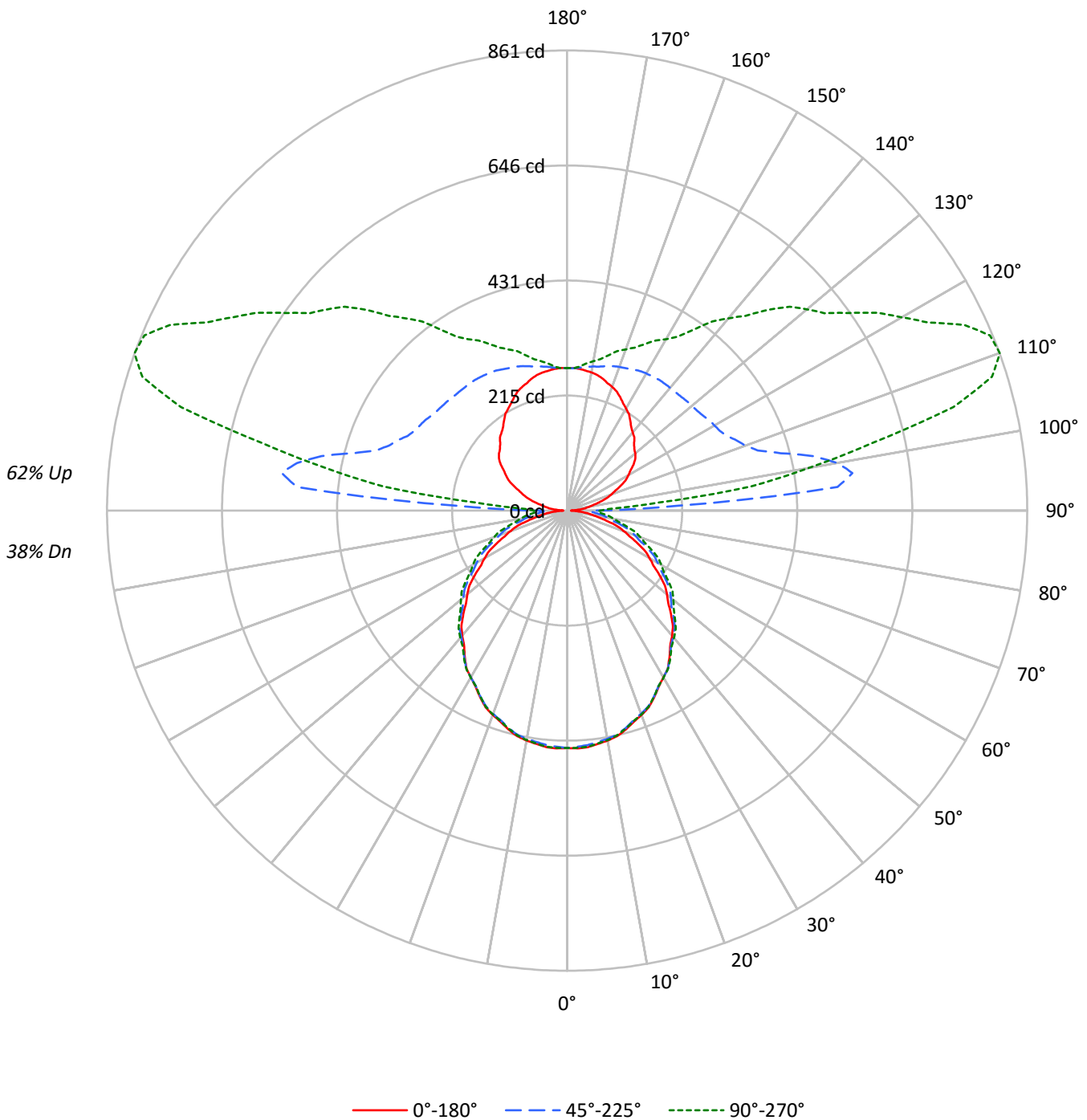
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333129-830

CATALOG NUMBER: S125DIP-S375D590U830-4F0-1E-UDD-D4

Luminous Intensity Polar Plot





TEST NUMBER: P333129-830

CATALOG NUMBER: S125DIP-S375D590U830-4F0-1E-UDD-D4

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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	95	90	86	82	86	82	78	75	66	64	62	52	51	49	39	38	37	31
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	34	32	31	26
3	78	69	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21
4	71	61	53	47	64	55	48	43	45	40	36	36	32	29	27	24	22	18
5	65	54	46	40	59	49	42	37	40	35	31	32	28	25	24	21	19	16
6	60	48	40	34	54	44	37	32	36	31	27	29	25	22	22	19	17	14
7	56	43	35	30	50	40	33	28	33	27	23	26	22	19	20	17	15	12
8	51	39	32	26	47	36	29	24	30	24	21	24	20	17	18	15	13	11
9	48	36	28	23	43	33	26	22	27	22	18	22	18	15	17	14	12	10
10	45	33	25	21	40	30	24	19	25	20	16	20	16	14	16	13	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



TEST NUMBER: P333129-830

CATALOG NUMBER: S125DIP-S375D590U830-4F0-1E-UDD-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.0	1.2
10°-20°	119.3	3.5
20°-30°	177.4	5.3
30°-40°	210.1	6.2
40°-50°	217.2	6.4
50°-60°	200.1	5.9
60°-70°	161.8	4.8
70°-80°	108.3	3.2
80°-90°	57.7	1.7
90°-100°	224.8	6.7
100°-110°	438.8	13.0
110°-120°	405.5	12.0
120°-130°	324.9	9.6
130°-140°	257.5	7.6
140°-150°	192.2	5.7
150°-160°	134.7	4.0
160°-170°	79.4	2.4
170°-180°	25.8	0.8
0°-30°	338.7	10.0
0°-40°	548.8	16.2
0°-60°	966.1	28.6
0°-90°	1293.8	38.3
90°-120°	1069.1	31.7
90°-150°	1843.7	54.6
90°-180°	2084.0	61.7
0°-180°	3377.5	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°	8	26	44	57	61	6
95°	23	70	508	257	171	23
105°	65	96	414	800	748	68
115°	111	137	330	699	821	109
125°	152	178	310	553	644	135
135°	177	213	301	459	531	138
145°	206	235	299	374	414	129
155°	234	252	291	329	344	108
165°	256	263	280	296	301	72
175°	266	266	268	272	270	25
180°	267	267	267	267	267	



TEST NUMBER: P333129-830

CATALOG NUMBER: S125DIP-S375D590U830-4F0-1E-UDD-D4

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	16.9	20.2	23.6	26.9	30.3	33.6	37.1	40.5	44.0	46.4
90°	7.5	11.1	15.3	19.5	23.7	27.9	31.8	36.1	40.0	44.3	47.1
92.5°	12.8	17.1	24.5	34.0	46.1	64.9	97.6	150.2	207.1	207.6	176.8
95°	23.4	26.5	33.3	41.8	56.1	83.1	143.9	265.5	417.3	508.1	500.1
97.5°	34.6	37.5	42.8	51.0	63.9	84.0	125.3	215.1	373.5	538.4	621.4
100°	42.4	45.5	49.7	57.7	69.9	88.6	122.9	195.9	334.5	513.4	649.8
102.5°	51.1	53.6	57.2	65.4	76.7	94.8	125.6	187.4	304.7	471.1	630.3
105°	64.7	66.3	70.5	77.4	87.6	104.8	131.4	182.1	274.8	413.8	570.0
107.5°	77.9	80.3	84.2	89.9	100.2	115.7	141.5	185.2	261.3	373.9	509.0
110°	87.5	89.7	93.0	99.0	108.2	124.1	148.9	188.7	256.5	354.9	473.9



TEST NUMBER: P333129-830

CATALOG NUMBER: S125DIP-S375D590U830-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	97.4	99.3	102.0	107.7	116.8	132.1	155.9	193.5	255.1	343.2	447.5
115°	111.2	113.0	115.3	120.7	129.5	144.6	166.9	200.7	254.8	329.9	418.2
117.5°	123.7	125.7	127.9	133.2	142.8	157.2	178.4	209.2	256.4	322.3	399.8
120°	132.3	134.2	136.7	141.8	151.2	165.9	186.9	215.0	258.6	318.4	389.4
122.5°	141.0	142.3	144.1	149.1	159.3	173.8	194.8	221.5	260.3	314.8	380.1
125°	152.3	153.3	155.9	160.6	170.7	185.6	205.3	230.4	263.4	310.0	367.5
127.5°	160.8	162.3	165.6	171.6	182.5	197.2	215.8	238.7	267.5	306.7	355.7
130°	166.4	167.9	172.1	179.0	190.2	204.8	222.8	244.6	270.1	304.8	348.1
132.5°	170.3	172.3	177.5	185.3	197.0	211.5	229.2	249.4	273.0	303.4	341.6
135°	177.2	179.3	185.6	194.2	205.3	220.2	237.5	255.9	276.4	301.3	333.3
137.5°	186.0	187.5	193.4	202.0	212.9	228.0	243.6	260.8	280.1	300.4	326.1
140°	190.8	192.4	198.9	207.5	217.6	232.2	247.9	264.1	281.4	299.8	322.3
142.5°	196.8	197.9	203.9	212.4	222.1	235.7	250.4	265.7	282.1	299.5	319.3
145°	205.9	206.8	212.1	219.5	229.1	241.4	255.4	268.8	283.3	299.0	315.6
147.5°	214.8	215.5	220.1	227.1	235.4	246.4	258.6	270.8	283.9	297.6	311.9
150°	220.5	221.5	225.3	232.2	239.8	248.9	260.8	272.0	283.9	296.2	309.2
152.5°	226.5	227.1	230.5	236.6	243.6	251.9	262.9	272.9	283.4	294.5	306.1
155°	234.4	234.4	237.6	243.0	248.4	255.9	265.0	273.6	282.3	291.4	301.0
157.5°	241.5	241.4	244.0	248.6	253.4	259.0	266.9	274.2	280.9	288.1	296.3
160°	246.3	245.7	247.9	251.7	255.9	260.8	267.8	274.2	279.6	286.1	292.5
162.5°	250.2	249.6	251.8	255.1	258.5	262.5	268.6	273.8	278.3	283.4	289.1
165°	255.9	254.9	256.5	259.1	261.3	264.6	268.8	273.1	276.4	279.6	283.9
167.5°	259.8	259.3	260.2	261.7	263.3	265.2	268.8	271.8	273.3	275.8	278.8
170°	262.4	261.8	262.4	263.4	264.6	266.2	268.8	271.0	272.0	273.6	275.8
172.5°	264.1	263.2	263.6	264.8	265.4	266.2	268.4	270.1	270.3	271.1	272.8
175°	266.2	265.0	265.6	266.2	266.2	266.2	267.8	268.8	268.2	268.2	268.8
177.5°	267.1	266.3	266.3	266.6	266.3	266.3	267.1	267.5	266.6	266.6	267.1
180°	266.6	266.6	266.6	266.6	266.6	266.6	266.6	266.6	266.6	266.6	266.6



TEST NUMBER: P333129-830

CATALOG NUMBER: S125DIP-S375D590U830-4F0-1E-UDD-D4

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°	48.7	51.1	53.4	55.0	55.7	56.5	57.2	57.9
90°	49.9	52.6	55.4	57.9	58.6	59.3	60.5	61.2
92.5°	133.9	109.9	95.0	88.4	82.2	81.6	81.5	81.3
95°	422.6	343.0	279.0	235.3	197.7	182.3	178.7	170.8
97.5°	609.4	554.1	491.7	430.3	397.8	368.3	353.4	347.1
100°	693.2	668.9	615.6	561.0	524.4	486.4	467.0	459.0
102.5°	720.5	738.8	714.1	677.5	638.5	611.5	590.4	584.6
105°	701.0	776.6	802.2	797.6	781.0	763.9	753.8	748.1
107.5°	638.2	738.4	801.1	830.4	839.7	840.2	837.3	833.6
110°	591.9	695.9	773.5	820.5	845.4	856.3	860.7	861.4



TEST NUMBER: P333129-830

CATALOG NUMBER: S125DIP-S375D590U830-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	555.1	653.8	732.3	787.4	823.4	841.6	851.7	856.2
115°	508.7	593.7	669.1	728.9	771.5	797.8	813.4	821.0
117.5°	477.8	551.3	616.3	671.3	713.9	741.2	756.8	761.8
120°	460.9	527.1	587.9	636.3	676.7	703.0	718.1	723.0
122.5°	447.7	509.1	563.4	608.7	644.8	669.0	684.1	688.6
125°	428.8	485.1	533.5	573.2	603.8	626.3	638.6	644.4
127.5°	409.3	461.9	507.0	544.2	572.1	592.1	603.9	606.8
130°	397.3	446.0	489.3	525.2	552.5	570.7	582.0	585.7
132.5°	385.2	430.8	470.2	504.8	532.1	550.3	560.5	564.6
135°	368.9	407.3	442.9	474.5	498.6	516.8	527.0	530.7
137.5°	355.2	386.4	416.1	443.0	464.6	481.1	490.4	494.3
140°	347.6	374.0	399.7	423.1	443.4	457.7	466.2	469.3
142.5°	341.0	363.4	385.6	405.8	423.0	435.3	443.3	445.9
145°	332.7	349.9	367.0	381.9	395.2	404.7	411.0	413.6
147.5°	325.2	338.8	351.9	363.0	373.3	380.8	384.5	385.6
150°	320.9	332.8	343.0	352.8	360.9	367.5	369.7	370.3
152.5°	316.7	327.3	336.6	344.1	350.9	356.1	358.3	358.8
155°	310.2	318.9	326.3	332.2	337.6	341.4	343.0	343.6
157.5°	303.8	310.9	316.7	321.3	325.5	328.6	330.1	330.0
160°	299.4	304.8	310.2	314.0	317.7	320.5	321.5	320.9
162.5°	294.7	299.7	304.2	307.6	310.5	312.7	312.9	312.8
165°	288.1	291.9	295.2	297.8	300.0	301.0	301.0	301.0
167.5°	281.9	284.5	286.9	288.8	289.9	290.9	290.4	290.3
170°	278.5	280.1	281.7	282.8	283.9	284.5	284.5	283.9
172.5°	274.7	276.3	277.4	278.1	278.3	279.3	278.4	277.9
175°	270.4	270.4	271.5	271.5	271.5	272.0	271.0	270.4
177.5°	267.5	268.0	268.0	268.0	267.5	268.0	266.6	266.6
180°	266.6	266.6	266.6	266.6	266.6	266.6	266.6	266.6

(END OF REPORT)