

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: P333348-830

Luminaire Tested: **S125DIW-S375D770U830-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333348-830
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-S375D770U830-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4271.3 lumens
Efficiency: N/A
Efficacy: 140.5 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

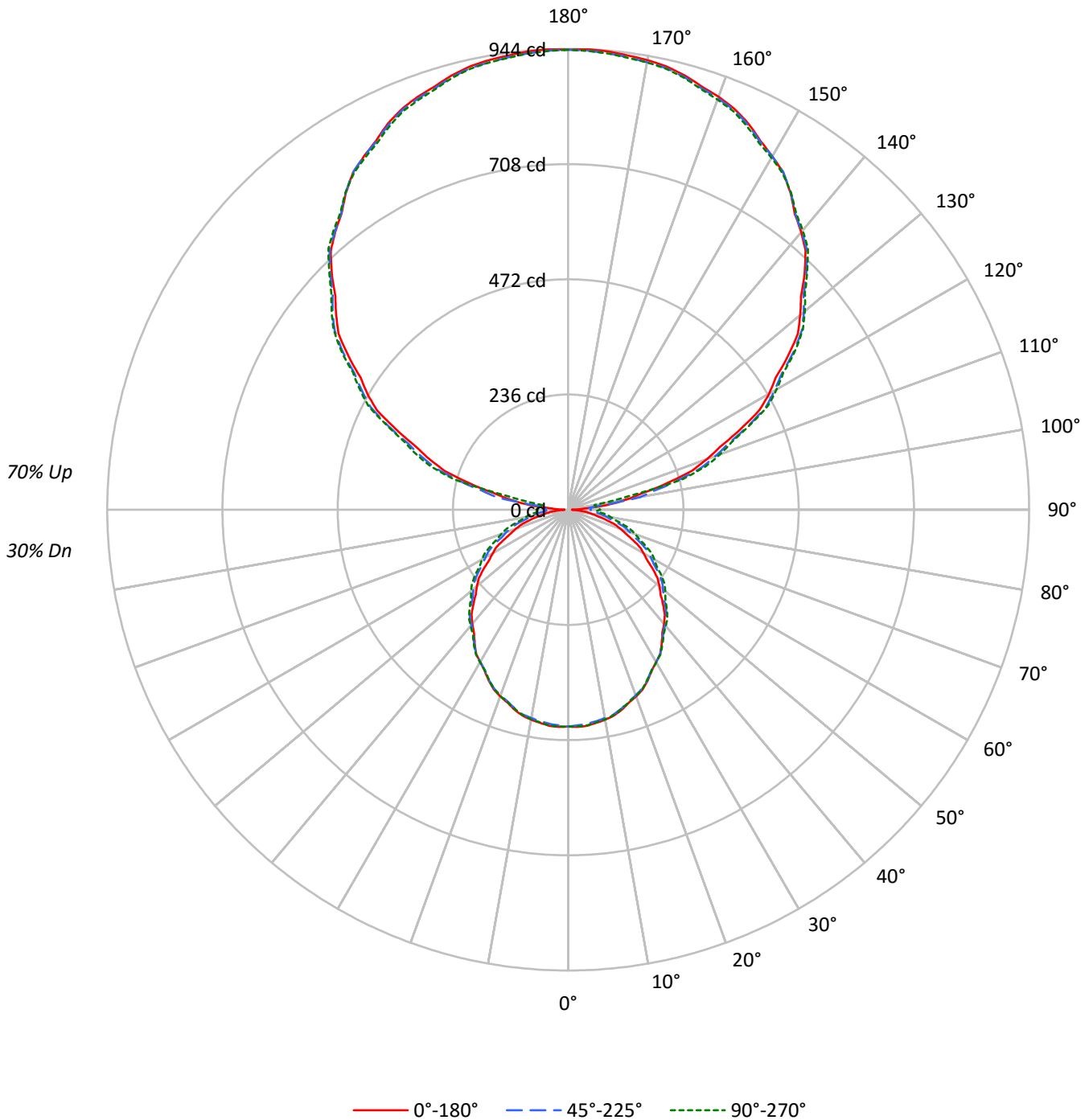
Input Watts (W): 30.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333348-830

CATALOG NUMBER: S125DIW-S375D770U830-4F0-1E-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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	38	38	38	30
1	93	89	85	81	83	80	76	73	63	60	58	47	46	44	33	32	31	25
2	84	77	71	66	75	69	64	60	55	51	48	41	39	37	29	27	26	20
3	77	67	60	54	69	61	55	50	48	44	40	36	33	31	25	23	22	17
4	70	60	52	46	63	54	47	42	42	38	34	32	29	26	22	20	19	14
5	64	53	45	39	57	48	41	36	38	33	29	29	25	22	20	18	16	12
6	59	47	39	34	53	43	36	31	34	29	25	26	22	20	18	16	14	11
7	54	42	35	29	49	38	32	27	31	26	22	23	20	17	17	14	12	10
8	50	38	31	26	45	35	28	24	28	23	19	21	18	15	15	13	11	9
9	47	35	28	23	42	32	25	21	25	21	17	20	16	14	14	12	10	8
10	44	32	25	20	39	29	23	19	23	19	15	18	15	12	13	11	9	7

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	1.0
10°-20°	119.3	2.8
20°-30°	177.4	4.2
30°-40°	210.1	4.9
40°-50°	217.2	5.1
50°-60°	200.1	4.7
60°-70°	161.8	3.8
70°-80°	108.3	2.5
80°-90°	58.1	1.4
90°-100°	65.8	1.5
100°-110°	234.2	5.5
110°-120°	398.3	9.3
120°-130°	500.0	11.7
130°-140°	532.1	12.5
140°-150°	496.6	11.6
150°-160°	401.1	9.4
160°-170°	259.4	6.1
170°-180°	89.5	2.1
0°-30°	338.7	7.9
0°-40°	548.8	12.8
0°-60°	966.1	22.6
0°-90°	1294.3	30.3
90°-120°	698.3	16.3
90°-150°	2227.0	52.1
90°-180°	2977.0	69.7
0°-180°	4271.3	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	27	47	60	66	6
95°	45	54	43	56	59	55
105°	209	219	232	240	243	222
115°	388	395	407	411	410	385
125°	550	555	563	567	567	491
135°	685	688	690	694	692	528
145°	793	794	794	797	794	496
155°	873	869	870	872	867	402
165°	921	917	918	921	916	260
175°	942	938	939	944	938	90
180°	942	942	942	942	942	



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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°	13.8	17.1	20.5	23.8	27.1	30.5	34.0	37.5	41.1	44.6	46.9
90°	7.6	12.0	16.3	20.6	25.1	29.4	33.7	38.2	42.5	46.9	49.9
92.5°	17.1	19.0	21.0	23.0	25.0	28.2	32.5	36.9	41.2	45.5	48.4
95°	45.4	47.5	49.6	51.7	53.6	53.4	50.8	48.2	45.6	43.0	45.9
97.5°	88.2	91.3	94.4	97.6	100.7	97.9	89.4	81.0	72.5	64.0	61.6
100°	121.4	123.9	126.4	128.9	131.4	134.5	138.3	141.9	145.7	149.4	128.3
102.5°	155.1	157.6	160.1	162.6	165.0	168.0	171.4	174.7	178.1	181.5	179.1
105°	209.2	211.4	213.6	215.7	217.9	220.5	223.4	226.3	229.1	232.1	234.0
107.5°	265.4	266.7	268.1	269.4	270.7	272.9	276.0	279.1	282.2	285.3	287.3
110°	302.0	303.1	304.3	305.5	306.6	308.7	311.7	314.7	317.7	320.7	322.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	336.6	337.9	339.2	340.5	341.8	343.8	346.7	349.5	352.3	355.2	356.3
115°	388.1	389.6	391.1	392.5	394.0	396.0	398.7	401.3	404.0	406.7	407.8
117.5°	441.5	441.9	442.3	442.7	443.1	444.8	447.8	450.7	453.7	456.7	457.5
120°	474.9	475.1	475.2	475.4	475.5	476.9	479.7	482.3	485.0	487.7	489.1
122.5°	504.3	505.0	505.7	506.4	507.2	508.7	511.0	513.4	515.8	518.2	519.4
125°	550.0	551.0	552.0	553.0	553.9	555.4	557.3	559.3	561.2	563.2	564.1
127.5°	593.2	593.9	594.7	595.3	596.0	597.1	598.5	600.0	601.5	603.0	604.2
130°	620.1	620.8	621.4	622.1	622.8	623.9	625.4	626.9	628.4	629.9	630.8
132.5°	646.6	647.4	648.3	649.2	650.1	650.8	651.6	652.2	653.0	653.7	655.0
135°	684.6	685.4	686.3	687.1	688.0	688.5	688.9	689.3	689.7	690.0	691.0
137.5°	719.5	720.3	721.0	721.8	722.5	722.8	722.9	722.9	723.0	723.1	724.2
140°	742.2	742.4	742.7	743.1	743.4	743.5	743.5	743.4	743.3	743.3	744.6
142.5°	762.8	762.9	763.0	763.1	763.3	763.4	763.6	763.8	764.1	764.3	765.3
145°	793.1	793.3	793.5	793.7	794.0	794.1	794.1	794.1	794.1	794.1	794.8
147.5°	819.3	819.2	819.1	819.1	819.0	819.1	819.3	819.4	819.5	819.7	820.1
150°	835.9	835.7	835.4	835.0	834.7	834.7	835.0	835.4	835.7	835.9	836.3
152.5°	852.2	851.5	850.8	850.2	849.4	849.2	849.6	849.9	850.2	850.5	850.8
155°	873.0	872.0	871.1	870.2	869.3	868.9	869.3	869.6	869.9	870.2	870.6
157.5°	889.0	888.5	888.0	887.4	886.8	886.6	886.6	886.6	886.6	886.6	887.2
160°	900.2	899.3	898.3	897.4	896.5	896.1	896.3	896.5	896.5	896.7	897.4
162.5°	909.2	908.2	907.3	906.3	905.4	905.0	905.2	905.4	905.5	905.7	906.5
165°	921.1	920.2	919.4	918.4	917.5	917.1	917.2	917.4	917.6	917.7	918.6
167.5°	930.1	929.2	928.2	927.3	926.2	925.9	926.0	926.1	926.3	926.5	927.6
170°	935.2	934.1	932.9	931.9	930.8	930.3	930.5	930.7	930.8	930.9	932.2
172.5°	938.5	937.5	936.3	935.2	934.2	933.8	934.1	934.3	934.6	934.9	935.9
175°	942.2	941.2	940.3	939.3	938.4	938.0	938.2	938.3	938.5	938.7	939.9
177.5°	943.8	943.0	942.4	941.6	940.8	940.5	940.7	940.8	940.8	941.0	941.9
180°	942.2	942.2	942.2	942.2	942.2	942.2	942.2	942.2	942.2	942.2	942.2



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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°	49.3	51.7	54.1	55.7	56.5	57.2	58.0	58.7
90°	52.9	55.9	58.9	61.0	62.1	63.2	64.4	65.5
92.5°	51.4	54.3	57.2	59.1	60.0	60.9	61.8	62.7
95°	48.8	51.7	54.6	56.4	57.0	57.8	58.4	59.1
97.5°	59.3	56.9	54.6	53.7	54.4	55.0	55.7	56.4
100°	107.3	86.1	65.0	54.5	54.4	54.4	54.4	54.3
102.5°	176.7	174.3	171.8	165.6	155.7	145.7	135.7	125.7
105°	235.9	237.9	239.8	241.0	241.6	242.1	242.6	243.2
107.5°	289.2	291.2	293.1	294.2	294.3	294.4	294.5	294.6
110°	323.6	324.9	326.3	327.3	328.2	329.0	329.9	330.7



TEST NUMBER: P333348-830

CATALOG NUMBER: S125DIW-S375D770U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	357.5	358.6	359.9	360.6	361.1	361.6	362.0	362.5
115°	409.0	410.1	411.1	411.6	411.2	410.9	410.5	410.2
117.5°	458.4	459.2	460.1	460.6	460.8	461.1	461.4	461.7
120°	490.4	491.7	493.0	493.6	493.4	493.2	493.0	492.9
122.5°	520.7	522.0	523.2	523.7	523.3	523.0	522.7	522.4
125°	565.0	565.9	566.8	567.3	567.3	567.4	567.4	567.4
127.5°	605.2	606.3	607.4	607.7	607.1	606.5	605.9	605.3
130°	631.7	632.6	633.5	633.8	633.5	633.2	632.9	632.6
132.5°	656.2	657.4	658.7	659.2	658.8	658.5	658.1	657.7
135°	691.9	692.9	693.8	694.1	693.6	693.1	692.7	692.3
137.5°	725.5	726.7	727.9	728.3	727.8	727.5	727.0	726.6
140°	746.0	747.3	748.8	749.1	748.7	748.1	747.5	747.0
142.5°	766.3	767.2	768.3	768.5	767.9	767.3	766.9	766.3
145°	795.3	796.0	796.6	796.6	796.2	795.6	795.0	794.5
147.5°	820.5	820.8	821.1	820.9	819.9	819.0	818.0	817.1
150°	836.6	836.9	837.3	836.8	835.7	834.5	833.4	832.3
152.5°	851.1	851.4	851.8	851.3	850.3	849.1	848.1	847.0
155°	871.1	871.6	872.0	871.7	870.4	869.2	868.0	866.7
157.5°	887.7	888.2	888.6	888.3	887.0	885.8	884.6	883.4
160°	898.0	898.6	899.2	898.9	897.7	896.5	895.2	893.9
162.5°	907.4	908.2	909.2	908.9	907.6	906.2	904.8	903.4
165°	919.5	920.5	921.4	921.2	920.0	918.8	917.6	916.2
167.5°	928.7	929.8	930.9	930.9	929.4	928.0	926.6	925.2
170°	933.4	934.7	935.9	935.9	934.4	933.0	931.6	930.3
172.5°	937.1	938.2	939.3	939.1	937.8	936.4	935.0	933.6
175°	941.1	942.4	943.6	943.5	942.2	940.8	939.3	937.9
177.5°	942.7	943.6	944.5	944.4	943.4	942.4	941.4	940.5
180°	942.2	942.2	942.2	942.2	942.2	942.2	942.2	942.2

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