

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: P333499-830

Luminaire Tested: **S125RDIP-S375D590U830-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333499-830  
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: S125RDIP-S375D590U830-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 590 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3591.7 lumens  
Efficiency: N/A  
Efficacy: 140.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

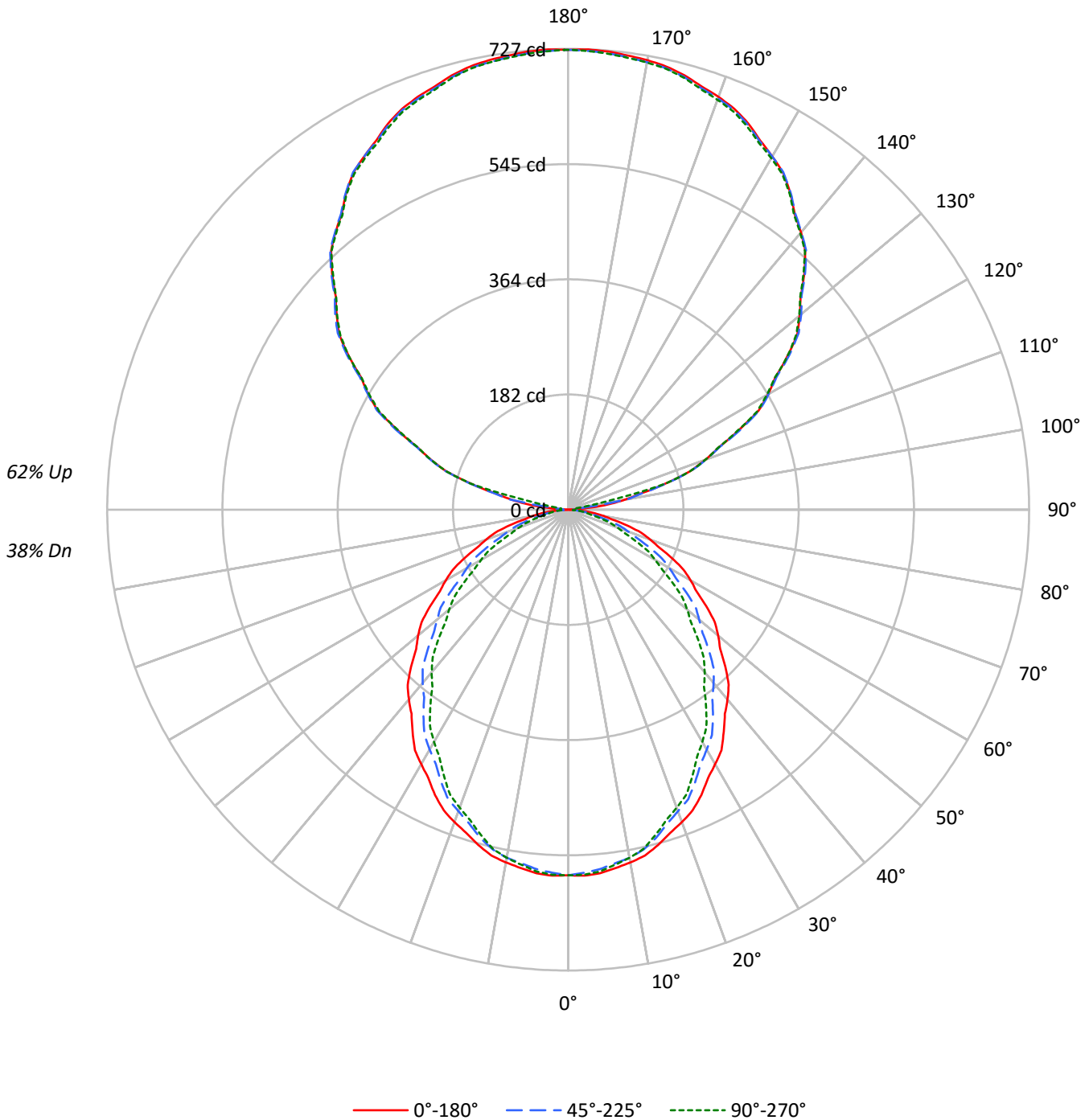
Input Watts (W): 25.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**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	91	87	84	86	83	80	77	67	65	63	53	52	50	40	39	38	32
2	87	80	74	69	79	73	68	63	59	56	53	47	44	42	35	34	33	27
3	79	70	63	57	72	64	58	53	52	48	44	42	38	36	32	30	28	23
4	73	62	54	49	66	57	50	45	47	42	38	37	34	31	28	26	24	20
5	67	55	47	42	60	51	44	39	42	37	33	33	30	27	25	23	21	18
6	61	50	42	36	55	45	38	33	37	32	28	30	26	23	23	21	19	15
7	57	45	37	32	51	41	34	29	34	29	25	27	24	21	21	19	17	14
8	53	41	33	28	48	37	31	26	31	26	22	25	21	18	19	17	15	12
9	49	37	30	25	44	34	28	23	28	23	20	23	19	17	18	15	13	11
10	46	34	27	22	41	31	25	21	26	21	18	21	18	15	17	14	12	10

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3725	3725	3725
5°	3734	3691	3713
10°	3705	3657	3657
15°	3661	3582	3553
20°	3604	3478	3437
25°	3539	3377	3302
30°	3456	3258	3155
35°	3372	3136	2988
40°	3295	3008	2824
45°	3199	2865	2645
50°	3104	2710	2460
55°	2992	2559	2262
60°	2880	2381	2047
65°	2749	2170	1803
70°	2598	1907	1554
75°	2393	1609	1293
80°	2105	1261	1086
85°	1771	1030	971



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.2	1.5
10°-20°	151.6	4.2
20°-30°	219.8	6.1
30°-40°	250.5	7.0
40°-50°	244.1	6.8
50°-60°	205.5	5.7
60°-70°	144.1	4.0
70°-80°	74.1	2.1
80°-90°	20.2	0.6
90°-100°	26.4	0.7
100°-110°	162.5	4.5
110°-120°	294.7	8.2
120°-130°	378.2	10.5
130°-140°	406.7	11.3
140°-150°	381.8	10.6
150°-160°	308.8	8.6
160°-170°	199.7	5.6
170°-180°	68.9	1.9
0°-30°	425.6	11.8
0°-40°	676.0	18.8
0°-60°	1125.7	31.3
0°-90°	1364.0	38.0
90°-120°	483.5	13.5
90°-150°	1650.2	45.9
90°-180°	2228.0	62.0
0°-180°	3591.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	577	577	577	577	577	
5°	576	574	569	573	573	55
15°	548	545	536	535	531	154
25°	497	490	474	468	463	228
35°	428	417	398	385	379	268
45°	350	337	314	297	290	270
55°	266	251	227	208	201	238
65°	180	165	142	125	118	178
75°	96	83	64	55	52	101
85°	24	16	14	14	13	27
90°	1	5	9	11	13	2
95°	31	28	9	11	11	39
105°	158	160	160	160	160	168
115°	297	299	300	298	295	294
125°	422	426	426	424	422	377
135°	526	529	529	527	524	406
145°	610	611	611	612	609	382
155°	672	669	670	671	667	310
165°	709	706	707	709	706	200
175°	726	722	723	727	722	69
180°	726	726	726	726	726	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7
2.5°	577.8	577.6	577.3	577.1	576.8	576.4	575.6	574.8	574.0	573.3	574.0
5°	575.9	575.5	575.1	574.7	574.3	573.6	572.5	571.5	570.4	569.3	570.3
7.5°	570.2	569.9	569.5	569.1	568.7	567.9	566.7	565.3	564.1	562.8	563.5
10°	565.0	564.7	564.4	564.1	563.8	563.0	561.7	560.2	558.9	557.6	557.9
12.5°	559.0	558.6	558.4	558.0	557.6	556.5	554.7	552.9	551.0	549.2	549.4
15°	547.5	547.0	546.4	545.8	545.3	543.9	541.9	539.9	537.8	535.8	535.7
17.5°	534.6	533.7	532.8	531.9	531.0	529.3	526.7	524.1	521.6	519.1	518.6
20°	524.4	523.5	522.5	521.6	520.6	518.6	515.5	512.4	509.3	506.1	505.7
22.5°	513.3	512.4	511.4	510.4	509.4	507.4	504.1	500.9	497.6	494.4	493.4
25°	496.6	495.1	493.7	492.2	490.8	488.2	484.7	481.1	477.5	473.9	472.7
27.5°	477.4	475.7	473.9	472.1	470.3	467.6	463.7	459.9	456.1	452.2	450.4
30°	463.4	461.7	459.8	458.0	456.1	453.2	449.1	445.1	441.0	436.9	434.7
32.5°	449.9	447.7	445.6	443.5	441.3	438.2	434.0	429.9	425.7	421.6	419.1
35°	427.7	425.5	423.1	420.8	418.5	415.1	410.8	406.4	402.1	397.8	394.9
37.5°	406.0	403.2	400.4	397.6	394.7	391.1	386.6	382.1	377.7	373.2	369.8
40°	390.8	387.9	384.9	382.0	379.1	375.3	370.7	366.1	361.4	356.8	353.1
42.5°	374.7	371.7	368.7	365.8	362.8	358.9	354.1	349.3	344.5	339.7	336.2
45°	350.2	347.4	344.6	341.8	339.0	334.9	329.6	324.3	319.0	313.7	309.7
47.5°	324.9	321.9	319.0	315.9	313.0	308.9	303.5	298.1	292.8	287.4	283.4
50°	308.9	305.7	302.5	299.3	296.1	291.7	286.2	280.7	275.1	269.7	265.6
52.5°	291.4	288.1	284.8	281.6	278.3	274.1	268.9	263.6	258.4	253.3	248.9
55°	265.7	262.6	259.5	256.5	253.4	249.1	243.6	238.2	232.8	227.3	223.0
57.5°	239.8	236.5	233.1	229.8	226.5	222.3	217.0	211.8	206.6	201.3	197.1
60°	223.0	219.6	216.2	212.8	209.4	205.2	199.9	194.7	189.5	184.3	180.0
62.5°	205.3	202.0	198.8	195.6	192.3	188.0	182.8	177.5	172.1	166.8	162.9
65°	179.9	176.6	173.3	170.0	166.7	162.5	157.4	152.3	147.1	142.0	138.2
67.5°	154.8	151.5	148.2	144.9	141.6	137.4	132.5	127.6	122.7	117.8	114.2
70°	137.6	134.4	131.1	127.8	124.5	120.5	115.6	110.7	105.9	101.0	98.0
72.5°	120.9	117.7	114.5	111.3	108.1	104.2	99.6	95.1	90.6	86.1	83.3
75°	95.9	92.9	90.0	87.1	84.3	80.8	76.6	72.6	68.5	64.5	62.3
77.5°	70.9	68.6	66.3	63.9	61.6	58.8	55.6	52.3	49.1	45.8	44.3
80°	56.6	54.3	52.0	49.7	47.3	44.9	42.1	39.4	36.7	33.9	33.1
82.5°	42.7	40.6	38.5	36.4	34.3	32.3	30.5	28.7	26.8	24.9	24.5
85°	23.9	22.2	20.5	18.8	17.0	15.8	15.4	14.9	14.4	13.9	13.9
87.5°	8.1	7.7	7.4	7.1	6.7	6.6	6.7	6.8	6.9	7.0	7.1
90°	0.6	1.5	2.5	3.4	4.3	5.3	6.1	7.0	7.7	8.6	9.2
92.5°	8.3	7.6	7.0	6.3	5.6	5.7	6.4	7.2	7.8	8.6	9.2
95°	30.6	30.3	30.0	29.6	29.2	26.8	22.2	17.7	13.1	8.6	9.2
97.5°	64.0	64.7	65.3	65.9	66.5	62.4	53.4	44.4	35.4	26.5	23.1
100°	89.8	90.2	90.5	90.9	91.2	91.6	92.2	92.7	93.1	93.6	75.8
102.5°	116.0	116.5	117.0	117.4	117.8	118.2	118.5	118.9	119.1	119.4	116.0
105°	158.1	158.5	159.1	159.6	160.0	160.2	160.2	160.2	160.2	160.2	160.2
107.5°	201.8	201.8	201.8	201.8	201.8	201.9	202.1	202.4	202.6	202.8	202.8
110°	230.2	230.2	230.2	230.2	230.2	230.3	230.5	230.7	231.0	231.2	230.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	256.8	257.1	257.4	257.7	258.0	258.2	258.4	258.4	258.6	258.7	258.4
115°	296.8	297.5	298.0	298.6	299.3	299.6	299.7	299.8	299.9	300.1	299.6
117.5°	338.3	338.2	338.2	338.2	338.2	338.4	338.8	339.3	339.7	340.2	339.6
120°	364.1	363.9	363.8	363.7	363.5	363.7	364.1	364.4	364.8	365.1	364.9
122.5°	386.8	387.3	387.8	388.2	388.7	389.0	389.2	389.4	389.5	389.6	389.5
125°	422.2	423.0	423.8	424.6	425.5	425.9	425.9	425.9	425.9	425.9	425.5
127.5°	455.8	456.4	457.0	457.6	458.2	458.5	458.4	458.4	458.3	458.2	457.9
130°	476.5	477.0	477.7	478.2	478.8	479.2	479.3	479.5	479.6	479.7	479.3
132.5°	497.1	497.8	498.5	499.2	499.8	500.1	499.8	499.5	499.3	499.1	499.0
135°	526.5	527.2	527.9	528.6	529.3	529.6	529.3	529.0	528.9	528.6	528.4
137.5°	553.5	554.1	554.7	555.3	555.9	556.2	555.9	555.7	555.5	555.3	555.3
140°	571.1	571.4	571.6	571.8	572.0	572.1	572.0	571.8	571.7	571.7	571.8
142.5°	587.0	587.2	587.3	587.5	587.6	587.8	588.0	588.1	588.2	588.4	588.4
145°	610.4	610.6	610.9	611.1	611.3	611.4	611.4	611.4	611.4	611.4	611.5
147.5°	630.7	630.7	630.7	630.7	630.6	630.7	630.7	630.9	631.0	631.2	631.4
150°	643.7	643.5	643.2	643.0	642.7	642.7	643.0	643.2	643.5	643.7	643.9
152.5°	656.2	655.6	655.2	654.6	654.0	653.9	654.1	654.4	654.6	654.9	655.2
155°	672.2	671.5	670.8	670.1	669.3	669.1	669.3	669.6	669.8	670.1	670.4
157.5°	684.6	684.1	683.7	683.2	682.9	682.7	682.7	682.7	682.7	682.8	683.2
160°	693.1	692.5	691.7	691.0	690.3	690.0	690.1	690.2	690.3	690.5	691.0
162.5°	700.0	699.4	698.6	697.9	697.2	696.9	697.0	697.1	697.2	697.4	698.0
165°	709.3	708.6	707.8	707.2	706.4	706.2	706.2	706.3	706.5	706.6	707.3
167.5°	716.1	715.5	714.7	714.0	713.2	712.9	713.0	713.1	713.2	713.4	714.3
170°	720.1	719.3	718.4	717.6	716.7	716.3	716.4	716.6	716.7	716.8	717.7
172.5°	722.6	721.8	721.0	720.1	719.3	719.0	719.2	719.4	719.6	719.8	720.7
175°	725.5	724.7	724.0	723.3	722.6	722.3	722.4	722.6	722.6	722.7	723.7
177.5°	726.7	726.1	725.6	725.0	724.4	724.2	724.2	724.3	724.4	724.5	725.3
180°	725.5	725.5	725.5	725.5	725.5	725.5	725.5	725.5	725.5	725.5	725.5



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7
2.5°	574.8	575.6	576.4	576.7	576.6	576.6	576.5	576.4
5°	571.3	572.2	573.2	573.6	573.4	573.2	573.0	572.8
7.5°	564.1	564.9	565.5	565.7	565.5	565.3	565.1	564.9
10°	558.2	558.5	558.7	558.7	558.5	558.2	557.9	557.6
12.5°	549.6	549.9	550.1	550.0	549.5	549.0	548.7	548.2
15°	535.6	535.5	535.4	534.9	534.0	533.2	532.3	531.4
17.5°	518.1	517.6	517.2	516.5	515.9	515.1	514.3	513.7
20°	505.2	504.7	504.3	503.6	502.7	501.8	501.0	500.1
22.5°	492.4	491.4	490.5	489.7	489.0	488.2	487.6	486.8
25°	471.5	470.1	468.9	467.8	466.7	465.6	464.6	463.4
27.5°	448.7	447.0	445.2	443.8	442.8	441.8	440.7	439.7
30°	432.4	430.3	428.0	426.5	425.6	424.7	423.9	423.0
32.5°	416.7	414.2	411.7	410.0	408.9	407.7	406.6	405.6
35°	392.1	389.3	386.4	384.4	383.0	381.7	380.3	379.0
37.5°	366.4	363.1	359.7	357.3	356.0	354.7	353.4	352.0
40°	349.4	345.7	342.0	339.6	338.5	337.3	336.1	335.0
42.5°	332.6	329.1	325.6	323.0	321.3	319.5	317.8	316.1
45°	305.9	302.0	298.1	295.5	294.1	292.6	291.2	289.6
47.5°	279.5	275.4	271.5	268.6	267.0	265.4	263.8	262.2
50°	261.5	257.4	253.4	250.6	249.2	247.7	246.3	244.8
52.5°	244.5	240.2	235.7	232.8	231.4	230.0	228.5	227.1
55°	218.7	214.3	210.0	207.0	205.5	203.9	202.4	200.9
57.5°	192.8	188.6	184.3	181.4	180.1	178.7	177.4	176.0
60°	175.8	171.4	167.2	164.4	162.9	161.5	160.0	158.5
62.5°	158.9	155.0	151.0	148.4	146.8	145.4	144.0	142.5
65°	134.2	130.4	126.5	123.9	122.4	120.9	119.5	118.0
67.5°	110.7	107.2	103.6	101.2	100.1	99.0	97.7	96.6
70°	95.1	92.1	89.1	87.0	85.8	84.6	83.5	82.3
72.5°	80.5	77.8	75.0	73.2	72.5	71.7	70.9	70.1
75°	60.2	58.1	56.0	54.6	53.9	53.2	52.5	51.8
77.5°	42.9	41.4	39.9	38.8	38.4	37.9	37.3	36.9
80°	32.2	31.4	30.5	30.0	29.8	29.6	29.4	29.2
82.5°	24.1	23.7	23.3	23.0	22.9	22.8	22.7	22.5
85°	13.8	13.7	13.6	13.5	13.4	13.3	13.2	13.1
87.5°	7.2	7.4	7.4	7.4	7.4	7.4	7.4	7.4
90°	9.8	10.4	11.0	11.5	11.9	12.2	12.5	12.9
92.5°	9.8	10.4	11.0	11.4	11.5	11.7	11.9	12.1
95°	9.8	10.4	11.0	11.3	11.3	11.3	11.3	11.3
97.5°	19.7	16.3	13.0	11.3	11.3	11.3	11.3	11.3
100°	58.0	40.2	22.3	13.2	12.7	12.3	11.8	11.3
102.5°	112.6	109.2	105.9	100.2	92.0	83.9	75.8	67.7
105°	160.2	160.2	160.2	160.2	160.0	159.9	159.9	159.7
107.5°	202.9	202.9	202.9	202.7	202.5	202.1	201.7	201.3
110°	230.5	230.2	229.8	229.7	229.8	229.9	230.1	230.2





TEST NUMBER: P333499-830

CATALOG NUMBER: S125RDIP-S375D590U830-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	257.9	257.4	256.9	256.7	256.5	256.3	256.2	256.0
115°	299.1	298.6	298.1	297.6	296.8	296.1	295.4	294.7
117.5°	338.9	338.3	337.7	337.2	337.0	336.6	336.3	336.0
120°	364.7	364.4	364.2	363.7	363.2	362.6	361.9	361.4
122.5°	389.2	389.0	388.7	388.2	387.6	386.8	386.2	385.5
125°	425.0	424.4	424.0	423.6	423.2	422.8	422.5	422.2
127.5°	457.6	457.4	457.1	456.6	455.6	454.8	453.9	453.0
130°	479.0	478.6	478.2	477.8	477.2	476.5	476.0	475.4
132.5°	498.9	498.8	498.8	498.4	497.9	497.2	496.6	496.1
135°	528.1	527.9	527.6	527.2	526.5	525.8	525.0	524.3
137.5°	555.3	555.4	555.4	555.2	554.6	553.9	553.4	552.7
140°	572.1	572.3	572.6	572.3	571.7	570.9	570.2	569.5
142.5°	588.5	588.5	588.6	588.2	587.6	586.8	586.1	585.4
145°	611.7	611.8	611.9	611.6	610.9	610.2	609.4	608.7
147.5°	631.5	631.7	631.8	631.4	630.6	629.7	628.9	628.0
150°	644.1	644.4	644.6	644.3	643.4	642.3	641.4	640.5
152.5°	655.3	655.6	655.8	655.5	654.7	653.8	652.9	652.1
155°	670.8	671.1	671.5	671.2	670.2	669.3	668.4	667.3
157.5°	683.5	683.9	684.3	684.0	683.1	682.0	681.1	680.1
160°	691.4	691.9	692.4	692.1	691.2	690.2	689.3	688.3
162.5°	698.7	699.4	700.0	699.8	698.8	697.8	696.7	695.6
165°	708.0	708.8	709.5	709.4	708.4	707.5	706.5	705.5
167.5°	715.1	716.0	716.8	716.7	715.7	714.5	713.5	712.4
170°	718.8	719.7	720.7	720.6	719.5	718.4	717.4	716.3
172.5°	721.5	722.5	723.3	723.2	722.1	721.0	719.9	718.9
175°	724.6	725.6	726.6	726.5	725.5	724.3	723.3	722.2
177.5°	725.9	726.6	727.3	727.2	726.4	725.7	724.9	724.2
180°	725.5	725.5	725.5	725.5	725.5	725.5	725.5	725.5

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