

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: P333529-840

Luminaire Tested: **S125RDIP-S610D590U840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333529-840
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: S125RDIP-S610D590U840-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 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: 4788.4 lumens
Efficiency: N/A
Efficacy: 146.0 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: General Diffuse

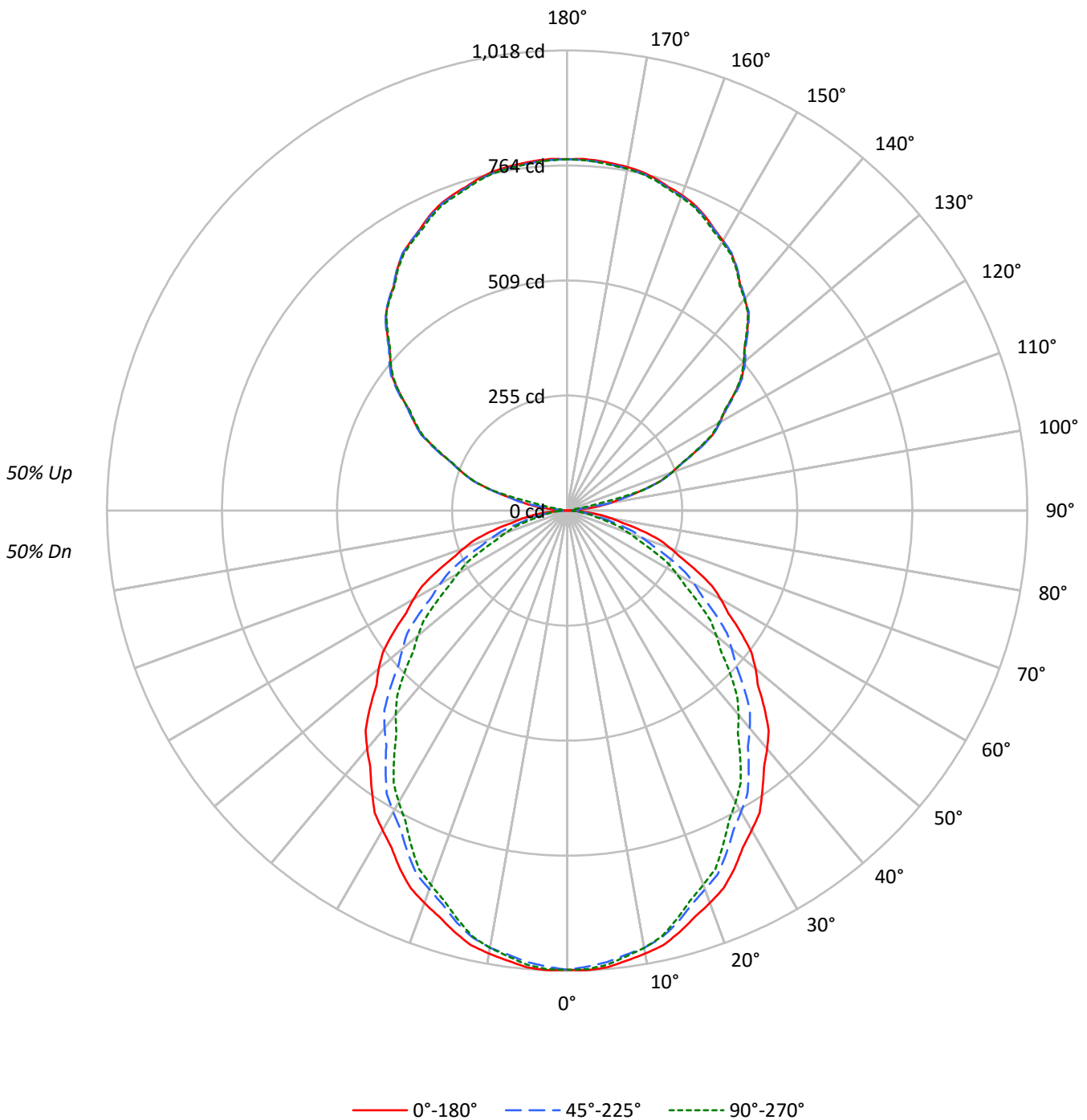
Input Watts (W): 32.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333529-840

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0													
RCR																																					
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50																			
1	98	94	90	87	90	87	83	81	73	71	69	61	60	58	50	49	48	43																			
2	89	82	76	71	82	76	71	66	65	61	57	54	51	49	44	42	41	36																			
3	82	72	65	59	75	67	61	56	57	52	49	48	44	42	39	37	35	31																			
4	75	64	56	50	69	60	53	47	51	46	41	43	39	36	35	33	30	27																			
5	69	57	49	43	63	53	46	41	46	40	36	39	34	31	32	29	26	23																			
6	63	51	43	38	58	48	41	36	41	36	31	35	31	27	29	26	23	20																			
7	59	46	39	33	54	43	36	31	37	32	28	32	27	24	27	23	21	18																			
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	19	16																			
9	51	39	31	26	47	36	29	25	31	26	22	27	23	20	23	19	17	15																			
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	21	18	15	13																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6561	6561	6561
5°	6576	6501	6541
10°	6526	6441	6441
15°	6449	6310	6258
20°	6349	6128	6054
25°	6233	5949	5818
30°	6088	5739	5557
35°	5941	5523	5263
40°	5802	5298	4975
45°	5634	5045	4661
50°	5466	4772	4332
55°	5271	4510	3984
60°	5074	4193	3608
65°	4843	3822	3177
70°	4579	3361	2738
75°	4212	2832	2278
80°	3712	2228	1912
85°	3127	1815	1704



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.5	2.0
10°-20°	267.0	5.6
20°-30°	387.1	8.1
30°-40°	441.2	9.2
40°-50°	430.0	9.0
50°-60°	362.0	7.6
60°-70°	253.8	5.3
70°-80°	130.4	2.7
80°-90°	34.6	0.7
90°-100°	28.3	0.6
100°-110°	174.1	3.6
110°-120°	315.7	6.6
120°-130°	405.2	8.5
130°-140°	435.8	9.1
140°-150°	409.1	8.5
150°-160°	330.9	6.9
160°-170°	214.0	4.5
170°-180°	73.8	1.5
0°-30°	749.6	15.7
0°-40°	1190.8	24.9
0°-60°	1982.8	41.4
0°-90°	2401.6	50.2
90°-120°	518.0	10.8
90°-150°	1768.1	36.9
90°-180°	2387.0	49.8
0°-180°	4788.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1016	1016	1016	1016	1016	
5°	1014	1011	1003	1010	1009	96
15°	964	959	944	943	936	272
25°	875	862	835	825	816	402
35°	754	734	700	679	668	472
45°	617	594	552	523	510	476
55°	468	442	400	367	354	418
65°	317	290	250	220	208	314
75°	169	145	114	97	91	179
85°	42	29	24	24	23	47
90°	1	5	9	12	14	3
95°	33	30	9	12	12	42
105°	169	172	172	172	171	180
115°	318	321	322	319	316	315
125°	452	456	456	454	452	404
135°	564	567	566	565	562	435
145°	654	655	655	655	652	409
155°	720	717	718	719	715	332
165°	760	757	757	760	756	215
175°	777	774	774	778	774	74
180°	777	777	777	777	777	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9
2.5°	1017.7	1017.3	1016.9	1016.5	1016.1	1015.2	1013.8	1012.5	1011.1	1009.8	1011.1
5°	1014.3	1013.7	1013.0	1012.3	1011.6	1010.4	1008.5	1006.6	1004.7	1002.8	1004.5
7.5°	1004.4	1003.7	1003.1	1002.4	1001.8	1000.4	998.0	995.8	993.6	991.3	992.5
10°	995.1	994.6	994.1	993.6	993.1	991.7	989.3	986.9	984.5	982.1	982.6
12.5°	984.7	984.1	983.4	982.8	982.1	980.2	977.0	973.8	970.6	967.3	967.8
15°	964.5	963.4	962.4	961.4	960.4	958.1	954.5	950.9	947.4	943.7	943.6
17.5°	941.6	940.1	938.5	937.0	935.3	932.3	927.8	923.3	918.8	914.3	913.4
20°	923.8	922.1	920.4	918.7	917.0	913.4	908.0	902.5	897.1	891.6	890.7
22.5°	904.1	902.4	900.8	899.1	897.4	893.6	887.9	882.2	876.5	870.7	869.1
25°	874.7	872.1	869.6	867.1	864.4	860.0	853.7	847.4	841.1	834.8	832.6
27.5°	840.9	837.9	834.8	831.6	828.5	823.6	816.9	810.1	803.3	796.6	793.5
30°	816.4	813.1	809.9	806.7	803.4	798.2	791.0	784.0	776.8	769.6	765.7
32.5°	792.4	788.7	784.9	781.1	777.3	771.7	764.5	757.2	749.8	742.6	738.2
35°	753.5	749.4	745.3	741.2	737.1	731.2	723.6	715.9	708.2	700.5	695.6
37.5°	715.3	710.2	705.3	700.3	695.4	688.9	681.0	673.1	665.2	657.2	651.4
40°	688.2	683.2	678.0	672.9	667.8	661.2	653.0	644.8	636.6	628.4	622.0
42.5°	660.0	654.8	649.5	644.3	639.0	632.2	623.7	615.2	606.8	598.3	592.1
45°	616.9	612.0	607.0	602.1	597.1	590.0	580.6	571.2	561.8	552.4	545.6
47.5°	572.3	567.0	561.8	556.6	551.4	544.0	534.6	525.1	515.7	506.2	499.3
50°	544.0	538.4	532.7	527.1	521.5	513.8	504.1	494.4	484.6	474.9	467.8
52.5°	513.3	507.6	501.8	496.0	490.3	482.8	473.6	464.4	455.2	446.1	438.4
55°	468.1	462.6	457.2	451.7	446.3	438.7	429.2	419.6	410.1	400.5	392.8
57.5°	422.3	416.5	410.6	404.9	399.0	391.4	382.2	373.0	363.9	354.7	347.1
60°	392.8	386.9	380.9	375.0	369.0	361.4	352.1	343.0	333.8	324.6	317.1
62.5°	361.5	355.9	350.1	344.5	338.8	331.2	321.9	312.6	303.3	293.9	286.9
65°	316.9	311.1	305.3	299.5	293.7	286.3	277.2	268.2	259.1	250.1	243.3
67.5°	272.6	266.7	260.9	255.2	249.3	242.2	233.5	224.8	216.1	207.4	201.3
70°	242.5	236.7	230.9	225.1	219.2	212.1	203.6	195.1	186.5	178.0	172.7
72.5°	213.0	207.3	201.7	196.0	190.4	183.5	175.5	167.5	159.6	151.6	146.7
75°	168.8	163.7	158.5	153.5	148.3	142.2	135.0	127.8	120.7	113.5	109.8
77.5°	124.9	120.8	116.7	112.6	108.6	103.6	97.9	92.2	86.4	80.7	78.1
80°	99.8	95.6	91.6	87.5	83.4	79.0	74.1	69.4	64.6	59.9	58.3
82.5°	75.2	71.5	67.9	64.1	60.5	57.0	53.7	50.4	47.2	43.9	43.2
85°	42.2	39.1	36.1	33.0	29.9	28.0	27.1	26.3	25.4	24.5	24.3
87.5°	14.2	13.5	12.7	12.0	11.2	10.9	10.9	11.0	11.0	11.0	11.2
90°	0.6	1.6	2.6	3.6	4.6	5.7	6.6	7.5	8.3	9.2	9.9
92.5°	8.9	8.2	7.5	6.8	6.0	6.1	6.9	7.7	8.4	9.2	9.9
95°	32.8	32.4	32.1	31.7	31.3	28.7	23.8	19.0	14.0	9.2	9.9
97.5°	68.6	69.3	70.0	70.6	71.3	66.9	57.3	47.6	38.0	28.4	24.7
100°	96.2	96.6	96.9	97.4	97.8	98.2	98.8	99.3	99.8	100.3	81.2
102.5°	124.3	124.8	125.3	125.8	126.2	126.6	126.9	127.3	127.6	127.9	124.3
105°	169.4	169.9	170.5	171.0	171.5	171.7	171.7	171.7	171.7	171.7	171.7
107.5°	216.2	216.2	216.2	216.2	216.2	216.3	216.5	216.8	217.1	217.3	217.3
110°	246.6	246.6	246.6	246.6	246.6	246.7	247.0	247.2	247.5	247.7	247.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	275.2	275.5	275.8	276.1	276.4	276.6	276.8	276.9	277.1	277.2	276.8
115°	318.0	318.7	319.3	319.9	320.6	321.0	321.1	321.2	321.3	321.5	321.0
117.5°	362.4	362.3	362.3	362.3	362.3	362.5	363.0	363.6	364.0	364.5	363.9
120°	390.1	389.9	389.8	389.7	389.5	389.7	390.1	390.4	390.8	391.2	390.9
122.5°	414.4	415.0	415.5	416.0	416.5	416.8	417.0	417.2	417.3	417.5	417.3
125°	452.3	453.2	454.0	454.9	455.9	456.4	456.4	456.4	456.4	456.4	455.9
127.5°	488.4	489.0	489.7	490.3	490.9	491.2	491.1	491.1	491.0	490.9	490.6
130°	510.5	511.1	511.8	512.4	513.0	513.4	513.5	513.7	513.8	513.9	513.5
132.5°	532.6	533.3	534.1	534.8	535.5	535.8	535.5	535.2	534.9	534.7	534.6
135°	564.1	564.8	565.6	566.3	567.1	567.4	567.1	566.8	566.6	566.3	566.1
137.5°	593.0	593.7	594.3	595.0	595.6	595.9	595.6	595.4	595.2	594.9	595.0
140°	611.9	612.2	612.4	612.7	612.9	613.0	612.9	612.7	612.6	612.5	612.7
142.5°	628.9	629.1	629.2	629.4	629.5	629.8	630.0	630.1	630.3	630.5	630.5
145°	654.0	654.2	654.5	654.7	655.0	655.1	655.1	655.1	655.1	655.1	655.2
147.5°	675.8	675.8	675.7	675.7	675.6	675.7	675.8	676.0	676.1	676.3	676.5
150°	689.6	689.4	689.1	688.9	688.6	688.6	688.9	689.1	689.4	689.6	689.9
152.5°	703.1	702.5	702.0	701.4	700.7	700.6	700.8	701.1	701.4	701.7	702.0
155°	720.2	719.4	718.7	717.9	717.1	716.9	717.1	717.4	717.6	717.9	718.3
157.5°	733.5	733.0	732.6	732.1	731.6	731.4	731.4	731.4	731.4	731.5	732.0
160°	742.7	741.9	741.1	740.3	739.6	739.3	739.4	739.5	739.6	739.8	740.3
162.5°	750.0	749.3	748.5	747.7	747.0	746.7	746.8	746.9	747.0	747.2	747.9
165°	759.9	759.2	758.4	757.7	756.9	756.6	756.7	756.8	757.0	757.1	757.8
167.5°	767.3	766.6	765.8	765.0	764.2	763.9	764.0	764.1	764.2	764.4	765.3
170°	771.5	770.6	769.7	768.8	767.9	767.5	767.6	767.8	767.9	768.0	769.0
172.5°	774.3	773.4	772.4	771.5	770.6	770.3	770.5	770.8	771.0	771.2	772.1
175°	777.3	776.5	775.7	775.0	774.2	773.9	774.0	774.2	774.3	774.4	775.4
177.5°	778.6	778.0	777.4	776.8	776.2	775.9	776.0	776.1	776.2	776.3	777.1
180°	777.3	777.3	777.3	777.3	777.3	777.3	777.3	777.3	777.3	777.3	777.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9
2.5°	1012.5	1013.8	1015.2	1015.8	1015.7	1015.5	1015.4	1015.3
5°	1006.2	1007.9	1009.7	1010.4	1010.0	1009.7	1009.4	1009.0
7.5°	993.7	994.9	996.1	996.5	996.1	995.7	995.4	995.0
10°	983.1	983.6	984.2	984.2	983.6	983.1	982.6	982.1
12.5°	968.2	968.6	968.9	968.7	967.9	967.1	966.3	965.5
15°	943.4	943.2	943.1	942.2	940.7	939.2	937.7	936.0
17.5°	912.6	911.7	910.9	909.8	908.6	907.3	906.1	904.7
20°	889.9	889.0	888.2	887.0	885.4	883.9	882.4	880.8
22.5°	867.4	865.7	864.0	862.5	861.3	860.0	858.8	857.5
25°	830.4	828.2	826.0	823.8	822.0	820.1	818.3	816.4
27.5°	790.4	787.3	784.2	781.7	779.9	778.1	776.3	774.5
30°	761.7	757.8	753.9	751.1	749.6	748.1	746.6	745.1
32.5°	733.9	729.6	725.3	722.2	720.1	718.2	716.3	714.4
35°	690.6	685.7	680.8	677.1	674.7	672.3	669.9	667.5
37.5°	645.4	639.4	633.5	629.3	627.0	624.8	622.5	620.2
40°	615.4	608.9	602.5	598.2	596.2	594.1	592.1	590.1
42.5°	585.9	579.7	573.5	568.9	565.9	562.9	559.9	556.9
45°	538.8	532.0	525.1	520.5	518.0	515.3	512.8	510.3
47.5°	492.2	485.1	478.2	473.2	470.4	467.6	464.7	461.9
50°	460.6	453.4	446.3	441.4	438.9	436.4	433.7	431.2
52.5°	430.7	422.9	415.3	410.1	407.6	405.1	402.4	399.9
55°	385.2	377.5	369.8	364.7	361.9	359.2	356.5	353.8
57.5°	339.6	332.1	324.7	319.6	317.2	314.8	312.5	310.0
60°	309.5	302.1	294.6	289.5	287.0	284.4	281.9	279.3
62.5°	279.9	273.0	266.0	261.3	258.7	256.2	253.6	251.1
65°	236.5	229.6	222.9	218.1	215.6	213.1	210.5	207.9
67.5°	195.0	188.7	182.5	178.3	176.3	174.3	172.2	170.2
70°	167.4	162.2	156.8	153.2	151.2	149.2	147.0	145.0
72.5°	141.9	136.9	132.1	129.0	127.6	126.2	124.9	123.5
75°	106.0	102.3	98.6	96.0	94.9	93.7	92.5	91.3
77.5°	75.4	72.8	70.2	68.5	67.6	66.7	65.8	64.9
80°	56.8	55.2	53.7	52.8	52.4	52.1	51.7	51.4
82.5°	42.4	41.7	41.0	40.6	40.4	40.2	40.0	39.8
85°	24.2	24.0	23.8	23.7	23.5	23.3	23.2	23.0
87.5°	11.3	11.4	11.6	11.6	11.5	11.5	11.4	11.3
90°	10.5	11.1	11.8	12.3	12.7	13.0	13.4	13.8
92.5°	10.5	11.1	11.8	12.2	12.3	12.5	12.7	12.9
95°	10.5	11.1	11.8	12.1	12.1	12.1	12.1	12.1
97.5°	21.1	17.5	13.9	12.1	12.1	12.1	12.1	12.1
100°	62.1	43.0	23.9	14.1	13.6	13.1	12.6	12.1
102.5°	120.7	117.0	113.5	107.3	98.6	89.9	81.2	72.5
105°	171.7	171.7	171.7	171.7	171.5	171.4	171.3	171.1
107.5°	217.4	217.4	217.4	217.2	216.9	216.5	216.1	215.7
110°	247.0	246.6	246.2	246.1	246.2	246.3	246.5	246.6



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CATALOG NUMBER: S125RDIP-S610D590U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	276.3	275.8	275.3	275.0	274.8	274.6	274.5	274.3
115°	320.4	319.9	319.4	318.8	318.0	317.3	316.5	315.8
117.5°	363.1	362.4	361.8	361.3	361.0	360.6	360.3	360.0
120°	390.7	390.4	390.2	389.7	389.1	388.5	387.8	387.2
122.5°	417.0	416.8	416.5	416.0	415.3	414.4	413.7	413.0
125°	455.3	454.7	454.2	453.8	453.4	453.0	452.7	452.3
127.5°	490.3	490.1	489.8	489.2	488.2	487.3	486.4	485.3
130°	513.2	512.8	512.4	511.9	511.3	510.6	510.0	509.4
132.5°	534.5	534.4	534.4	534.0	533.4	532.7	532.1	531.5
135°	565.8	565.6	565.3	564.8	564.1	563.3	562.5	561.8
137.5°	595.0	595.1	595.1	594.8	594.2	593.5	592.9	592.2
140°	613.0	613.2	613.5	613.2	612.5	611.7	611.0	610.2
142.5°	630.6	630.6	630.7	630.3	629.5	628.7	627.9	627.2
145°	655.4	655.5	655.6	655.3	654.5	653.8	653.0	652.2
147.5°	676.6	676.8	676.9	676.5	675.6	674.7	673.8	672.9
150°	690.1	690.4	690.6	690.3	689.3	688.2	687.2	686.2
152.5°	702.2	702.5	702.7	702.4	701.5	700.5	699.5	698.6
155°	718.7	719.0	719.4	719.1	718.1	717.1	716.1	715.0
157.5°	732.4	732.8	733.2	732.9	731.8	730.7	729.7	728.7
160°	740.8	741.3	741.8	741.5	740.5	739.5	738.5	737.5
162.5°	748.6	749.3	750.0	749.8	748.7	747.6	746.5	745.3
165°	758.6	759.4	760.1	760.0	759.0	758.0	757.0	755.9
167.5°	766.2	767.1	768.0	767.9	766.8	765.6	764.5	763.3
170°	770.1	771.1	772.1	772.0	770.9	769.7	768.6	767.5
172.5°	773.1	774.1	775.0	774.9	773.7	772.5	771.3	770.2
175°	776.4	777.4	778.5	778.4	777.3	776.1	775.0	773.8
177.5°	777.8	778.5	779.2	779.1	778.3	777.5	776.7	775.9
180°	777.3	777.3	777.3	777.3	777.3	777.3	777.3	777.3

(END OF REPORT)