

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: P333667

Luminaire Tested: **S125RDIW-S610D770U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333667
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIW-S610D770U835-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 770 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5040.4 lumens
Efficiency: N/A
Efficacy: 134.1 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

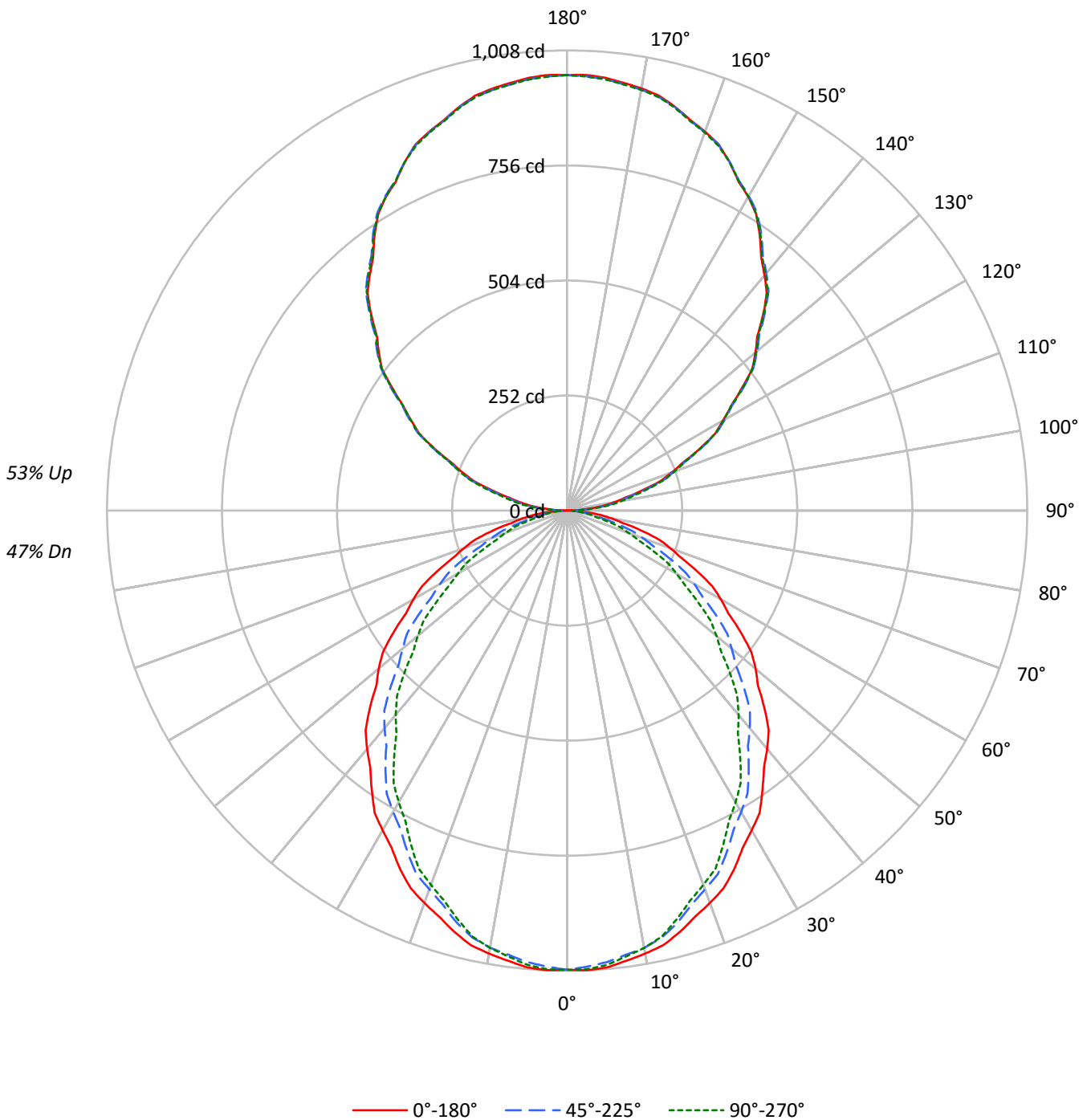
Input Watts (W): 37.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	50	30	10	50	30	10	0		
RCR																										
0	106	106	106	106	98	98	98	98	82	82	82	67	67	67	54	54	54	47					47			
1	97	93	89	86	89	86	83	80	72	70	68	59	58	56	48	47	46					40				
2	89	82	76	70	81	75	70	66	63	60	56	52	50	47	42	40	39					34				
3	81	72	65	59	74	66	60	55	56	51	47	46	43	40	38	35	33					29				
4	74	64	56	50	68	59	52	47	50	45	41	41	38	35	34	31	29					25				
5	68	57	49	43	63	53	46	40	45	39	35	37	33	30	30	27	25					22				
6	63	51	43	37	58	47	40	35	40	35	31	34	30	26	28	25	22					19				
7	58	46	38	33	53	43	36	31	37	31	27	31	27	23	25	22	20					17				
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	23	20	18					15				
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	21	18	16					14				
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15					13				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6497	6497	6497
5°	6512	6438	6477
10°	6462	6378	6378
15°	6386	6248	6197
20°	6287	6068	5994
25°	6173	5890	5761
30°	6029	5683	5502
35°	5882	5469	5211
40°	5746	5246	4926
45°	5580	4996	4615
50°	5413	4725	4290
55°	5219	4466	3944
60°	5025	4151	3573
65°	4795	3785	3147
70°	4534	3329	2712
75°	4172	2805	2256
80°	3675	2205	1893
85°	3097	1801	1690



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.6	1.9
10°-20°	264.3	5.2
20°-30°	383.3	7.6
30°-40°	436.9	8.7
40°-50°	425.9	8.4
50°-60°	358.5	7.1
60°-70°	251.3	5.0
70°-80°	129.2	2.6
80°-90°	34.7	0.7
90°-100°	63.9	1.3
100°-110°	188.7	3.7
110°-120°	319.6	6.3
120°-130°	420.6	8.3
130°-140°	471.2	9.3
140°-150°	461.9	9.2
150°-160°	387.9	7.7
160°-170°	257.9	5.1
170°-180°	90.2	1.8
0°-30°	742.3	14.7
0°-40°	1179.2	23.4
0°-60°	1963.5	39.0
0°-90°	2378.6	47.2
90°-120°	572.1	11.4
90°-150°	1925.8	38.2
90°-180°	2662.0	52.8
0°-180°	5040.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	1004	1001	993	1000	999	95
15°	955	950	934	933	927	269
25°	866	854	827	817	808	398
35°	746	727	694	672	661	467
45°	611	588	547	518	505	471
55°	464	438	397	364	350	414
65°	314	287	248	218	206	311
75°	167	144	112	96	90	177
85°	42	29	24	24	23	47
90°	1	7	12	16	18	5
95°	48	50	57	62	64	52
105°	169	173	177	182	184	181
115°	320	323	324	324	323	316
125°	467	471	472	471	470	418
135°	607	612	612	612	610	468
145°	736	739	741	741	739	460
155°	842	842	843	845	842	388
165°	915	914	915	917	913	258
175°	952	949	949	953	948	90
180°	954	954	954	954	954	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0
2.5°	1007.8	1007.4	1007.0	1006.6	1006.2	1005.3	1003.9	1002.6	1001.2	999.9	1001.2
5°	1004.4	1003.8	1003.1	1002.4	1001.7	1000.5	998.6	996.8	994.9	993.0	994.7
7.5°	994.6	993.9	993.3	992.6	992.0	990.6	988.3	986.1	983.9	981.6	982.8
10°	985.4	984.9	984.4	983.9	983.4	982.0	979.6	977.3	974.9	972.5	973.0
12.5°	975.1	974.5	973.8	973.2	972.5	970.6	967.5	964.3	961.1	957.9	958.3
15°	955.1	954.0	953.0	952.0	951.0	948.7	945.2	941.6	938.1	934.5	934.4
17.5°	932.4	930.9	929.3	927.8	926.2	923.2	918.7	914.3	909.8	905.4	904.5
20°	914.8	913.1	911.4	909.7	908.0	904.5	899.1	893.7	888.3	882.9	882.0
22.5°	895.3	893.6	892.0	890.3	888.6	884.9	879.2	873.6	867.9	862.2	860.6
25°	866.2	863.6	861.1	858.6	856.0	851.6	845.4	839.1	832.9	826.6	824.5
27.5°	832.7	829.7	826.6	823.5	820.4	815.6	808.9	802.2	795.5	788.8	785.7
30°	808.4	805.2	802.0	798.8	795.6	790.4	783.3	776.3	769.2	762.1	758.2
32.5°	784.7	781.0	777.2	773.5	769.7	764.2	757.0	749.8	742.5	735.3	731.0
35°	746.1	742.1	738.0	734.0	729.9	724.1	716.5	708.9	701.3	693.7	688.8
37.5°	708.3	703.3	698.4	693.5	688.6	682.2	674.3	666.5	658.7	650.8	645.0
40°	681.5	676.5	671.4	666.3	661.3	654.7	646.6	638.5	630.4	622.3	615.9
42.5°	653.6	648.4	643.2	638.0	632.8	626.0	617.6	609.2	600.9	592.5	586.3
45°	610.9	606.0	601.1	596.2	591.3	584.2	574.9	565.6	556.3	547.0	540.3
47.5°	566.7	561.5	556.3	551.2	546.0	538.7	529.4	520.0	510.7	501.3	494.4
50°	538.7	533.1	527.5	522.0	516.4	508.8	499.2	489.6	479.9	470.3	463.2
52.5°	508.3	502.6	496.9	491.2	485.5	478.1	469.0	459.9	450.8	441.7	434.1
55°	463.5	458.1	452.7	447.3	441.9	434.4	425.0	415.5	406.1	396.6	389.0
57.5°	418.2	412.4	406.6	400.9	395.1	387.6	378.5	369.4	360.3	351.2	343.7
60°	389.0	383.1	377.2	371.3	365.4	357.9	348.7	339.6	330.5	321.4	314.0
62.5°	358.0	352.4	346.7	341.1	335.5	328.0	318.8	309.5	300.3	291.0	284.1
65°	313.8	308.1	302.3	296.6	290.8	283.5	274.5	265.6	256.6	247.7	240.9
67.5°	269.9	264.1	258.4	252.7	246.9	239.8	231.2	222.6	214.0	205.4	199.3
70°	240.1	234.4	228.6	222.9	217.1	210.0	201.6	193.2	184.7	176.3	171.0
72.5°	210.9	205.3	199.7	194.1	188.5	181.7	173.8	165.9	158.0	150.1	145.3
75°	167.2	162.1	157.0	152.0	146.9	140.8	133.7	126.6	119.5	112.4	108.7
77.5°	123.7	119.6	115.6	111.5	107.5	102.6	96.9	91.3	85.6	79.9	77.3
80°	98.8	94.7	90.7	86.6	82.6	78.2	73.4	68.7	64.0	59.3	57.7
82.5°	74.5	70.8	67.2	63.5	59.9	56.4	53.2	49.9	46.7	43.5	42.8
85°	41.8	38.7	35.7	32.7	29.6	27.7	26.8	26.0	25.2	24.3	24.1
87.5°	14.1	13.4	12.8	12.1	11.4	11.1	11.2	11.3	11.4	11.5	11.7
90°	0.7	2.1	3.4	4.7	6.0	7.3	8.4	9.6	10.7	11.9	12.7
92.5°	18.0	18.9	19.8	20.7	21.7	22.8	24.3	25.7	27.1	28.5	29.6
95°	48.3	48.6	48.9	49.2	49.6	50.6	52.2	53.9	55.5	57.2	58.3
97.5°	80.2	80.3	80.4	80.6	80.7	81.9	84.2	86.5	88.7	91.0	92.1
100°	103.9	103.9	103.9	103.9	103.9	105.0	107.1	109.3	111.4	113.6	115.1
102.5°	129.5	130.1	130.8	131.4	132.1	133.0	134.1	135.2	136.2	137.3	139.0
105°	169.3	170.1	170.9	171.7	172.6	173.5	174.5	175.4	176.4	177.4	178.4
107.5°	213.2	214.0	214.9	215.7	216.5	217.3	218.1	218.8	219.6	220.3	220.8
110°	243.5	244.3	245.1	246.0	246.8	247.4	247.9	248.4	248.9	249.4	249.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	274.4	274.8	275.2	275.7	276.1	276.6	277.2	277.9	278.5	279.1	279.4
115°	320.0	320.6	321.3	321.9	322.6	323.1	323.4	323.7	324.1	324.4	324.2
117.5°	365.7	366.0	366.3	366.6	366.9	367.2	367.5	367.8	368.1	368.4	368.5
120°	394.2	395.0	395.8	396.7	397.5	398.0	398.1	398.3	398.5	398.6	398.6
122.5°	425.1	425.4	425.7	426.0	426.3	426.6	427.0	427.5	427.9	428.3	428.2
125°	466.9	467.9	468.9	469.9	470.9	471.5	471.6	471.8	472.0	472.1	471.8
127.5°	511.5	512.0	512.6	513.2	513.7	514.1	514.3	514.5	514.7	514.9	514.7
130°	538.2	539.0	539.9	540.7	541.5	542.1	542.4	542.7	543.1	543.4	543.2
132.5°	564.9	566.3	567.6	569.0	570.3	571.0	570.9	570.8	570.8	570.7	570.6
135°	607.2	608.2	609.2	610.2	611.2	611.8	611.9	612.1	612.3	612.4	612.4
137.5°	647.0	648.0	648.9	649.9	650.9	651.5	651.9	652.2	652.6	653.0	653.2
140°	672.6	673.4	674.2	675.0	675.9	676.5	677.0	677.5	678.0	678.5	678.8
142.5°	698.1	698.8	699.5	700.2	700.9	701.5	702.2	702.8	703.4	704.0	704.2
145°	735.7	736.3	737.0	737.6	738.3	738.9	739.4	739.9	740.4	740.9	740.9
147.5°	770.4	770.8	771.1	771.5	771.9	772.2	772.6	773.0	773.4	773.8	774.2
150°	793.6	793.4	793.2	793.1	792.9	793.2	793.8	794.5	795.1	795.8	795.8
152.5°	812.6	812.8	813.0	813.3	813.5	813.7	814.0	814.3	814.5	814.8	815.2
155°	841.8	841.8	841.8	841.8	841.8	841.9	842.1	842.2	842.4	842.6	843.2
157.5°	868.0	867.6	867.2	866.9	866.5	866.4	866.6	866.7	866.9	867.1	867.7
160°	883.4	882.9	882.4	881.9	881.4	881.2	881.4	881.6	881.7	881.9	882.6
162.5°	897.1	896.7	896.3	896.0	895.6	895.4	895.5	895.5	895.5	895.6	896.4
165°	915.3	915.0	914.7	914.3	914.0	913.9	914.1	914.2	914.4	914.6	915.2
167.5°	930.8	930.1	929.4	928.8	928.1	927.8	927.8	927.8	927.8	927.8	928.8
170°	939.1	938.4	937.7	937.1	936.4	936.1	936.1	936.1	936.1	936.1	937.1
172.5°	945.0	944.3	943.7	943.0	942.4	942.0	942.0	942.0	942.0	942.0	943.0
175°	951.7	951.0	950.4	949.7	949.0	948.7	948.7	948.7	948.7	948.7	949.7
177.5°	955.1	954.6	954.0	953.5	953.0	952.7	952.5	952.4	952.3	952.1	952.9
180°	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0
2.5°	1002.6	1003.9	1005.3	1005.9	1005.8	1005.6	1005.5	1005.4
5°	996.4	998.1	999.8	1000.5	1000.1	999.8	999.5	999.1
7.5°	984.0	985.2	986.4	986.8	986.4	986.0	985.7	985.3
10°	973.5	974.0	974.6	974.6	974.0	973.5	973.0	972.5
12.5°	958.7	959.1	959.4	959.2	958.4	957.7	956.9	956.1
15°	934.2	934.0	933.9	933.0	931.5	930.0	928.5	926.9
17.5°	903.7	902.8	902.0	900.9	899.7	898.4	897.2	895.9
20°	881.2	880.3	879.5	878.3	876.8	875.3	873.8	872.2
22.5°	858.9	857.2	855.6	854.1	852.9	851.6	850.4	849.1
25°	822.3	820.1	817.9	815.8	814.0	812.1	810.3	808.4
27.5°	782.7	779.6	776.5	774.1	772.3	770.5	768.7	766.9
30°	754.3	750.4	746.5	743.8	742.3	740.8	739.3	737.8
32.5°	726.7	722.5	718.2	715.1	713.1	711.2	709.3	707.4
35°	683.9	679.0	674.1	670.5	668.1	665.7	663.4	661.0
37.5°	639.1	633.2	627.3	623.2	620.9	618.7	616.4	614.1
40°	609.4	603.0	596.6	592.4	590.4	588.3	586.3	584.3
42.5°	580.2	574.0	567.9	563.3	560.4	557.4	554.4	551.5
45°	533.5	526.8	520.0	515.4	512.9	510.3	507.8	505.3
47.5°	487.4	480.4	473.5	468.6	465.8	463.0	460.2	457.4
50°	456.1	449.0	441.9	437.1	434.6	432.1	429.5	427.0
52.5°	426.5	418.8	411.2	406.1	403.6	401.1	398.5	396.0
55°	381.4	373.8	366.2	361.1	358.4	355.7	353.0	350.3
57.5°	336.3	328.9	321.5	316.5	314.1	311.7	309.4	307.0
60°	306.5	299.1	291.7	286.7	284.2	281.6	279.1	276.6
62.5°	277.2	270.3	263.4	258.7	256.2	253.7	251.1	248.6
65°	234.2	227.4	220.7	216.0	213.5	211.0	208.4	205.9
67.5°	193.1	186.9	180.7	176.6	174.6	172.6	170.5	168.5
70°	165.8	160.6	155.3	151.7	149.7	147.7	145.6	143.6
72.5°	140.5	135.6	130.8	127.7	126.4	125.0	123.7	122.3
75°	105.0	101.3	97.6	95.1	94.0	92.8	91.6	90.4
77.5°	74.7	72.1	69.5	67.8	66.9	66.0	65.2	64.3
80°	56.2	54.7	53.2	52.3	51.9	51.6	51.2	50.9
82.5°	42.0	41.3	40.6	40.2	40.0	39.8	39.6	39.4
85°	24.0	23.8	23.6	23.5	23.3	23.1	23.0	22.8
87.5°	11.8	12.0	12.2	12.2	12.2	12.1	12.1	12.1
90°	13.5	14.4	15.2	15.8	16.3	16.8	17.3	17.8
92.5°	30.7	31.8	32.9	33.6	34.0	34.3	34.7	35.0
95°	59.5	60.6	61.8	62.5	62.9	63.2	63.5	63.8
97.5°	93.2	94.3	95.4	96.0	96.2	96.4	96.6	96.8
100°	116.5	118.0	119.5	120.4	120.8	121.1	121.4	121.7
102.5°	140.6	142.2	143.8	144.8	145.3	145.8	146.2	146.7
105°	179.4	180.4	181.4	182.1	182.6	183.1	183.6	184.1
107.5°	221.3	221.8	222.3	222.5	222.5	222.5	222.4	222.4
110°	250.4	250.9	251.4	251.6	251.4	251.2	251.1	250.9



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CATALOG NUMBER: S125RDIW-S610D770U835-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	279.6	279.8	280.0	280.0	279.7	279.4	279.1	278.8
115°	324.1	323.9	323.7	323.6	323.4	323.3	323.1	322.9
117.5°	368.6	368.7	368.9	368.6	368.0	367.3	366.6	366.0
120°	398.6	398.6	398.6	398.3	397.7	397.0	396.3	395.7
122.5°	428.1	427.9	427.8	427.5	426.9	426.4	425.9	425.4
125°	471.5	471.1	470.8	470.6	470.4	470.2	470.1	469.9
127.5°	514.6	514.4	514.2	514.0	513.7	513.3	513.0	512.7
130°	543.1	542.9	542.7	542.5	542.2	541.8	541.5	541.2
132.5°	570.4	570.2	570.1	569.7	569.3	568.8	568.4	567.9
135°	612.4	612.4	612.4	612.1	611.4	610.8	610.1	609.5
137.5°	653.4	653.6	653.8	653.4	652.6	651.8	651.0	650.1
140°	679.2	679.5	679.8	679.6	678.8	677.9	677.1	676.3
142.5°	704.4	704.6	704.8	704.5	703.7	702.9	702.0	701.2
145°	740.9	740.9	740.9	740.6	740.1	739.6	739.1	738.6
147.5°	774.6	775.0	775.4	775.0	773.9	772.8	771.7	770.6
150°	795.8	795.8	795.8	795.6	795.3	795.0	794.6	794.3
152.5°	815.6	816.0	816.4	816.3	815.7	815.1	814.5	813.9
155°	843.9	844.5	845.2	845.1	844.3	843.5	842.6	841.8
157.5°	868.4	869.0	869.7	869.5	868.4	867.3	866.2	865.1
160°	883.2	883.9	884.5	884.5	883.6	882.8	882.0	881.2
162.5°	897.2	897.9	898.7	898.7	897.7	896.7	895.8	894.8
165°	915.9	916.6	917.2	917.0	916.1	915.1	914.1	913.1
167.5°	929.8	930.8	931.7	931.7	930.7	929.7	928.7	927.6
170°	938.1	939.1	940.1	940.0	938.8	937.7	936.5	935.4
172.5°	944.0	945.0	946.0	946.0	945.0	943.9	942.9	941.9
175°	950.7	951.7	952.7	952.6	951.4	950.3	949.1	948.0
177.5°	953.7	954.5	955.3	955.2	954.3	953.4	952.5	951.5
180°	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9

(END OF REPORT)