

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: P333548-930

Luminaire Tested: **S125RDIP-S610D1205U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333548-930
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: S125RDIP-S610D1205U930-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5337.4 lumens
Efficiency: N/A
Efficacy: 108.0 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: Semi-Indirect

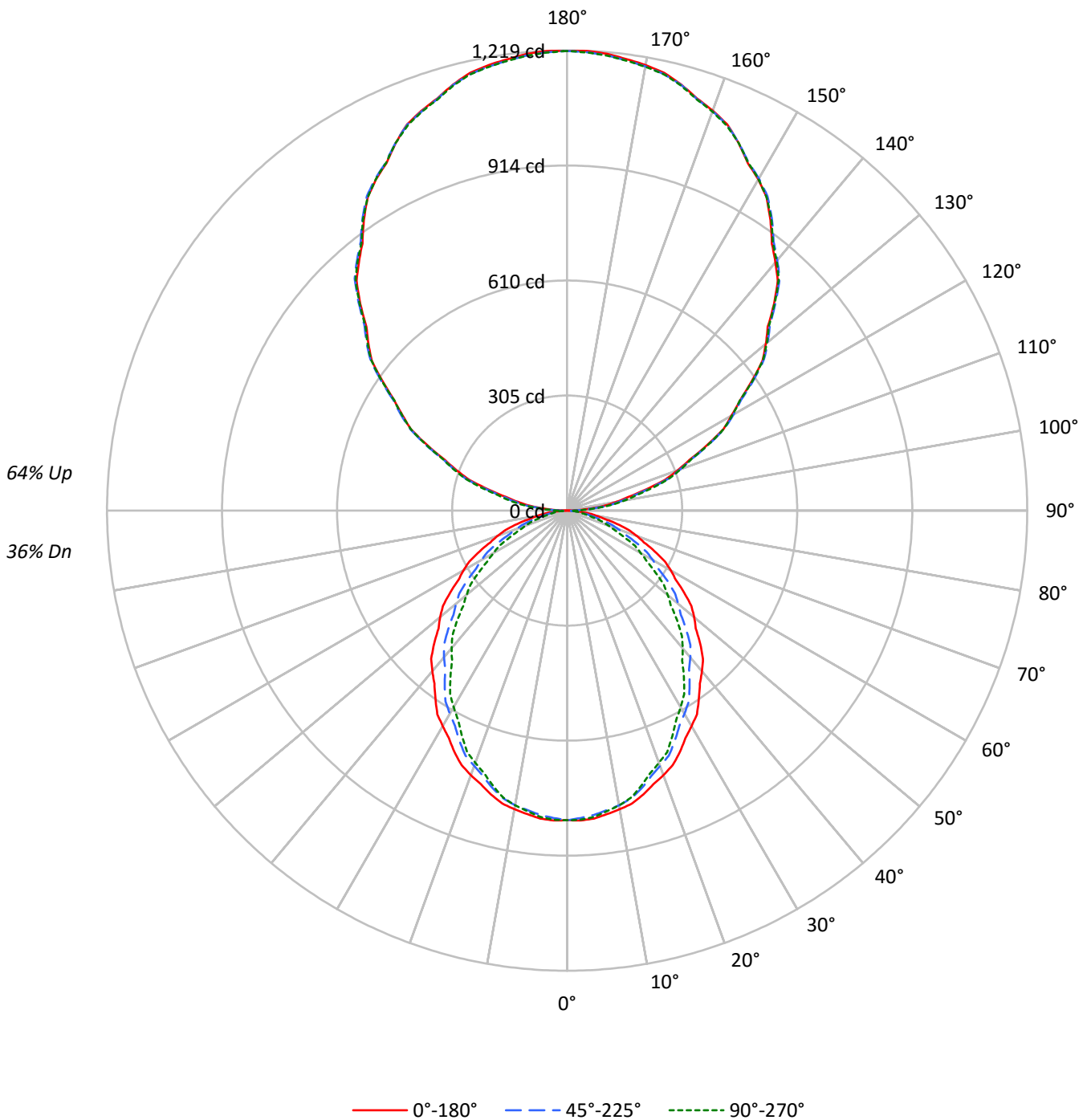
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	36
1	95	91	87	84	86	82	79	76	67	64	62	52	51	49	39	38	37	31
2	86	79	73	68	78	72	67	63	58	55	52	46	44	41	34	33	31	26
3	79	70	63	57	71	64	57	53	52	47	44	41	38	35	30	29	27	22
4	72	62	54	48	65	56	50	45	46	41	37	36	33	30	27	25	23	19
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	22	20	17
6	61	49	41	36	55	45	38	33	37	32	28	29	26	23	22	20	18	15
7	56	44	37	31	51	41	34	29	33	28	25	27	23	20	20	18	16	13
8	52	40	33	28	47	37	30	26	31	25	22	24	21	18	19	16	14	12
9	49	37	29	25	44	34	27	23	28	23	20	22	19	16	17	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5297	5297	5297
5°	5309	5249	5281
10°	5269	5200	5200
15°	5207	5094	5053
20°	5126	4947	4887
25°	5032	4802	4697
30°	4915	4633	4486
35°	4796	4459	4249
40°	4684	4278	4016
45°	4549	4074	3763
50°	4413	3852	3497
55°	4255	3640	3216
60°	4097	3384	2913
65°	3909	3085	2566
70°	3697	2713	2211
75°	3401	2286	1839
80°	2998	1796	1543
85°	2527	1467	1378



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.1	1.4
10°-20°	215.5	4.0
20°-30°	312.5	5.9
30°-40°	356.2	6.7
40°-50°	347.2	6.5
50°-60°	292.3	5.5
60°-70°	204.9	3.8
70°-80°	105.3	2.0
80°-90°	29.3	0.5
90°-100°	81.5	1.5
100°-110°	240.8	4.5
110°-120°	407.8	7.6
120°-130°	536.7	10.1
130°-140°	601.4	11.3
140°-150°	589.4	11.0
150°-160°	495.1	9.3
160°-170°	329.1	6.2
170°-180°	115.2	2.2
0°-30°	605.2	11.3
0°-40°	961.4	18.0
0°-60°	1600.8	30.0
0°-90°	1940.2	36.4
90°-120°	730.2	13.7
90°-150°	2457.8	46.0
90°-180°	3397.0	63.6
0°-180°	5337.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	820	820	820	820	820	
5°	819	816	810	815	815	78
15°	779	774	762	761	756	219
25°	706	696	674	666	659	325
35°	608	593	566	548	539	381
45°	498	479	446	422	412	384
55°	378	357	323	296	286	338
65°	256	234	202	178	168	253
75°	136	117	92	79	74	144
85°	34	23	20	19	19	38
90°	1	8	15	20	23	5
95°	62	64	73	79	81	66
105°	216	221	226	232	235	231
115°	408	412	414	413	412	404
125°	596	601	603	601	600	533
135°	775	780	782	781	778	597
145°	939	943	946	945	943	587
155°	1074	1074	1075	1079	1074	495
165°	1168	1166	1167	1170	1165	329
175°	1215	1211	1211	1216	1210	115
180°	1217	1217	1217	1217	1217	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2
2.5°	821.7	821.3	821.0	820.7	820.4	819.6	818.5	817.4	816.3	815.2	816.3
5°	818.9	818.4	817.8	817.3	816.7	815.7	814.2	812.7	811.1	809.6	811.0
7.5°	810.9	810.3	809.8	809.3	808.8	807.6	805.8	804.0	802.2	800.3	801.3
10°	803.4	803.0	802.6	802.2	801.8	800.6	798.7	796.8	794.8	792.9	793.3
12.5°	795.0	794.5	793.9	793.4	792.9	791.3	788.8	786.2	783.6	781.0	781.3
15°	778.7	777.8	777.0	776.2	775.3	773.5	770.6	767.7	764.8	761.9	761.8
17.5°	760.2	759.0	757.7	756.4	755.1	752.7	749.0	745.4	741.8	738.2	737.4
20°	745.8	744.4	743.1	741.7	740.3	737.4	733.0	728.6	724.2	719.8	719.1
22.5°	729.9	728.6	727.2	725.9	724.5	721.5	716.8	712.2	707.6	703.0	701.6
25°	706.2	704.1	702.1	700.0	697.9	694.3	689.3	684.1	679.1	673.9	672.2
27.5°	678.9	676.5	673.9	671.4	668.9	665.0	659.5	654.0	648.6	643.1	640.6
30°	659.1	656.5	653.9	651.3	648.7	644.4	638.6	632.9	627.1	621.3	618.2
32.5°	639.8	636.7	633.7	630.6	627.5	623.1	617.2	611.3	605.4	599.5	596.0
35°	608.3	605.0	601.7	598.4	595.1	590.4	584.2	578.0	571.8	565.6	561.6
37.5°	577.5	573.4	569.4	565.4	561.4	556.2	549.8	543.4	537.0	530.6	525.9
40°	555.6	551.5	547.4	543.2	539.2	533.8	527.2	520.6	514.0	507.4	502.1
42.5°	532.9	528.6	524.4	520.2	515.9	510.4	503.5	496.7	489.9	483.1	478.0
45°	498.1	494.1	490.1	486.1	482.1	476.3	468.7	461.1	453.6	446.0	440.5
47.5°	462.0	457.8	453.6	449.4	445.2	439.2	431.6	424.0	416.4	408.7	403.1
50°	439.2	434.6	430.1	425.6	421.0	414.8	407.0	399.2	391.3	383.4	377.6
52.5°	414.4	409.8	405.1	400.5	395.8	389.8	382.4	375.0	367.5	360.1	353.9
55°	377.9	373.5	369.1	364.7	360.3	354.2	346.5	338.8	331.1	323.3	317.2
57.5°	341.0	336.2	331.5	326.9	322.1	316.0	308.6	301.2	293.8	286.3	280.2
60°	317.2	312.3	307.5	302.7	297.9	291.8	284.3	276.9	269.5	262.0	256.0
62.5°	291.9	287.3	282.7	278.1	273.5	267.4	259.9	252.3	244.8	237.3	231.6
65°	255.8	251.2	246.5	241.8	237.1	231.1	223.8	216.5	209.2	201.9	196.4
67.5°	220.0	215.3	210.7	206.0	201.3	195.5	188.5	181.5	174.5	167.5	162.5
70°	195.8	191.1	186.4	181.7	177.0	171.2	164.4	157.5	150.6	143.7	139.4
72.5°	171.9	167.4	162.8	158.2	153.7	148.1	141.7	135.3	128.8	122.4	118.5
75°	136.3	132.2	128.0	123.9	119.8	114.8	109.0	103.2	97.4	91.6	88.6
77.5°	100.9	97.5	94.2	90.9	87.6	83.6	79.0	74.4	69.8	65.1	63.0
80°	80.6	77.2	73.9	70.6	67.3	63.8	59.8	56.0	52.2	48.3	47.0
82.5°	60.7	57.7	54.8	51.8	48.8	46.0	43.4	40.7	38.1	35.5	34.9
85°	34.1	31.6	29.1	26.7	24.1	22.6	21.9	21.2	20.5	19.8	19.6
87.5°	11.6	11.2	10.7	10.3	9.9	9.7	9.9	10.1	10.3	10.4	10.7
90°	1.0	2.6	4.3	6.0	7.7	9.3	10.8	12.2	13.7	15.2	16.2
92.5°	22.9	24.1	25.3	26.5	27.6	29.1	31.0	32.8	34.6	36.4	37.7
95°	61.6	62.0	62.5	62.9	63.3	64.5	66.6	68.7	70.8	73.0	74.4
97.5°	102.3	102.5	102.6	102.8	103.0	104.5	107.5	110.3	113.2	116.2	117.6
100°	132.6	132.6	132.6	132.6	132.6	134.0	136.7	139.5	142.2	145.0	146.8
102.5°	165.3	166.1	166.9	167.8	168.6	169.7	171.1	172.5	173.9	175.3	177.3
105°	216.0	217.0	218.1	219.2	220.2	221.4	222.7	223.9	225.2	226.4	227.7
107.5°	272.1	273.1	274.2	275.2	276.3	277.3	278.3	279.2	280.2	281.2	281.8
110°	310.8	311.8	312.8	313.9	315.0	315.8	316.4	317.1	317.7	318.3	318.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	350.2	350.7	351.2	351.8	352.4	353.0	353.8	354.7	355.4	356.2	356.5
115°	408.3	409.2	410.0	410.8	411.7	412.3	412.8	413.2	413.6	414.0	413.8
117.5°	466.7	467.1	467.5	467.8	468.2	468.6	469.0	469.4	469.7	470.1	470.3
120°	503.0	504.1	505.2	506.2	507.3	507.9	508.1	508.3	508.6	508.7	508.7
122.5°	542.5	542.9	543.2	543.6	544.0	544.5	545.0	545.6	546.1	546.7	546.5
125°	595.9	597.2	598.4	599.7	601.0	601.7	601.9	602.1	602.3	602.6	602.1
127.5°	652.8	653.5	654.2	654.9	655.7	656.2	656.4	656.6	656.9	657.1	656.9
130°	686.9	687.9	689.0	690.1	691.0	691.9	692.3	692.7	693.1	693.5	693.3
132.5°	721.0	722.7	724.5	726.2	727.9	728.7	728.6	728.6	728.5	728.4	728.1
135°	775.0	776.2	777.6	778.8	780.1	780.8	781.0	781.2	781.4	781.6	781.6
137.5°	825.7	827.0	828.2	829.4	830.6	831.5	831.9	832.4	832.9	833.3	833.6
140°	858.3	859.4	860.5	861.5	862.6	863.4	864.1	864.7	865.3	865.9	866.3
142.5°	891.0	891.9	892.8	893.6	894.5	895.4	896.1	896.9	897.7	898.5	898.8
145°	938.9	939.7	940.6	941.4	942.2	943.0	943.6	944.3	944.9	945.5	945.5
147.5°	983.3	983.7	984.1	984.6	985.0	985.5	986.1	986.6	987.1	987.6	988.1
150°	1012.8	1012.6	1012.4	1012.2	1011.9	1012.3	1013.1	1013.9	1014.8	1015.6	1015.6
152.5°	1037.1	1037.3	1037.6	1038.0	1038.2	1038.5	1038.9	1039.2	1039.6	1039.9	1040.4
155°	1074.4	1074.4	1074.4	1074.4	1074.4	1074.5	1074.7	1074.9	1075.1	1075.3	1076.2
157.5°	1107.7	1107.3	1106.8	1106.4	1105.9	1105.7	1106.0	1106.2	1106.4	1106.6	1107.4
160°	1127.4	1126.8	1126.2	1125.5	1124.9	1124.7	1124.9	1125.1	1125.4	1125.5	1126.3
162.5°	1144.8	1144.4	1143.9	1143.5	1143.0	1142.8	1142.8	1142.9	1142.9	1143.0	1143.9
165°	1168.2	1167.8	1167.3	1166.9	1166.4	1166.4	1166.6	1166.8	1167.0	1167.2	1168.1
167.5°	1187.9	1187.0	1186.2	1185.4	1184.5	1184.1	1184.1	1184.1	1184.1	1184.1	1185.4
170°	1198.5	1197.7	1196.8	1196.0	1195.1	1194.7	1194.7	1194.7	1194.7	1194.7	1196.0
172.5°	1206.1	1205.3	1204.4	1203.5	1202.7	1202.2	1202.2	1202.2	1202.2	1202.2	1203.5
175°	1214.6	1213.7	1212.9	1212.0	1211.2	1210.8	1210.8	1210.8	1210.8	1210.8	1212.0
177.5°	1219.0	1218.3	1217.6	1216.9	1216.3	1215.9	1215.7	1215.5	1215.3	1215.1	1216.2
180°	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2
2.5°	817.4	818.5	819.6	820.1	820.0	819.9	819.8	819.7
5°	812.4	813.8	815.1	815.7	815.4	815.1	814.9	814.6
7.5°	802.3	803.2	804.2	804.5	804.2	803.9	803.6	803.3
10°	793.7	794.1	794.6	794.6	794.1	793.7	793.3	792.9
12.5°	781.6	782.0	782.2	782.0	781.4	780.8	780.2	779.5
15°	761.7	761.5	761.4	760.7	759.5	758.2	757.0	755.7
17.5°	736.8	736.1	735.4	734.5	733.5	732.5	731.5	730.4
20°	718.4	717.7	717.1	716.1	714.9	713.6	712.4	711.1
22.5°	700.3	698.9	697.6	696.3	695.4	694.3	693.3	692.3
25°	670.4	668.6	666.8	665.1	663.7	662.1	660.6	659.1
27.5°	638.1	635.6	633.1	631.1	629.7	628.2	626.7	625.3
30°	615.0	611.8	608.6	606.4	605.2	604.0	602.8	601.5
32.5°	592.5	589.1	585.5	583.0	581.4	579.8	578.3	576.7
35°	557.6	553.6	549.6	546.7	544.7	542.7	540.9	538.9
37.5°	521.1	516.2	511.4	508.1	506.2	504.4	502.6	500.7
40°	496.8	491.6	486.4	483.0	481.4	479.6	478.0	476.4
42.5°	473.0	468.0	463.0	459.3	456.9	454.4	452.0	449.6
45°	435.0	429.5	424.0	420.2	418.2	416.0	414.0	412.0
47.5°	397.4	391.7	386.0	382.0	379.8	377.5	375.2	372.9
50°	371.9	366.1	360.3	356.4	354.3	352.3	350.2	348.1
52.5°	347.7	341.4	335.3	331.1	329.1	327.0	324.9	322.9
55°	311.0	304.8	298.6	294.4	292.2	290.0	287.8	285.6
57.5°	274.2	268.2	262.1	258.0	256.1	254.1	252.3	250.3
60°	249.9	243.9	237.8	233.7	231.7	229.6	227.6	225.5
62.5°	226.0	220.4	214.7	210.9	208.9	206.8	204.7	202.7
65°	190.9	185.4	179.9	176.1	174.1	172.0	169.9	167.9
67.5°	157.4	152.4	147.3	144.0	142.4	140.7	139.0	137.4
70°	135.2	130.9	126.6	123.7	122.1	120.4	118.7	117.1
72.5°	114.5	110.6	106.6	104.1	103.1	101.9	100.9	99.7
75°	85.6	82.6	79.6	77.5	76.6	75.7	74.7	73.7
77.5°	60.9	58.8	56.7	55.3	54.5	53.8	53.2	52.4
80°	45.8	44.6	43.4	42.6	42.3	42.1	41.7	41.5
82.5°	34.2	33.7	33.1	32.8	32.6	32.4	32.3	32.1
85°	19.6	19.4	19.2	19.2	19.0	18.8	18.8	18.6
87.5°	10.9	11.1	11.3	11.4	11.4	11.4	11.5	11.5
90°	17.3	18.3	19.4	20.2	20.9	21.4	22.1	22.7
92.5°	39.1	40.5	41.9	42.9	43.3	43.8	44.3	44.7
95°	75.9	77.4	78.8	79.8	80.2	80.6	81.0	81.4
97.5°	119.0	120.3	121.7	122.5	122.8	123.0	123.3	123.5
100°	148.7	150.7	152.5	153.7	154.1	154.5	155.0	155.4
102.5°	179.4	181.5	183.5	184.8	185.5	186.1	186.6	187.2
105°	228.9	230.2	231.5	232.4	233.1	233.7	234.3	235.0
107.5°	282.4	283.1	283.7	284.1	284.0	284.0	283.9	283.8
110°	319.6	320.2	320.8	321.1	320.8	320.7	320.4	320.2



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CATALOG NUMBER: S125RDIP-S610D1205U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	356.9	357.1	357.4	357.3	357.0	356.6	356.2	355.9
115°	413.6	413.4	413.2	412.9	412.8	412.5	412.3	412.1
117.5°	470.4	470.6	470.8	470.4	469.6	468.8	467.9	467.1
120°	508.7	508.7	508.7	508.3	507.5	506.6	505.8	505.0
122.5°	546.3	546.2	546.0	545.6	544.9	544.2	543.6	542.9
125°	601.7	601.3	600.9	600.5	600.4	600.1	599.9	599.7
127.5°	656.7	656.5	656.3	656.0	655.6	655.1	654.7	654.3
130°	693.1	692.8	692.7	692.4	691.9	691.5	691.0	690.6
132.5°	728.0	727.7	727.5	727.2	726.5	725.9	725.4	724.8
135°	781.6	781.6	781.6	781.2	780.3	779.5	778.7	777.8
137.5°	833.9	834.1	834.4	834.0	832.9	831.8	830.8	829.7
140°	866.7	867.2	867.6	867.3	866.3	865.2	864.1	863.1
142.5°	899.0	899.3	899.5	899.1	898.1	897.1	896.0	895.0
145°	945.5	945.5	945.5	945.2	944.6	944.0	943.3	942.6
147.5°	988.6	989.1	989.6	989.1	987.7	986.3	984.9	983.4
150°	1015.6	1015.6	1015.6	1015.5	1015.0	1014.6	1014.2	1013.7
152.5°	1040.9	1041.4	1041.9	1041.8	1041.1	1040.2	1039.5	1038.8
155°	1077.0	1077.8	1078.7	1078.6	1077.5	1076.4	1075.5	1074.4
157.5°	1108.2	1109.1	1109.9	1109.7	1108.3	1106.9	1105.5	1104.2
160°	1127.2	1128.0	1128.9	1128.8	1127.7	1126.7	1125.6	1124.6
162.5°	1145.0	1146.0	1147.0	1146.9	1145.7	1144.4	1143.2	1142.0
165°	1168.9	1169.7	1170.6	1170.4	1169.1	1167.8	1166.6	1165.3
167.5°	1186.6	1187.9	1189.1	1189.1	1187.8	1186.5	1185.2	1183.9
170°	1197.2	1198.5	1199.7	1199.6	1198.2	1196.7	1195.2	1193.8
172.5°	1204.8	1206.1	1207.3	1207.3	1206.0	1204.7	1203.4	1202.1
175°	1213.3	1214.6	1215.9	1215.8	1214.3	1212.8	1211.3	1209.8
177.5°	1217.2	1218.2	1219.2	1219.1	1218.0	1216.8	1215.6	1214.4
180°	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4

(END OF REPORT)