

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: P333541-940

Luminaire Tested: **S125RDIP-S610D1035U940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333541-940
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-S610D1035U940-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5810.0 lumens
Efficiency: N/A
Efficacy: 130.6 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

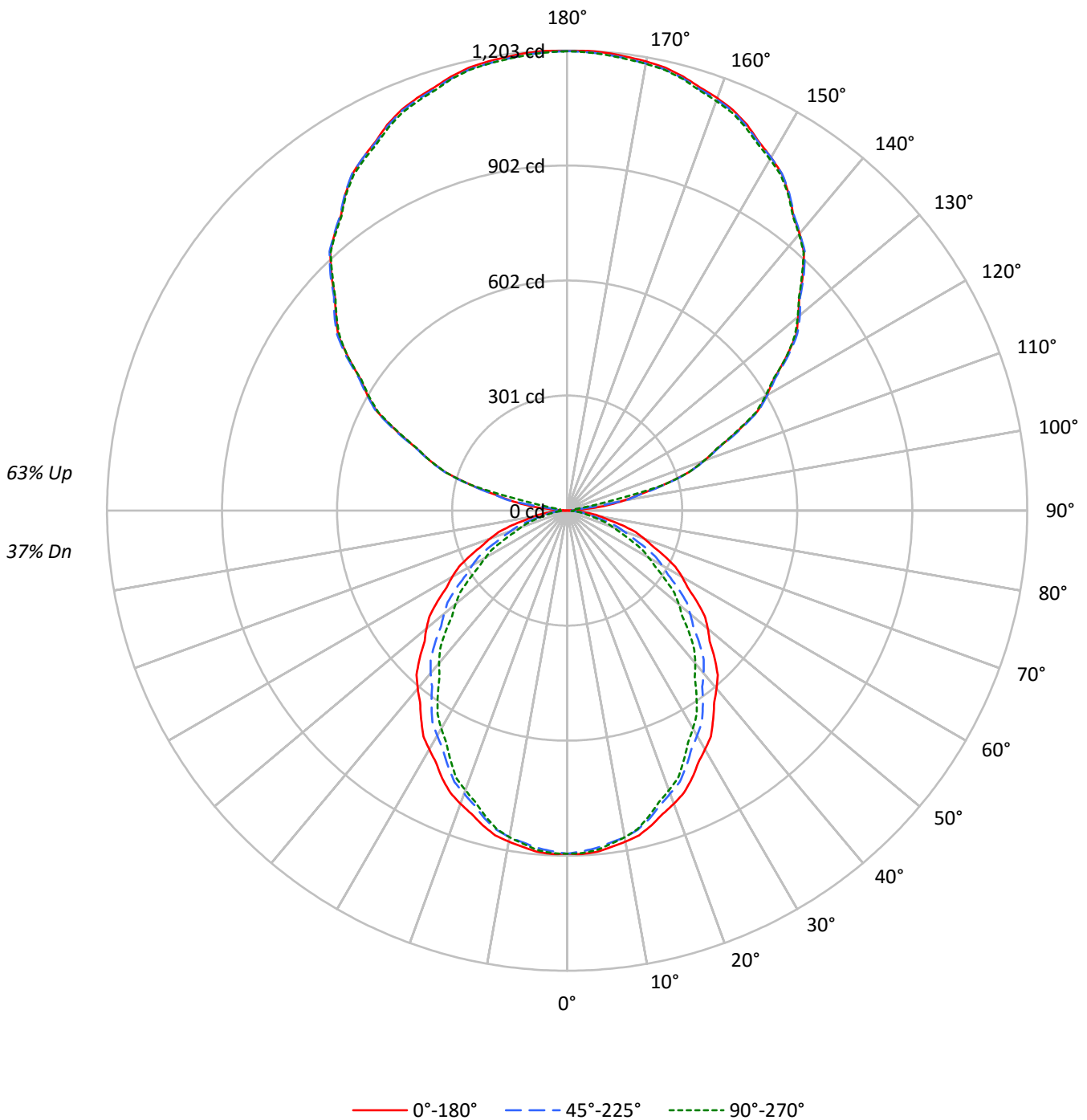
Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44
1	95	91	87	84	86	82	79	76	67	64	62	52	51	49	39	38	37
2	87	79	73	69	78	72	67	63	59	55	52	46	44	42	34	33	32
3	79	70	63	57	71	64	58	53	52	47	44	41	38	35	31	29	27
4	72	62	54	48	65	56	50	45	46	41	37	36	33	30	27	25	23
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	22	20
6	61	49	41	36	55	45	38	33	37	32	28	30	26	23	22	20	18
7	56	44	37	31	51	41	34	29	34	28	25	27	23	20	21	18	16
8	52	40	33	28	47	37	30	26	31	25	22	25	21	18	19	16	14
9	49	37	29	25	44	34	27	23	28	23	20	23	19	16	17	15	13
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5794	5794	5794
5°	5806	5741	5776
10°	5762	5687	5687
15°	5695	5572	5526
20°	5606	5411	5346
25°	5504	5253	5137
30°	5376	5068	4906
35°	5245	4877	4647
40°	5123	4678	4392
45°	4975	4455	4116
50°	4827	4214	3826
55°	4654	3983	3518
60°	4481	3702	3185
65°	4276	3376	2806
70°	4043	2968	2417
75°	3721	2500	2011
80°	3277	1967	1689
85°	2764	1608	1504



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.3	1.5
10°-20°	235.7	4.1
20°-30°	341.8	5.9
30°-40°	389.6	6.7
40°-50°	379.7	6.5
50°-60°	319.6	5.5
60°-70°	224.1	3.9
70°-80°	115.2	2.0
80°-90°	31.6	0.5
90°-100°	43.6	0.8
100°-110°	269.0	4.6
110°-120°	487.9	8.4
120°-130°	626.1	10.8
130°-140°	673.4	11.6
140°-150°	632.1	10.9
150°-160°	511.3	8.8
160°-170°	330.7	5.7
170°-180°	114.1	2.0
0°-30°	661.9	11.4
0°-40°	1051.5	18.1
0°-60°	1750.9	30.1
0°-90°	2121.7	36.5
90°-120°	800.5	13.8
90°-150°	2732.2	47.0
90°-180°	3688.0	63.5
0°-180°	5810.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	897	897	897	897	897	
5°	896	893	886	892	891	85
15°	852	847	833	832	826	240
25°	772	761	737	728	721	355
35°	665	648	619	600	589	416
45°	545	524	488	462	451	420
55°	413	391	354	324	312	370
65°	280	256	221	195	184	277
75°	149	128	100	86	81	158
85°	37	26	22	21	20	42
90°	1	8	14	19	21	4
95°	51	46	14	18	19	65
105°	262	265	265	265	264	277
115°	492	496	497	493	488	487
125°	699	705	705	702	699	624
135°	872	877	875	873	868	672
145°	1011	1012	1012	1013	1008	632
155°	1113	1108	1109	1112	1105	513
165°	1174	1169	1170	1175	1168	332
175°	1201	1196	1197	1203	1196	114
180°	1201	1201	1201	1201	1201	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1
2.5°	898.7	898.3	898.0	897.6	897.2	896.4	895.2	894.0	892.8	891.6	892.8
5°	895.6	895.1	894.5	893.9	893.2	892.2	890.5	888.9	887.2	885.5	887.0
7.5°	886.9	886.3	885.7	885.1	884.6	883.3	881.3	879.3	877.4	875.3	876.4
10°	878.7	878.2	877.8	877.4	876.9	875.7	873.5	871.5	869.3	867.2	867.6
12.5°	869.5	869.0	868.3	867.8	867.2	865.5	862.7	859.9	857.0	854.2	854.5
15°	851.7	850.7	849.8	848.9	848.0	846.0	842.8	839.6	836.5	833.3	833.2
17.5°	831.4	830.1	828.7	827.3	825.9	823.2	819.2	815.3	811.3	807.4	806.6
20°	815.7	814.2	812.7	811.2	809.7	806.6	801.7	796.9	792.1	787.3	786.5
22.5°	798.3	796.8	795.4	793.9	792.4	789.1	784.0	779.0	773.9	768.8	767.4
25°	772.4	770.1	767.9	765.6	763.3	759.4	753.9	748.2	742.7	737.1	735.2
27.5°	742.5	739.9	737.1	734.3	731.6	727.3	721.3	715.3	709.4	703.4	700.6
30°	720.9	718.0	715.2	712.3	709.4	704.8	698.5	692.2	685.9	679.6	676.1
32.5°	699.7	696.4	693.0	689.7	686.3	681.4	675.0	668.6	662.1	655.7	651.8
35°	665.3	661.7	658.1	654.5	650.9	645.7	638.9	632.1	625.4	618.6	614.2
37.5°	631.6	627.1	622.8	618.4	614.0	608.3	601.3	594.3	587.4	580.3	575.2
40°	607.7	603.2	598.7	594.1	589.7	583.8	576.6	569.4	562.1	554.9	549.2
42.5°	582.8	578.2	573.5	568.9	564.3	558.2	550.7	543.2	535.8	528.3	522.8
45°	544.7	540.4	536.0	531.6	527.3	520.9	512.6	504.4	496.1	487.8	481.8
47.5°	505.3	500.7	496.1	491.5	486.9	480.4	472.1	463.7	455.4	447.0	440.9
50°	480.4	475.4	470.4	465.5	460.5	453.7	445.1	436.6	427.9	419.4	413.0
52.5°	453.3	448.2	443.1	438.0	432.9	426.3	418.2	410.1	402.0	393.9	387.1
55°	413.3	408.5	403.7	398.9	394.0	387.4	379.0	370.5	362.1	353.7	346.9
57.5°	372.9	367.7	362.6	357.5	352.3	345.6	337.5	329.4	321.3	313.2	306.5
60°	346.9	341.6	336.4	331.1	325.8	319.1	310.9	302.8	294.7	286.6	280.0
62.5°	319.2	314.2	309.2	304.2	299.2	292.5	284.3	276.0	267.8	259.5	253.3
65°	279.8	274.7	269.6	264.5	259.3	252.8	244.8	236.8	228.8	220.9	214.8
67.5°	240.7	235.5	230.4	225.3	220.2	213.8	206.2	198.5	190.8	183.2	177.7
70°	214.1	209.0	203.8	198.8	193.6	187.3	179.8	172.3	164.7	157.2	152.5
72.5°	188.1	183.1	178.1	173.1	168.1	162.0	155.0	147.9	140.9	133.8	129.6
75°	149.1	144.5	140.0	135.5	131.0	125.6	119.2	112.9	106.6	100.2	96.9
77.5°	110.3	106.6	103.1	99.4	95.9	91.5	86.4	81.4	76.3	71.2	68.9
80°	88.1	84.4	80.9	77.2	73.7	69.7	65.5	61.3	57.1	52.9	51.5
82.5°	66.4	63.1	59.9	56.6	53.4	50.3	47.4	44.5	41.6	38.8	38.2
85°	37.3	34.5	31.8	29.2	26.4	24.7	23.9	23.2	22.5	21.7	21.5
87.5°	12.7	12.1	11.6	11.1	10.5	10.3	10.5	10.7	10.8	11.0	11.1
90°	0.9	2.5	4.0	5.6	7.2	8.7	10.1	11.5	12.8	14.3	15.2
92.5°	13.7	12.6	11.5	10.3	9.3	9.4	10.5	11.8	13.0	14.3	15.2
95°	50.7	50.1	49.6	49.0	48.4	44.3	36.8	29.2	21.8	14.3	15.2
97.5°	105.9	107.0	108.1	109.1	110.2	103.3	88.5	73.6	58.7	43.8	38.3
100°	148.6	149.3	149.9	150.4	151.1	151.8	152.6	153.4	154.1	154.9	125.5
102.5°	192.2	192.9	193.7	194.4	195.1	195.7	196.3	196.7	197.2	197.7	192.1
105°	261.7	262.5	263.3	264.1	264.9	265.3	265.3	265.3	265.3	265.3	265.3
107.5°	334.0	334.0	334.0	334.0	334.0	334.2	334.7	335.0	335.5	335.8	335.9
110°	381.0	381.0	381.0	381.0	381.0	381.3	381.7	382.1	382.5	382.8	382.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	425.3	425.7	426.1	426.7	427.1	427.5	427.8	427.9	428.2	428.5	427.7
115°	491.5	492.5	493.5	494.5	495.4	496.1	496.2	496.4	496.6	496.8	496.1
117.5°	560.0	560.0	559.9	559.9	559.9	560.3	561.0	561.7	562.5	563.2	562.2
120°	602.8	602.5	602.4	602.2	602.0	602.2	602.8	603.3	604.0	604.6	604.1
122.5°	640.5	641.2	642.0	642.7	643.5	644.0	644.4	644.6	644.9	645.2	644.7
125°	698.9	700.3	701.7	703.1	704.5	705.2	705.2	705.2	705.2	705.2	704.4
127.5°	754.7	755.6	756.6	757.6	758.6	759.0	758.9	758.8	758.7	758.6	758.1
130°	788.8	789.9	790.9	791.8	792.8	793.4	793.6	793.8	794.0	794.2	793.6
132.5°	823.0	824.2	825.4	826.4	827.6	828.0	827.5	827.2	826.7	826.3	826.1
135°	871.6	872.8	874.1	875.2	876.4	876.8	876.4	876.0	875.6	875.2	874.8
137.5°	916.3	917.4	918.4	919.4	920.4	920.8	920.4	920.1	919.7	919.4	919.4
140°	945.6	945.9	946.4	946.7	947.1	947.3	947.0	946.8	946.6	946.5	946.8
142.5°	971.9	972.1	972.4	972.6	972.9	973.1	973.4	973.7	973.9	974.2	974.3
145°	1010.6	1010.9	1011.3	1011.7	1012.1	1012.4	1012.4	1012.4	1012.4	1012.4	1012.5
147.5°	1044.4	1044.3	1044.2	1044.1	1044.0	1044.1	1044.4	1044.6	1044.8	1045.1	1045.4
150°	1065.8	1065.3	1065.0	1064.5	1064.2	1064.2	1064.5	1065.0	1065.3	1065.8	1066.1
152.5°	1086.4	1085.6	1084.7	1083.8	1082.9	1082.7	1083.1	1083.4	1083.9	1084.2	1084.7
155°	1112.9	1111.8	1110.5	1109.4	1108.2	1107.8	1108.2	1108.6	1108.9	1109.4	1110.0
157.5°	1133.4	1132.7	1132.0	1131.3	1130.6	1130.2	1130.2	1130.3	1130.3	1130.4	1131.0
160°	1147.6	1146.5	1145.3	1144.1	1142.9	1142.4	1142.6	1142.8	1143.0	1143.2	1144.0
162.5°	1159.0	1157.9	1156.6	1155.5	1154.3	1153.8	1154.0	1154.2	1154.4	1154.6	1155.7
165°	1174.4	1173.1	1172.0	1170.8	1169.7	1169.1	1169.3	1169.5	1169.7	1169.9	1171.1
167.5°	1185.8	1184.5	1183.3	1182.1	1180.9	1180.4	1180.5	1180.7	1180.9	1181.2	1182.6
170°	1192.1	1190.8	1189.4	1188.0	1186.6	1186.1	1186.2	1186.4	1186.6	1186.9	1188.4
172.5°	1196.4	1195.1	1193.6	1192.3	1190.9	1190.4	1190.7	1191.1	1191.4	1191.8	1193.2
175°	1201.0	1199.9	1198.7	1197.5	1196.3	1195.9	1196.1	1196.2	1196.4	1196.6	1198.2
177.5°	1203.2	1202.3	1201.3	1200.3	1199.4	1199.0	1199.2	1199.4	1199.5	1199.6	1200.8
180°	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1
2.5°	894.0	895.2	896.4	897.0	896.9	896.7	896.6	896.5
5°	888.5	890.0	891.5	892.2	891.8	891.5	891.3	890.9
7.5°	877.4	878.5	879.6	879.9	879.6	879.2	879.0	878.6
10°	868.1	868.5	869.1	869.1	868.5	868.1	867.6	867.2
12.5°	854.9	855.2	855.5	855.3	854.6	854.0	853.3	852.6
15°	833.0	832.9	832.8	832.0	830.6	829.3	828.0	826.5
17.5°	805.8	805.0	804.3	803.3	802.3	801.1	800.0	798.9
20°	785.8	785.0	784.3	783.2	781.9	780.5	779.2	777.8
22.5°	765.9	764.4	762.9	761.6	760.5	759.4	758.3	757.2
25°	733.3	731.3	729.3	727.5	725.9	724.2	722.6	720.9
27.5°	697.9	695.2	692.4	690.3	688.7	687.1	685.5	683.9
30°	672.6	669.1	665.7	663.3	661.9	660.6	659.2	657.9
32.5°	648.0	644.3	640.4	637.7	635.9	634.2	632.5	630.8
35°	609.8	605.5	601.1	597.9	595.8	593.6	591.6	589.4
37.5°	569.9	564.6	559.4	555.7	553.7	551.7	549.7	547.6
40°	543.4	537.7	532.0	528.2	526.5	524.6	522.8	521.0
42.5°	517.4	511.8	506.4	502.3	499.7	497.0	494.4	491.8
45°	475.7	469.8	463.7	459.6	457.4	455.0	452.8	450.6
47.5°	434.6	428.4	422.2	417.9	415.4	412.9	410.4	407.9
50°	406.7	400.4	394.0	389.8	387.5	385.3	383.0	380.8
52.5°	380.3	373.4	366.7	362.1	359.9	357.7	355.3	353.1
55°	340.1	333.3	326.5	322.0	319.6	317.2	314.8	312.4
57.5°	299.9	293.3	286.7	282.2	280.1	277.9	275.9	273.8
60°	273.3	266.7	260.1	255.7	253.4	251.1	248.9	246.6
62.5°	247.2	241.0	234.9	230.7	228.5	226.2	223.9	221.7
65°	208.8	202.8	196.8	192.6	190.4	188.2	185.8	183.6
67.5°	172.2	166.7	161.1	157.5	155.7	153.9	152.0	150.3
70°	147.8	143.2	138.5	135.3	133.5	131.7	129.8	128.0
72.5°	125.3	120.9	116.6	113.9	112.7	111.5	110.3	109.1
75°	93.6	90.3	87.0	84.8	83.8	82.8	81.7	80.6
77.5°	66.6	64.3	62.0	60.5	59.7	58.9	58.1	57.3
80°	50.1	48.8	47.4	46.6	46.3	46.0	45.7	45.4
82.5°	37.5	36.8	36.2	35.8	35.7	35.5	35.3	35.1
85°	21.4	21.2	21.0	21.0	20.8	20.6	20.5	20.3
87.5°	11.4	11.6	11.8	11.9	11.9	11.9	11.9	11.9
90°	16.2	17.2	18.2	19.0	19.6	20.2	20.8	21.4
92.5°	16.2	17.2	18.2	18.8	19.1	19.4	19.7	20.0
95°	16.2	17.2	18.2	18.7	18.7	18.7	18.7	18.7
97.5°	32.6	27.1	21.5	18.7	18.7	18.7	18.7	18.7
100°	95.9	66.5	37.0	21.8	21.0	20.2	19.5	18.7
102.5°	186.5	180.9	175.3	165.9	152.4	138.9	125.5	112.0
105°	265.3	265.3	265.3	265.2	265.0	264.8	264.7	264.4
107.5°	335.9	336.0	336.0	335.7	335.1	334.6	333.9	333.3
110°	381.7	381.0	380.5	380.3	380.5	380.7	380.8	381.0



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CATALOG NUMBER: S125RDIP-S610D1035U940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	427.0	426.1	425.4	424.9	424.6	424.4	424.1	423.8
115°	495.3	494.5	493.7	492.7	491.5	490.3	489.1	487.9
117.5°	561.2	560.2	559.1	558.3	557.9	557.3	556.8	556.2
120°	603.8	603.3	603.0	602.3	601.3	600.3	599.3	598.3
122.5°	644.4	644.0	643.5	642.7	641.7	640.5	639.4	638.2
125°	703.6	702.8	702.0	701.3	700.7	700.1	699.5	698.9
127.5°	757.7	757.2	756.8	755.9	754.4	753.0	751.5	750.0
130°	793.0	792.4	791.8	791.0	790.1	789.1	788.1	787.0
132.5°	826.0	825.9	825.7	825.2	824.2	823.2	822.2	821.3
135°	874.4	874.1	873.6	872.8	871.6	870.5	869.2	868.1
137.5°	919.5	919.6	919.7	919.2	918.2	917.1	916.1	915.1
140°	947.3	947.6	948.0	947.6	946.5	945.2	944.1	942.9
142.5°	974.4	974.5	974.6	974.0	972.8	971.6	970.4	969.2
145°	1012.7	1012.9	1013.1	1012.6	1011.5	1010.2	1009.1	1007.9
147.5°	1045.5	1045.8	1046.1	1045.4	1044.0	1042.6	1041.2	1039.7
150°	1066.6	1066.9	1067.3	1066.8	1065.1	1063.5	1061.9	1060.4
152.5°	1085.0	1085.5	1085.8	1085.3	1083.9	1082.4	1081.0	1079.6
155°	1110.5	1111.2	1111.8	1111.3	1109.6	1108.0	1106.5	1104.9
157.5°	1131.7	1132.3	1132.9	1132.5	1130.9	1129.3	1127.7	1126.1
160°	1144.8	1145.6	1146.4	1145.9	1144.4	1142.8	1141.2	1139.6
162.5°	1156.8	1157.9	1159.0	1158.7	1157.0	1155.2	1153.5	1151.7
165°	1172.2	1173.5	1174.7	1174.5	1172.9	1171.3	1169.7	1168.1
167.5°	1184.0	1185.4	1186.9	1186.7	1184.9	1183.1	1181.3	1179.6
170°	1190.0	1191.6	1193.2	1193.0	1191.2	1189.5	1187.8	1186.0
172.5°	1194.6	1196.1	1197.5	1197.3	1195.5	1193.7	1191.9	1190.3
175°	1199.8	1201.4	1202.9	1202.8	1201.0	1199.3	1197.5	1195.7
177.5°	1201.8	1203.0	1204.1	1204.0	1202.7	1201.5	1200.2	1198.9
180°	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0

(END OF REPORT)