

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: P333202-940

Luminaire Tested: **S125DIP-S610D1205U940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333202-940
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: S125DIP-S610D1205U940-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6524.4 lumens
Efficiency: N/A
Efficacy: 132.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

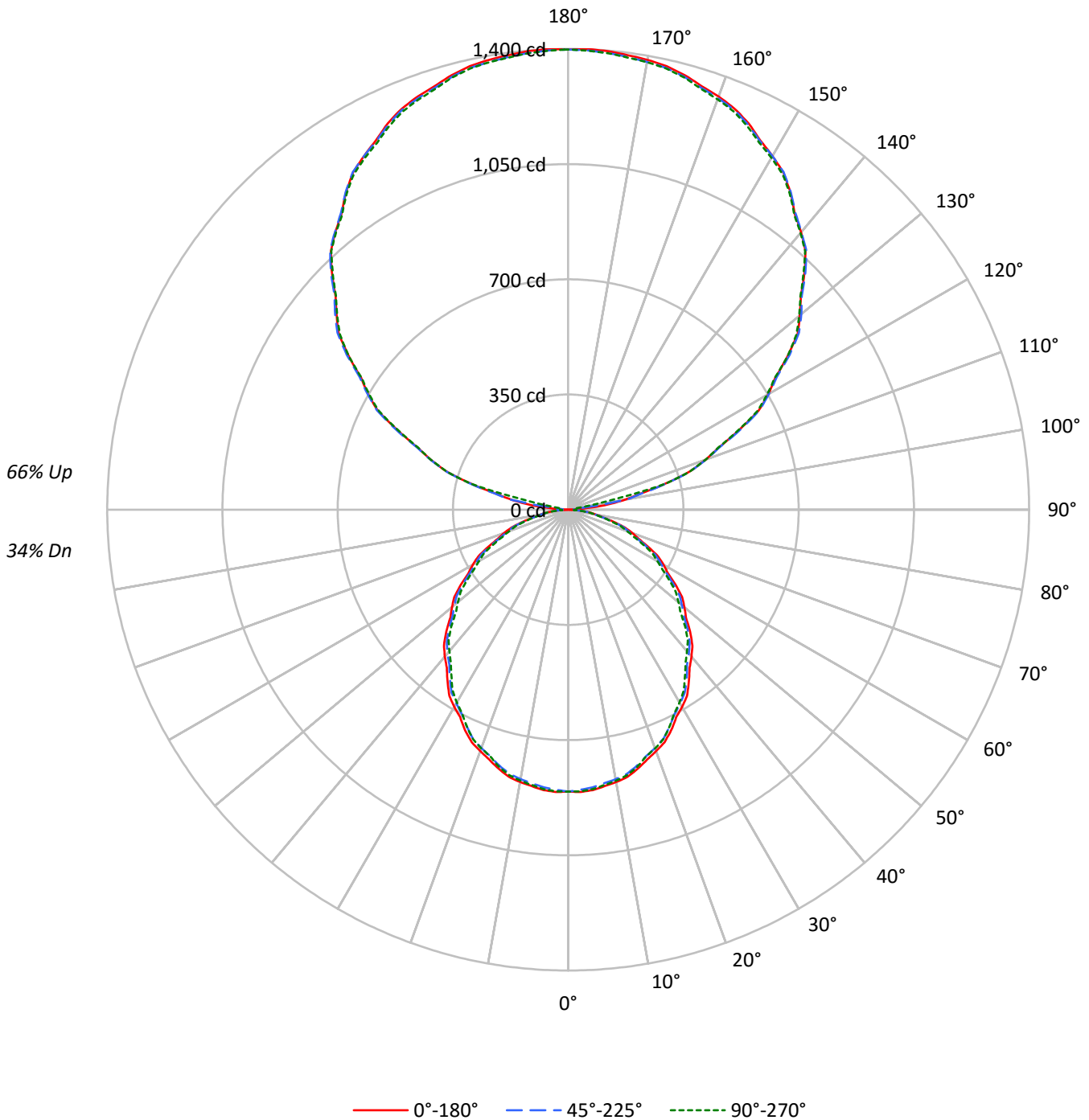
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	75	75	75	57	57	57	42	42	42	34
1	94	90	86	83	85	81	78	75	65	63	61	50	49	48	37	36	35	29
2	86	78	72	67	77	71	66	62	57	53	50	44	42	40	32	31	29	24
3	78	69	62	56	70	62	56	51	50	46	42	39	36	33	29	27	25	20
4	71	61	53	47	64	55	49	43	45	40	36	35	31	29	25	23	22	17
5	65	54	46	40	59	49	42	37	40	35	31	31	28	25	23	21	19	15
6	60	48	41	35	54	44	37	32	36	31	27	28	24	22	21	18	16	13
7	56	44	36	30	50	40	33	28	32	27	24	25	22	19	19	16	15	12
8	51	40	32	27	46	36	29	25	29	24	21	23	20	17	17	15	13	11
9	48	36	29	24	43	33	26	22	27	22	19	21	18	15	16	14	12	9
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	12	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5531	5531	5531
5°	5544	5490	5525
10°	5509	5452	5483
15°	5449	5386	5409
20°	5364	5294	5304
25°	5273	5185	5181
30°	5158	5068	5043
35°	5037	4941	4872
40°	4912	4804	4736
45°	4778	4678	4585
50°	4629	4527	4391
55°	4486	4355	4234
60°	4314	4184	4035
65°	4109	3976	3842
70°	3914	3737	3609
75°	3566	3449	3331
80°	3172	3124	3046
85°	2764	2808	2660



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.7	1.2
10°-20°	228.1	3.5
20°-30°	336.8	5.2
30°-40°	393.0	6.0
40°-50°	394.7	6.0
50°-60°	346.5	5.3
60°-70°	258.2	4.0
70°-80°	147.6	2.3
80°-90°	45.8	0.7
90°-100°	50.8	0.8
100°-110°	313.1	4.8
110°-120°	567.9	8.7
120°-130°	728.8	11.2
130°-140°	783.9	12.0
140°-150°	735.8	11.3
150°-160°	595.2	9.1
160°-170°	384.9	5.9
170°-180°	132.8	2.0
0°-30°	645.6	9.9
0°-40°	1038.6	15.9
0°-60°	1779.7	27.3
0°-90°	2231.3	34.2
90°-120°	931.8	14.3
90°-150°	3180.2	48.7
90°-180°	4293.0	65.8
0°-180°	6524.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	856	856	856	856	856	
5°	855	853	847	853	852	81
15°	815	813	806	809	809	230
25°	740	736	728	729	727	340
35°	639	636	627	623	618	399
45°	523	520	512	504	502	403
55°	398	396	387	381	376	356
65°	269	267	260	254	251	267
75°	143	142	138	136	134	152
85°	37	38	38	37	36	42
90°	1	9	17	22	25	5
95°	59	54	17	22	22	75
105°	305	309	309	309	308	323
115°	572	577	578	574	568	567
125°	814	820	821	817	814	726
135°	1015	1020	1019	1016	1010	782
145°	1176	1178	1178	1179	1173	735
155°	1295	1290	1291	1294	1286	597
165°	1367	1361	1362	1367	1360	386
175°	1398	1392	1393	1400	1392	133
180°	1398	1398	1398	1398	1398	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	856.4	856.4	856.4	856.4	856.4	856.4	856.4	856.4	856.4	856.4	856.4
2.5°	858.5	858.2	857.8	857.5	857.1	856.3	855.2	853.9	852.7	851.5	852.7
5°	855.1	854.7	854.4	854.1	853.8	852.9	851.4	849.9	848.4	846.9	848.3
7.5°	847.1	846.9	846.6	846.2	846.0	845.0	843.3	841.7	840.0	838.4	839.6
10°	840.1	839.8	839.5	839.2	838.9	837.9	836.2	834.6	832.9	831.3	832.5
12.5°	831.4	830.9	830.4	829.8	829.3	828.2	826.7	825.2	823.6	822.1	823.0
15°	815.0	814.6	814.1	813.7	813.2	812.2	810.6	808.9	807.2	805.6	806.3
17.5°	796.2	795.6	794.9	794.2	793.5	792.4	790.7	788.9	787.2	785.5	786.4
20°	780.5	780.2	779.9	779.6	779.3	778.2	776.2	774.3	772.3	770.3	771.4
22.5°	764.7	764.2	763.7	763.1	762.6	761.4	759.6	757.8	755.9	754.0	754.7
25°	739.9	739.0	738.3	737.6	736.8	735.5	733.5	731.6	729.6	727.6	728.0
27.5°	710.7	710.2	709.8	709.4	708.9	707.7	705.6	703.6	701.6	699.6	699.6
30°	691.7	691.3	690.8	690.4	689.9	688.6	686.3	684.0	681.8	679.6	679.2
32.5°	671.1	670.5	669.8	669.1	668.3	667.0	665.0	663.0	660.9	659.0	658.4
35°	638.9	638.3	637.7	637.1	636.5	635.2	633.0	630.9	628.8	626.7	626.0
37.5°	605.4	604.7	604.0	603.2	602.4	601.0	599.1	597.1	595.0	593.1	592.0
40°	582.6	581.9	581.1	580.4	579.6	578.2	576.1	574.0	571.9	569.8	568.5
42.5°	558.3	557.7	557.0	556.3	555.7	554.4	552.2	550.2	548.0	545.9	544.7
45°	523.1	522.5	521.8	521.2	520.7	519.4	517.6	515.9	514.0	512.2	510.4
47.5°	485.1	485.1	485.2	485.2	485.2	484.1	482.0	479.8	477.7	475.5	473.7
50°	460.7	460.2	459.8	459.3	458.9	457.8	455.9	454.1	452.4	450.6	448.6
52.5°	435.8	435.4	435.2	434.8	434.4	433.3	431.4	429.4	427.6	425.6	423.9
55°	398.4	397.9	397.4	397.0	396.5	395.3	393.2	391.1	389.0	386.8	385.5
57.5°	358.9	358.7	358.5	358.2	358.0	357.0	355.2	353.4	351.6	349.9	348.1
60°	334.0	333.4	332.8	332.2	331.6	330.5	328.9	327.2	325.5	323.9	322.4
62.5°	308.0	307.6	307.0	306.6	306.0	305.1	303.7	302.3	300.9	299.4	297.8
65°	268.9	268.7	268.4	268.0	267.8	266.8	265.1	263.5	261.8	260.2	258.8
67.5°	231.1	230.5	229.9	229.3	228.6	227.7	226.5	225.2	224.0	222.7	221.6
70°	207.3	206.6	205.8	205.1	204.3	203.2	201.9	200.5	199.2	197.9	196.9
72.5°	181.3	180.7	180.3	179.8	179.2	178.5	177.7	176.8	175.9	175.0	174.1
75°	142.9	142.7	142.3	142.0	141.8	141.2	140.4	139.7	138.9	138.2	137.8
77.5°	107.6	107.5	107.4	107.2	107.1	106.8	106.4	106.0	105.6	105.1	104.9
80°	85.3	85.3	85.3	85.3	85.3	85.2	84.9	84.6	84.4	84.0	83.8
82.5°	65.9	65.6	65.4	65.1	64.9	64.7	64.6	64.6	64.6	64.5	64.2
85°	37.3	37.5	37.5	37.7	37.9	37.9	37.9	37.9	37.9	37.9	37.8
87.5°	14.8	15.2	15.6	16.0	16.3	16.6	16.8	17.0	17.2	17.4	17.7
90°	1.1	2.9	4.7	6.6	8.4	10.2	11.8	13.4	15.0	16.6	17.7
92.5°	16.0	14.7	13.4	12.1	10.8	10.9	12.3	13.7	15.2	16.6	17.7
95°	59.0	58.4	57.7	57.0	56.3	51.6	42.8	34.1	25.3	16.6	17.7
97.5°	123.3	124.6	125.8	127.1	128.3	120.3	102.9	85.6	68.3	51.0	44.5
100°	173.1	173.8	174.4	175.1	175.8	176.6	177.5	178.5	179.4	180.3	146.0
102.5°	223.6	224.5	225.4	226.2	227.1	227.8	228.4	229.0	229.5	230.1	223.6
105°	304.7	305.6	306.5	307.5	308.4	308.8	308.8	308.8	308.8	308.8	308.8
107.5°	388.9	388.9	388.9	388.9	388.9	389.1	389.5	389.9	390.5	390.9	390.9
110°	443.5	443.5	443.5	443.5	443.5	443.8	444.3	444.7	445.1	445.6	445.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	495.0	495.5	496.1	496.6	497.1	497.6	497.8	498.1	498.4	498.6	497.8
115°	572.0	573.2	574.4	575.5	576.7	577.4	577.6	577.8	578.0	578.3	577.4
117.5°	651.8	651.8	651.8	651.8	651.7	652.1	653.0	653.8	654.7	655.6	654.4
120°	701.6	701.3	701.2	700.9	700.7	700.9	701.6	702.3	702.9	703.6	703.2
122.5°	745.6	746.5	747.3	748.1	749.0	749.7	749.9	750.3	750.6	750.9	750.5
125°	813.5	815.1	816.7	818.3	819.9	820.7	820.7	820.7	820.7	820.7	819.8
127.5°	878.4	879.6	880.7	881.8	883.0	883.5	883.3	883.2	883.1	883.0	882.4
130°	918.2	919.4	920.5	921.7	922.8	923.5	923.7	924.0	924.2	924.4	923.7
132.5°	958.0	959.3	960.6	962.0	963.3	963.8	963.2	962.7	962.2	961.7	961.6
135°	1014.6	1015.9	1017.4	1018.7	1020.1	1020.6	1020.1	1019.7	1019.1	1018.7	1018.2
137.5°	1066.6	1067.8	1069.0	1070.1	1071.4	1071.7	1071.4	1070.9	1070.5	1070.1	1070.2
140°	1100.5	1101.1	1101.5	1102.0	1102.4	1102.5	1102.3	1102.1	1101.9	1101.6	1102.1
142.5°	1131.2	1131.5	1131.8	1132.1	1132.4	1132.7	1133.0	1133.3	1133.6	1134.0	1134.1
145°	1176.3	1176.7	1177.1	1177.6	1178.0	1178.3	1178.3	1178.3	1178.3	1178.3	1178.6
147.5°	1215.6	1215.5	1215.4	1215.3	1215.2	1215.3	1215.6	1215.8	1216.2	1216.5	1216.7
150°	1240.5	1240.0	1239.6	1239.1	1238.7	1238.7	1239.1	1239.6	1240.0	1240.5	1240.9
152.5°	1264.5	1263.6	1262.5	1261.5	1260.4	1260.2	1260.7	1261.1	1261.6	1262.0	1262.5
155°	1295.4	1294.1	1292.6	1291.3	1289.9	1289.4	1289.9	1290.3	1290.8	1291.3	1292.0
157.5°	1319.3	1318.4	1317.6	1316.8	1315.9	1315.5	1315.6	1315.6	1315.7	1315.7	1316.4
160°	1335.9	1334.4	1333.1	1331.7	1330.3	1329.7	1330.0	1330.2	1330.4	1330.6	1331.6
162.5°	1349.1	1347.7	1346.3	1345.0	1343.5	1343.0	1343.2	1343.5	1343.7	1343.9	1345.2
165°	1366.9	1365.6	1364.1	1362.8	1361.4	1360.8	1361.0	1361.3	1361.5	1361.7	1363.2
167.5°	1380.2	1378.8	1377.3	1375.9	1374.5	1373.9	1374.1	1374.3	1374.6	1374.8	1376.4
170°	1387.7	1386.1	1384.4	1382.8	1381.2	1380.5	1380.7	1381.0	1381.2	1381.4	1383.3
172.5°	1392.6	1391.0	1389.4	1387.8	1386.2	1385.5	1386.0	1386.4	1386.8	1387.2	1388.9
175°	1398.0	1396.6	1395.3	1393.8	1392.5	1391.9	1392.1	1392.4	1392.6	1392.9	1394.6
177.5°	1400.5	1399.4	1398.3	1397.2	1396.1	1395.6	1395.8	1396.0	1396.2	1396.3	1397.7
180°	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	856.4	856.4	856.4	856.4	856.4	856.4	856.4	856.4
2.5°	853.9	855.2	856.3	856.8	856.8	856.6	856.5	856.4
5°	849.6	851.0	852.3	852.9	852.7	852.7	852.5	852.3
7.5°	841.0	842.3	843.6	844.3	844.1	843.9	843.8	843.6
10°	833.7	834.9	836.2	836.7	836.5	836.3	836.2	836.1
12.5°	824.0	825.0	825.9	826.4	826.3	826.3	826.3	826.3
15°	807.1	807.8	808.6	809.0	809.0	809.0	809.0	809.0
17.5°	787.4	788.3	789.3	789.3	788.5	787.8	787.1	786.3
20°	772.4	773.5	774.5	774.7	773.9	773.2	772.4	771.7
22.5°	755.5	756.2	756.9	757.0	756.4	755.9	755.4	754.9
25°	728.3	728.5	728.9	728.8	728.3	727.9	727.5	727.0
27.5°	699.7	699.8	699.8	699.6	699.2	698.7	698.3	697.9
30°	678.9	678.7	678.3	678.0	677.5	677.1	676.6	676.2
32.5°	657.9	657.3	656.7	656.1	655.3	654.5	653.6	652.8
35°	625.2	624.5	623.7	622.7	621.5	620.3	619.1	617.9
37.5°	590.8	589.8	588.6	587.7	587.0	586.4	585.7	585.0
40°	567.0	565.7	564.4	563.5	563.0	562.6	562.1	561.7
42.5°	543.5	542.2	541.0	540.0	539.3	538.7	538.0	537.3
45°	508.5	506.8	505.0	503.8	503.4	502.9	502.5	502.0
47.5°	471.8	469.9	468.1	466.7	465.7	464.6	463.5	462.4
50°	446.7	444.7	442.7	441.2	440.1	439.1	438.0	437.0
52.5°	422.1	420.4	418.7	417.3	416.2	414.9	413.8	412.6
55°	384.1	382.8	381.5	380.2	379.2	378.1	377.1	376.0
57.5°	346.3	344.6	342.9	341.7	341.2	340.5	340.0	339.5
60°	320.8	319.3	317.8	316.6	315.5	314.4	313.3	312.4
62.5°	296.2	294.6	292.9	291.8	291.0	290.1	289.3	288.5
65°	257.4	256.1	254.8	253.8	253.2	252.5	252.0	251.4
67.5°	220.5	219.4	218.2	217.4	217.0	216.7	216.3	216.0
70°	196.0	195.1	194.2	193.5	192.9	192.3	191.6	191.1
72.5°	173.0	172.0	170.9	170.1	169.5	169.0	168.4	167.7
75°	137.3	136.9	136.4	135.9	135.3	134.6	134.1	133.5
77.5°	104.6	104.3	104.1	103.7	103.3	102.9	102.5	102.0
80°	83.7	83.6	83.4	83.2	82.8	82.6	82.3	81.9
82.5°	63.9	63.7	63.4	63.2	63.2	63.1	63.0	63.0
85°	37.6	37.5	37.4	37.1	36.8	36.5	36.2	35.9
87.5°	17.8	18.1	18.4	18.4	18.3	18.2	18.1	18.0
90°	18.9	20.1	21.2	22.1	22.8	23.5	24.2	24.9
92.5°	18.9	20.1	21.2	21.9	22.2	22.6	22.9	23.2
95°	18.9	20.1	21.2	21.8	21.8	21.8	21.8	21.8
97.5°	38.0	31.5	25.0	21.8	21.8	21.8	21.8	21.8
100°	111.7	77.4	43.1	25.4	24.5	23.6	22.6	21.8
102.5°	217.0	210.6	204.1	193.1	177.4	161.7	146.1	130.4
105°	308.8	308.8	308.8	308.7	308.4	308.3	308.0	307.8
107.5°	391.0	391.0	391.1	390.7	390.0	389.4	388.7	388.0
110°	444.3	443.5	442.8	442.6	442.8	443.1	443.4	443.5



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CATALOG NUMBER: S125DIP-S610D1205U940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	497.0	496.1	495.2	494.5	494.3	493.9	493.7	493.3
115°	576.4	575.5	574.6	573.5	572.0	570.7	569.3	567.9
117.5°	653.2	652.0	650.8	649.9	649.3	648.7	648.1	647.5
120°	702.8	702.3	701.9	701.1	699.9	698.7	697.6	696.4
122.5°	750.0	749.6	749.1	748.1	746.8	745.5	744.2	742.9
125°	818.9	818.0	817.1	816.3	815.6	814.9	814.2	813.5
127.5°	881.9	881.5	880.9	879.9	878.2	876.4	874.7	873.0
130°	923.0	922.3	921.7	920.7	919.5	918.5	917.3	916.1
132.5°	961.4	961.3	961.2	960.6	959.4	958.2	957.1	955.9
135°	1017.8	1017.4	1016.9	1015.9	1014.6	1013.2	1011.8	1010.4
137.5°	1070.3	1070.4	1070.5	1070.0	1068.7	1067.6	1066.3	1065.1
140°	1102.5	1103.0	1103.5	1103.0	1101.6	1100.3	1098.9	1097.5
142.5°	1134.2	1134.3	1134.3	1133.7	1132.3	1131.0	1129.5	1128.2
145°	1178.8	1179.0	1179.2	1178.7	1177.2	1175.9	1174.5	1173.1
147.5°	1217.0	1217.3	1217.5	1216.8	1215.2	1213.5	1211.9	1210.2
150°	1241.4	1241.9	1242.3	1241.6	1239.8	1238.0	1236.1	1234.3
152.5°	1262.9	1263.5	1263.9	1263.3	1261.6	1260.0	1258.3	1256.7
155°	1292.6	1293.3	1294.1	1293.4	1291.6	1289.8	1287.9	1286.1
157.5°	1317.2	1317.9	1318.7	1318.1	1316.3	1314.5	1312.6	1310.7
160°	1332.5	1333.4	1334.4	1333.9	1332.0	1330.2	1328.4	1326.5
162.5°	1346.5	1347.8	1349.1	1348.7	1346.7	1344.6	1342.6	1340.6
165°	1364.5	1365.9	1367.3	1367.0	1365.2	1363.3	1361.5	1359.7
167.5°	1378.1	1379.7	1381.4	1381.3	1379.1	1377.1	1375.0	1373.0
170°	1385.1	1387.0	1388.8	1388.7	1386.6	1384.6	1382.5	1380.4
172.5°	1390.5	1392.2	1393.8	1393.7	1391.6	1389.6	1387.4	1385.4
175°	1396.5	1398.4	1400.2	1400.1	1398.0	1396.0	1393.8	1391.8
177.5°	1398.9	1400.3	1401.5	1401.4	1400.0	1398.5	1397.0	1395.5
180°	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0

(END OF REPORT)