

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: P333202-930

Luminaire Tested: **S125DIP-S610D1205U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333202-930
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-S610D1205U930-4F0-1E-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: 5965.3 lumens
Efficiency: N/A
Efficacy: 120.8 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

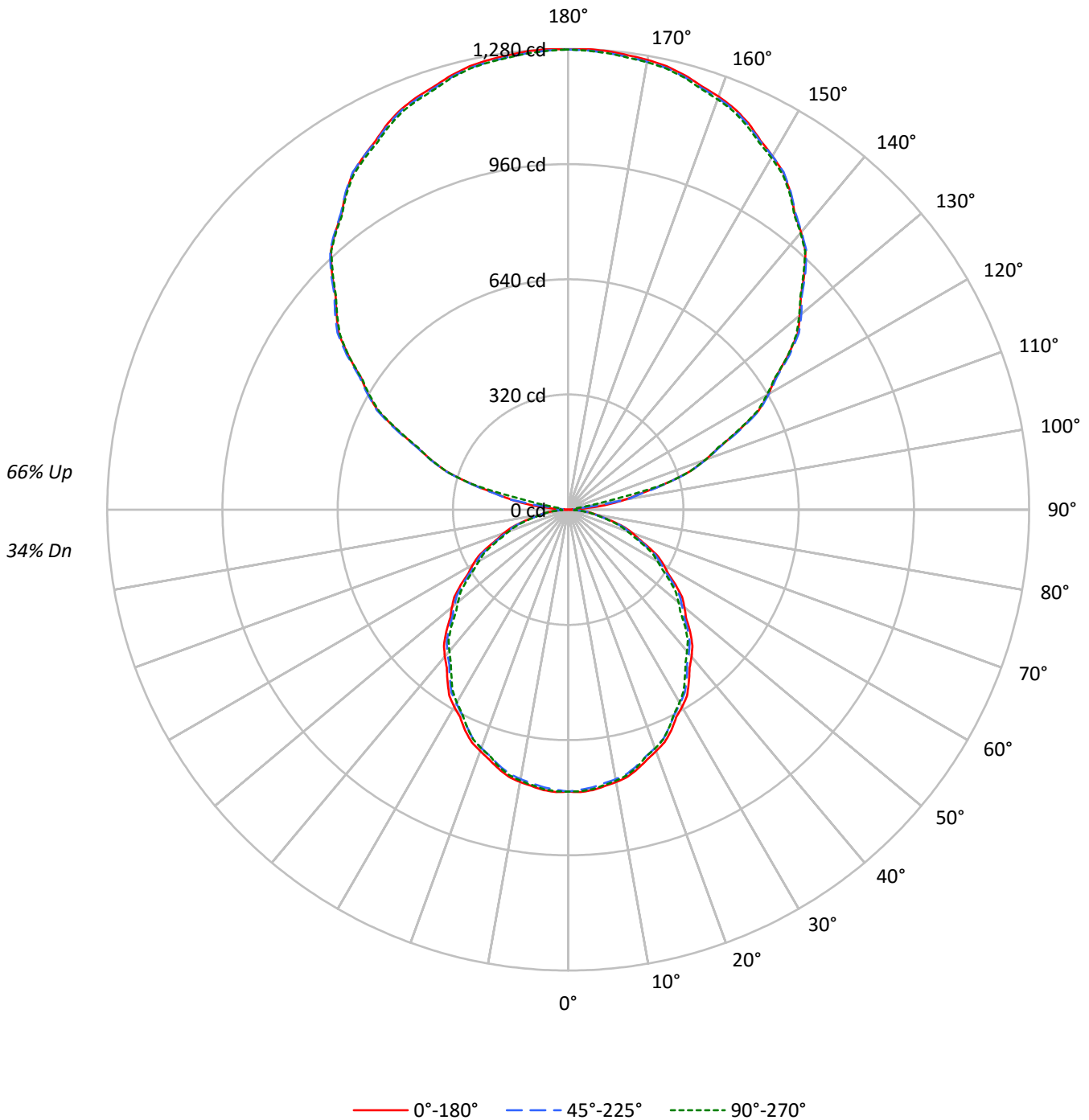
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5057	5057	5057
5°	5068	5020	5052
10°	5037	4985	5013
15°	4983	4924	4945
20°	4904	4841	4849
25°	4821	4741	4737
30°	4716	4633	4610
35°	4606	4518	4454
40°	4491	4392	4330
45°	4369	4277	4192
50°	4233	4140	4015
55°	4102	3983	3871
60°	3945	3825	3689
65°	3758	3636	3512
70°	3580	3416	3299
75°	3261	3154	3047
80°	2901	2856	2786
85°	2527	2571	2438



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.8	1.2
10°-20°	208.5	3.5
20°-30°	307.9	5.2
30°-40°	359.3	6.0
40°-50°	360.9	6.0
50°-60°	316.8	5.3
60°-70°	236.0	4.0
70°-80°	135.0	2.3
80°-90°	41.9	0.7
90°-100°	46.5	0.8
100°-110°	286.3	4.8
110°-120°	519.2	8.7
120°-130°	666.3	11.2
130°-140°	716.7	12.0
140°-150°	672.7	11.3
150°-160°	544.2	9.1
160°-170°	351.9	5.9
170°-180°	121.4	2.0
0°-30°	590.3	9.9
0°-40°	949.6	15.9
0°-60°	1627.2	27.3
0°-90°	2040.1	34.2
90°-120°	851.9	14.3
90°-150°	2907.7	48.7
90°-180°	3925.0	65.8
0°-180°	5965.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	783	783	783	783	783	
5°	782	780	774	780	779	74
15°	745	743	736	739	740	210
25°	676	673	665	666	665	311
35°	584	581	573	570	565	365
45°	478	476	468	461	459	368
55°	364	362	354	348	344	325
65°	246	244	238	232	230	244
75°	131	129	126	124	122	139
85°	34	35	35	34	33	38
90°	1	8	15	20	23	4
95°	54	49	15	20	20	69
105°	279	282	282	282	281	295
115°	523	528	529	525	519	518
125°	744	750	750	747	744	664
135°	928	933	931	929	924	715
145°	1076	1077	1077	1078	1073	672
155°	1184	1179	1181	1183	1176	545
165°	1250	1244	1245	1250	1243	353
175°	1278	1273	1274	1280	1272	122
180°	1278	1278	1278	1278	1278	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0
2.5°	785.0	784.6	784.3	784.0	783.7	782.9	781.9	780.7	779.7	778.5	779.7
5°	781.8	781.5	781.2	780.9	780.6	779.8	778.4	777.1	775.7	774.3	775.6
7.5°	774.5	774.3	774.0	773.7	773.5	772.6	771.0	769.6	768.0	766.5	767.7
10°	768.1	767.8	767.6	767.3	767.0	766.1	764.6	763.1	761.6	760.1	761.2
12.5°	760.2	759.7	759.2	758.7	758.2	757.2	755.9	754.5	753.0	751.6	752.5
15°	745.2	744.8	744.4	744.0	743.6	742.6	741.1	739.6	738.0	736.5	737.2
17.5°	728.0	727.4	726.8	726.2	725.5	724.5	722.9	721.3	719.7	718.2	719.0
20°	713.6	713.3	713.1	712.8	712.5	711.5	709.7	707.9	706.1	704.3	705.3
22.5°	699.2	698.7	698.2	697.7	697.2	696.2	694.5	692.8	691.1	689.4	690.1
25°	676.5	675.7	675.1	674.4	673.7	672.5	670.7	668.9	667.1	665.3	665.6
27.5°	649.8	649.4	649.0	648.6	648.2	647.0	645.1	643.4	641.5	639.7	639.7
30°	632.4	632.0	631.6	631.2	630.8	629.6	627.5	625.4	623.4	621.3	621.0
32.5°	613.6	613.0	612.4	611.7	611.1	609.8	608.1	606.2	604.3	602.5	602.0
35°	584.2	583.6	583.0	582.5	582.0	580.7	578.8	576.8	574.9	573.0	572.3
37.5°	553.5	552.9	552.2	551.5	550.8	549.5	547.7	545.9	544.0	542.3	541.3
40°	532.7	532.1	531.3	530.7	529.9	528.6	526.8	524.8	522.9	521.0	519.8
42.5°	510.5	509.9	509.2	508.7	508.1	506.9	504.9	503.0	501.1	499.1	498.1
45°	478.3	477.7	477.1	476.5	476.1	474.9	473.3	471.7	469.9	468.3	466.7
47.5°	443.5	443.5	443.6	443.6	443.6	442.6	440.7	438.7	436.8	434.7	433.1
50°	421.3	420.8	420.4	420.0	419.6	418.6	416.9	415.2	413.6	412.0	410.2
52.5°	398.4	398.1	397.9	397.5	397.2	396.2	394.4	392.6	390.9	389.1	387.6
55°	364.3	363.8	363.4	363.0	362.6	361.4	359.5	357.6	355.6	353.7	352.5
57.5°	328.2	328.0	327.8	327.5	327.3	326.4	324.7	323.1	321.5	319.9	318.3
60°	305.4	304.8	304.3	303.7	303.2	302.1	300.7	299.1	297.6	296.1	294.7
62.5°	281.6	281.2	280.7	280.3	279.8	279.0	277.7	276.4	275.1	273.8	272.3
65°	245.9	245.6	245.4	245.1	244.8	243.9	242.4	240.9	239.4	237.9	236.6
67.5°	211.3	210.8	210.2	209.6	209.0	208.2	207.1	205.9	204.8	203.7	202.6
70°	189.6	188.9	188.2	187.5	186.8	185.8	184.6	183.4	182.1	180.9	180.0
72.5°	165.8	165.3	164.9	164.4	163.9	163.2	162.5	161.7	160.9	160.0	159.1
75°	130.7	130.4	130.1	129.9	129.6	129.1	128.4	127.8	127.0	126.4	126.0
77.5°	98.4	98.2	98.2	98.0	97.9	97.7	97.3	96.9	96.5	96.1	95.9
80°	78.0	78.0	78.0	78.0	78.0	77.9	77.6	77.4	77.1	76.8	76.6
82.5°	60.3	60.0	59.8	59.5	59.4	59.2	59.1	59.1	59.0	58.9	58.7
85°	34.1	34.2	34.3	34.5	34.7	34.7	34.7	34.7	34.7	34.7	34.6
87.5°	13.5	13.9	14.3	14.6	14.9	15.2	15.3	15.6	15.7	15.9	16.1
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°	14.6	13.5	12.2	11.1	9.9	9.9	11.3	12.6	13.9	15.2	16.2
95°	54.0	53.4	52.7	52.1	51.4	47.2	39.1	31.1	23.2	15.2	16.2
97.5°	112.8	113.9	115.0	116.2	117.3	110.0	94.1	78.3	62.5	46.6	40.7
100°	158.2	158.9	159.5	160.1	160.8	161.5	162.3	163.2	164.0	164.9	133.5
102.5°	204.5	205.3	206.1	206.8	207.7	208.3	208.8	209.4	209.9	210.3	204.4
105°	278.6	279.4	280.2	281.1	281.9	282.3	282.3	282.3	282.3	282.3	282.3
107.5°	355.6	355.6	355.6	355.6	355.6	355.7	356.1	356.5	357.0	357.4	357.4
110°	405.5	405.5	405.5	405.5	405.5	405.8	406.2	406.6	407.0	407.4	406.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	452.6	453.1	453.6	454.0	454.5	454.9	455.2	455.4	455.7	455.9	455.2
115°	523.0	524.1	525.1	526.2	527.3	527.9	528.1	528.3	528.5	528.7	527.9
117.5°	596.0	596.0	595.9	595.9	595.8	596.2	597.0	597.8	598.6	599.4	598.3
120°	641.5	641.2	641.1	640.8	640.7	640.8	641.5	642.1	642.7	643.4	642.9
122.5°	681.7	682.5	683.2	684.0	684.9	685.4	685.7	686.0	686.3	686.6	686.2
125°	743.8	745.3	746.7	748.2	749.7	750.4	750.4	750.4	750.4	750.4	749.6
127.5°	803.2	804.2	805.2	806.2	807.3	807.8	807.6	807.6	807.4	807.3	806.8
130°	839.5	840.6	841.6	842.7	843.8	844.3	844.6	844.8	845.0	845.2	844.6
132.5°	875.9	877.1	878.3	879.5	880.8	881.2	880.7	880.2	879.8	879.3	879.2
135°	927.6	928.9	930.2	931.4	932.7	933.1	932.7	932.3	931.8	931.4	931.0
137.5°	975.2	976.3	977.4	978.4	979.6	979.9	979.6	979.2	978.8	978.4	978.5
140°	1006.2	1006.7	1007.1	1007.5	1008.0	1008.0	1007.9	1007.6	1007.5	1007.2	1007.6
142.5°	1034.3	1034.5	1034.9	1035.1	1035.3	1035.6	1035.9	1036.2	1036.5	1036.8	1036.9
145°	1075.5	1075.9	1076.3	1076.7	1077.1	1077.3	1077.3	1077.3	1077.3	1077.3	1077.6
147.5°	1111.4	1111.3	1111.3	1111.2	1111.1	1111.2	1111.4	1111.7	1112.0	1112.2	1112.5
150°	1134.2	1133.8	1133.3	1132.9	1132.5	1132.5	1132.9	1133.3	1133.8	1134.2	1134.6
152.5°	1156.2	1155.3	1154.3	1153.4	1152.4	1152.2	1152.7	1153.1	1153.5	1153.9	1154.3
155°	1184.4	1183.2	1181.9	1180.6	1179.3	1178.9	1179.3	1179.7	1180.2	1180.6	1181.3
157.5°	1206.2	1205.4	1204.7	1204.0	1203.1	1202.8	1202.9	1202.9	1203.0	1203.0	1203.6
160°	1221.4	1220.1	1218.9	1217.6	1216.3	1215.8	1216.0	1216.2	1216.4	1216.6	1217.5
162.5°	1233.5	1232.2	1230.9	1229.7	1228.4	1227.9	1228.1	1228.3	1228.6	1228.7	1230.0
165°	1249.8	1248.5	1247.2	1246.0	1244.7	1244.2	1244.4	1244.6	1244.8	1245.0	1246.3
167.5°	1261.9	1260.6	1259.3	1258.0	1256.7	1256.1	1256.4	1256.5	1256.8	1257.0	1258.5
170°	1268.8	1267.3	1265.8	1264.3	1262.8	1262.2	1262.4	1262.7	1262.8	1263.1	1264.8
172.5°	1273.3	1271.8	1270.3	1268.9	1267.4	1266.8	1267.2	1267.6	1268.0	1268.4	1269.9
175°	1278.2	1276.9	1275.7	1274.4	1273.2	1272.6	1272.8	1273.1	1273.3	1273.5	1275.1
177.5°	1280.5	1279.4	1278.5	1277.5	1276.4	1276.0	1276.2	1276.4	1276.5	1276.7	1277.9
180°	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	783.0	783.0	783.0	783.0	783.0	783.0	783.0	783.0
2.5°	780.7	781.9	782.9	783.4	783.3	783.2	783.1	783.0
5°	776.8	778.0	779.3	779.8	779.7	779.6	779.4	779.3
7.5°	768.9	770.1	771.4	771.9	771.8	771.6	771.5	771.4
10°	762.3	763.4	764.5	765.0	764.8	764.7	764.5	764.4
12.5°	753.4	754.3	755.1	755.6	755.5	755.5	755.5	755.5
15°	737.9	738.6	739.3	739.6	739.6	739.6	739.6	739.6
17.5°	719.9	720.7	721.6	721.7	721.0	720.3	719.7	718.9
20°	706.2	707.2	708.2	708.3	707.6	706.9	706.2	705.6
22.5°	690.7	691.4	692.0	692.1	691.6	691.1	690.6	690.2
25°	665.9	666.1	666.4	666.3	665.9	665.5	665.1	664.7
27.5°	639.8	639.8	639.8	639.7	639.3	638.9	638.5	638.1
30°	620.8	620.5	620.2	619.9	619.5	619.1	618.6	618.2
32.5°	601.5	601.0	600.5	599.9	599.2	598.4	597.6	596.9
35°	571.6	571.0	570.2	569.3	568.3	567.1	566.1	564.9
37.5°	540.2	539.2	538.2	537.4	536.7	536.1	535.5	534.8
40°	518.4	517.2	516.0	515.2	514.8	514.4	514.0	513.6
42.5°	496.9	495.8	494.6	493.7	493.1	492.5	491.9	491.2
45°	465.0	463.3	461.7	460.6	460.2	459.8	459.4	459.0
47.5°	431.4	429.7	428.0	426.7	425.7	424.8	423.8	422.8
50°	408.4	406.6	404.8	403.4	402.4	401.5	400.5	399.6
52.5°	386.0	384.4	382.9	381.6	380.5	379.4	378.3	377.2
55°	351.2	350.0	348.8	347.6	346.7	345.7	344.8	343.8
57.5°	316.7	315.1	313.5	312.4	311.9	311.4	310.9	310.4
60°	293.3	292.0	290.6	289.4	288.5	287.5	286.5	285.6
62.5°	270.8	269.4	267.8	266.8	266.0	265.2	264.5	263.7
65°	235.4	234.2	232.9	232.0	231.5	230.9	230.4	229.8
67.5°	201.6	200.6	199.5	198.8	198.4	198.1	197.8	197.5
70°	179.2	178.4	177.6	176.9	176.3	175.8	175.2	174.7
72.5°	158.2	157.3	156.3	155.6	155.0	154.5	153.9	153.4
75°	125.6	125.1	124.7	124.3	123.7	123.1	122.6	122.1
77.5°	95.6	95.4	95.1	94.8	94.4	94.1	93.7	93.3
80°	76.6	76.4	76.2	76.1	75.7	75.5	75.3	74.9
82.5°	58.5	58.2	58.0	57.8	57.8	57.7	57.6	57.6
85°	34.4	34.2	34.2	33.9	33.7	33.3	33.1	32.9
87.5°	16.3	16.6	16.8	16.8	16.7	16.6	16.6	16.5
90°	17.3	18.3	19.4	20.2	20.9	21.4	22.1	22.7
92.5°	17.3	18.3	19.4	20.1	20.3	20.6	21.0	21.2
95°	17.3	18.3	19.4	19.9	19.9	19.9	19.9	19.9
97.5°	34.7	28.8	22.8	19.9	19.9	19.9	19.9	19.9
100°	102.2	70.8	39.4	23.2	22.4	21.6	20.7	19.9
102.5°	198.4	192.6	186.6	176.5	162.2	147.8	133.5	119.2
105°	282.3	282.3	282.3	282.3	282.0	281.8	281.6	281.4
107.5°	357.5	357.5	357.6	357.3	356.6	356.0	355.4	354.7
110°	406.2	405.5	404.9	404.7	404.9	405.1	405.4	405.5



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CATALOG NUMBER: S125DIP-S610D1205U930-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	454.4	453.6	452.7	452.2	451.9	451.6	451.3	451.0
115°	527.0	526.2	525.4	524.3	523.0	521.8	520.5	519.3
117.5°	597.2	596.1	595.0	594.2	593.6	593.1	592.6	592.0
120°	642.5	642.1	641.7	641.0	639.9	638.9	637.8	636.7
122.5°	685.7	685.3	684.9	684.0	682.8	681.6	680.4	679.2
125°	748.8	747.9	747.1	746.3	745.7	745.1	744.4	743.8
127.5°	806.3	805.9	805.4	804.5	802.9	801.3	799.7	798.2
130°	843.9	843.3	842.7	841.8	840.7	839.8	838.7	837.6
132.5°	879.1	878.9	878.8	878.2	877.2	876.1	875.1	874.0
135°	930.6	930.2	929.8	928.9	927.6	926.3	925.1	923.8
137.5°	978.6	978.7	978.8	978.3	977.1	976.1	974.9	973.9
140°	1008.0	1008.4	1008.9	1008.4	1007.2	1006.0	1004.7	1003.5
142.5°	1037.0	1037.1	1037.1	1036.6	1035.3	1034.0	1032.7	1031.5
145°	1077.7	1078.0	1078.2	1077.7	1076.4	1075.1	1073.8	1072.6
147.5°	1112.7	1113.0	1113.2	1112.6	1111.1	1109.5	1108.1	1106.5
150°	1135.1	1135.5	1135.9	1135.2	1133.6	1131.9	1130.2	1128.5
152.5°	1154.7	1155.2	1155.6	1155.0	1153.5	1152.0	1150.5	1149.0
155°	1181.9	1182.5	1183.2	1182.6	1181.0	1179.2	1177.5	1175.9
157.5°	1204.4	1205.0	1205.7	1205.2	1203.5	1201.8	1200.1	1198.4
160°	1218.3	1219.1	1220.0	1219.6	1217.9	1216.2	1214.6	1212.8
162.5°	1231.1	1232.3	1233.5	1233.1	1231.3	1229.4	1227.6	1225.7
165°	1247.6	1248.9	1250.1	1249.9	1248.2	1246.5	1244.8	1243.2
167.5°	1260.0	1261.5	1263.1	1262.9	1260.9	1259.1	1257.2	1255.3
170°	1266.4	1268.1	1269.8	1269.7	1267.8	1265.9	1264.0	1262.1
172.5°	1271.4	1272.9	1274.4	1274.2	1272.4	1270.5	1268.5	1266.6
175°	1276.8	1278.6	1280.2	1280.1	1278.2	1276.4	1274.4	1272.5
177.5°	1279.0	1280.3	1281.4	1281.3	1280.0	1278.6	1277.2	1275.9
180°	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2

(END OF REPORT)