

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: P333190-840

Luminaire Tested: **S125DIP-S610D1035U840-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333190-840
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-S610D1035U840-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6603.9 lumens
Efficiency: N/A
Efficacy: 148.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

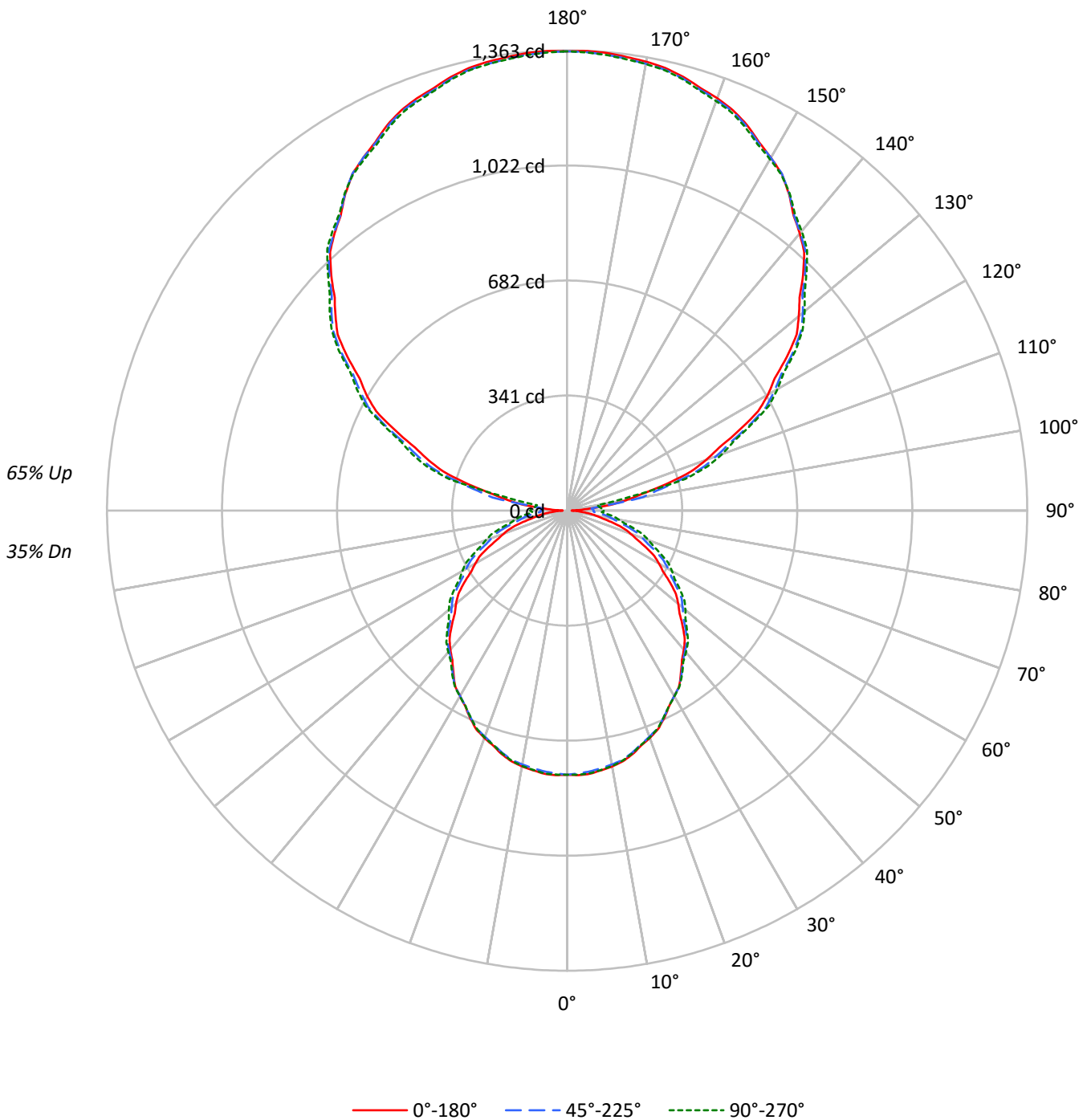
Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	58	58	58	42	42	42	35
1	94	89	85	82	84	81	77	74	65	62	60	50	48	47	36	35	34	28
2	85	78	72	66	77	70	65	61	56	53	49	43	41	39	32	30	28	23
3	78	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19
4	71	60	52	46	64	54	48	42	44	39	35	34	30	28	25	22	21	16
5	65	53	45	39	58	48	41	36	39	34	30	30	27	24	22	20	18	14
6	60	48	40	34	54	43	36	31	35	30	26	27	24	21	20	18	16	12
7	55	43	35	30	49	39	32	27	32	26	23	25	21	18	18	16	14	11
8	51	39	31	26	46	35	29	24	29	24	20	23	19	16	17	14	12	10
9	47	35	28	23	43	32	26	21	26	21	18	21	17	14	15	13	11	9
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5054	5054	5054
5°	5064	4961	4977
10°	5029	4873	4865
15°	4969	4767	4723
20°	4888	4635	4581
25°	4792	4495	4406
30°	4676	4340	4247
35°	4567	4199	4102
40°	4457	4049	3955
45°	4331	3922	3825
50°	4213	3783	3710
55°	4069	3652	3575
60°	3913	3503	3437
65°	3749	3347	3282
70°	3561	3133	3123
75°	3269	2928	2928
80°	2884	2679	2713
85°	2526	2512	2645



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.0	1.1
10°-20°	210.1	3.2
20°-30°	312.4	4.7
30°-40°	370.1	5.6
40°-50°	382.6	5.8
50°-60°	352.5	5.3
60°-70°	284.9	4.3
70°-80°	190.8	2.9
80°-90°	101.8	1.5
90°-100°	105.0	1.6
100°-110°	345.6	5.2
110°-120°	579.9	8.8
120°-130°	724.7	11.0
130°-140°	769.5	11.7
140°-150°	717.3	10.9
150°-160°	579.1	8.8
160°-170°	374.5	5.7
170°-180°	129.2	2.0
0°-30°	596.5	9.0
0°-40°	966.6	14.6
0°-60°	1701.7	25.8
0°-90°	2279.2	34.5
90°-120°	1030.5	15.6
90°-150°	3241.9	49.1
90°-180°	4325.0	65.5
0°-180°	6603.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	783	783	783	783	783	
5°	783	781	776	781	781	74
15°	747	748	743	747	744	210
25°	679	681	677	679	676	312
35°	588	593	591	593	593	368
45°	484	492	496	502	503	373
55°	372	384	397	405	408	333
65°	256	274	292	303	307	254
75°	141	161	186	200	205	150
85°	42	68	94	111	117	45
90°	13	46	79	101	110	11
95°	68	83	72	93	100	81
105°	303	320	343	357	362	322
115°	561	572	593	602	601	556
125°	795	801	816	824	825	709
135°	989	994	997	1005	1003	762
145°	1145	1146	1146	1151	1148	716
155°	1260	1255	1256	1259	1251	580
165°	1330	1324	1325	1330	1323	376
175°	1360	1355	1355	1362	1354	129
180°	1360	1360	1360	1360	1360	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6
2.5°	784.5	784.2	784.0	783.7	783.4	782.7	781.8	780.8	779.9	778.9	779.9
5°	782.6	782.2	781.9	781.6	781.2	780.5	779.3	778.1	776.9	775.7	777.1
7.5°	775.7	775.6	775.5	775.3	775.2	774.5	773.3	772.0	770.8	769.6	770.7
10°	769.6	769.6	769.6	769.6	769.6	768.9	767.5	766.2	764.8	763.5	764.7
12.5°	761.0	761.1	761.2	761.4	761.5	761.0	759.9	758.9	757.8	756.7	757.6
15°	747.3	747.5	747.7	747.8	748.0	747.5	746.3	745.1	744.0	742.8	743.8
17.5°	729.5	729.8	730.2	730.5	730.9	730.4	729.3	728.1	726.9	725.7	726.5
20°	716.6	717.0	717.3	717.7	718.0	717.6	716.4	715.2	714.0	712.8	713.3
22.5°	702.0	702.6	703.2	703.8	704.4	704.0	702.7	701.4	700.0	698.7	699.3
25°	679.0	679.5	680.0	680.5	681.1	680.9	679.8	678.8	677.7	676.7	677.4
27.5°	653.6	654.3	655.1	655.8	656.6	656.4	655.2	654.1	652.9	651.8	652.2
30°	634.5	635.6	636.6	637.6	638.6	638.6	637.6	636.6	635.6	634.5	634.9
32.5°	617.3	618.2	619.1	620.1	620.9	621.0	620.3	619.5	618.7	617.9	618.3
35°	587.7	589.0	590.2	591.3	592.5	592.9	592.4	591.8	591.3	590.8	591.3
37.5°	558.2	559.3	560.3	561.4	562.5	562.9	562.8	562.6	562.4	562.3	562.9
40°	537.9	539.3	540.6	542.0	543.3	543.9	543.7	543.6	543.4	543.2	543.9
42.5°	515.7	517.6	519.3	521.1	522.9	523.9	524.3	524.7	525.0	525.4	526.2
45°	484.1	486.0	487.9	489.8	491.7	493.0	493.9	494.7	495.5	496.4	497.7
47.5°	451.8	453.5	455.2	457.0	458.8	460.3	461.8	463.2	464.7	466.2	468.0
50°	429.7	431.5	433.4	435.4	437.2	439.1	440.9	442.8	444.6	446.6	448.5
52.5°	406.4	408.6	410.9	413.2	415.5	417.8	420.1	422.3	424.6	426.9	428.9
55°	372.1	374.9	377.6	380.3	383.0	385.8	388.5	391.2	393.9	396.7	398.6
57.5°	337.2	340.4	343.7	347.0	350.2	353.5	356.6	359.7	362.8	366.0	368.1
60°	313.9	317.2	320.6	324.1	327.5	330.8	334.3	337.7	341.1	344.5	347.1
62.5°	291.1	294.5	297.9	301.3	304.8	308.3	311.9	315.7	319.3	323.1	325.9
65°	256.3	260.2	264.1	268.0	272.0	276.0	280.0	284.2	288.2	292.4	294.9
67.5°	223.5	227.2	231.0	234.8	238.5	242.6	246.7	250.9	255.0	259.2	262.3
70°	199.4	203.4	207.3	211.3	215.2	219.3	223.8	228.2	232.7	237.1	240.3
72.5°	176.1	180.3	184.3	188.3	192.4	196.8	201.7	206.5	211.4	216.2	219.7
75°	141.2	145.6	150.1	154.5	159.0	163.9	169.4	174.8	180.3	185.7	189.0
77.5°	107.6	112.7	117.9	122.9	128.1	133.2	138.5	143.7	149.0	154.2	157.9
80°	86.7	91.8	96.9	102.1	107.1	112.6	118.5	124.2	130.0	135.8	139.6
82.5°	67.7	73.0	78.5	83.8	89.3	94.9	100.8	106.7	112.7	118.7	122.2
85°	42.2	47.9	53.4	59.1	64.7	70.5	76.4	82.4	88.4	94.4	98.2
87.5°	24.1	30.0	35.7	41.6	47.4	53.3	59.5	65.5	71.7	77.8	82.0
90°	13.3	20.5	27.8	35.0	42.3	49.6	57.0	64.3	71.7	79.1	84.1
92.5°	26.6	30.4	34.1	38.0	41.7	47.3	54.6	61.9	69.3	76.5	81.5
95°	67.5	71.2	74.9	78.8	82.5	83.0	80.3	77.6	74.8	72.1	77.1
97.5°	129.1	134.2	139.5	144.6	149.9	146.8	135.5	124.3	113.0	101.8	99.1
100°	176.8	181.1	185.3	189.6	193.8	199.1	205.5	211.9	218.2	224.6	194.7
102.5°	225.4	229.5	233.8	237.9	242.1	247.1	253.0	258.8	264.7	270.5	267.6
105°	303.4	307.0	310.6	314.3	317.8	322.2	327.3	332.4	337.6	342.6	346.1
107.5°	384.4	386.6	388.9	391.2	393.5	397.4	402.7	408.2	413.5	418.9	422.3
110°	437.0	439.0	441.0	443.0	445.1	448.8	453.9	459.2	464.4	469.7	472.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	487.0	489.1	491.3	493.4	495.6	499.2	504.1	509.0	513.9	518.8	521.1
115°	561.2	563.5	565.8	568.2	570.5	573.9	578.6	583.3	587.9	592.6	594.7
117.5°	638.0	638.8	639.5	640.3	641.1	643.9	648.9	654.0	659.0	664.1	665.8
120°	686.5	686.7	687.0	687.3	687.6	690.0	694.7	699.2	703.9	708.4	710.8
122.5°	728.6	729.7	730.7	731.8	733.0	735.6	739.6	743.8	747.9	751.9	754.3
125°	794.6	796.0	797.4	798.8	800.2	802.6	806.0	809.4	812.8	816.3	818.1
127.5°	857.0	857.9	858.9	859.8	860.7	862.5	865.3	867.9	870.5	873.2	875.3
130°	895.6	896.7	897.6	898.5	899.5	901.2	903.8	906.5	909.1	911.7	913.4
132.5°	933.8	935.0	936.3	937.6	938.9	940.2	941.5	942.8	944.2	945.5	947.8
135°	988.7	989.9	991.0	992.2	993.4	994.3	995.1	995.8	996.5	997.3	999.1
137.5°	1039.2	1040.2	1041.2	1042.2	1043.3	1043.9	1044.0	1044.2	1044.4	1044.6	1046.6
140°	1071.6	1072.1	1072.5	1073.0	1073.4	1073.6	1073.5	1073.5	1073.4	1073.4	1075.7
142.5°	1101.5	1101.6	1101.7	1101.9	1102.0	1102.2	1102.6	1102.9	1103.3	1103.6	1105.3
145°	1145.2	1145.5	1145.8	1146.0	1146.3	1146.5	1146.5	1146.5	1146.5	1146.5	1147.5
147.5°	1182.8	1182.7	1182.6	1182.5	1182.3	1182.5	1182.8	1183.1	1183.3	1183.6	1184.1
150°	1207.0	1206.5	1206.1	1205.6	1205.2	1205.2	1205.6	1206.1	1206.5	1207.0	1207.4
152.5°	1230.3	1229.4	1228.4	1227.4	1226.4	1226.2	1226.6	1227.0	1227.5	1227.9	1228.4
155°	1260.4	1259.1	1257.7	1256.4	1255.1	1254.6	1255.1	1255.5	1255.9	1256.4	1257.1
157.5°	1283.5	1282.7	1282.0	1281.2	1280.4	1280.0	1280.0	1280.1	1280.1	1280.2	1280.9
160°	1299.7	1298.4	1297.1	1295.7	1294.3	1293.7	1294.0	1294.2	1294.4	1294.6	1295.6
162.5°	1312.6	1311.3	1309.9	1308.6	1307.3	1306.7	1306.9	1307.2	1307.4	1307.6	1308.9
165°	1330.0	1328.6	1327.3	1326.0	1324.6	1324.0	1324.2	1324.4	1324.7	1324.9	1326.3
167.5°	1342.9	1341.5	1340.1	1338.7	1337.4	1336.8	1337.0	1337.2	1337.4	1337.7	1339.3
170°	1350.1	1348.6	1347.0	1345.4	1343.8	1343.2	1343.4	1343.6	1343.8	1344.1	1345.8
172.5°	1354.9	1353.4	1351.8	1350.3	1348.7	1348.2	1348.5	1348.9	1349.3	1349.7	1351.3
175°	1360.2	1358.9	1357.6	1356.1	1354.8	1354.3	1354.5	1354.7	1354.9	1355.1	1357.0
177.5°	1362.6	1361.6	1360.5	1359.4	1358.4	1357.9	1358.1	1358.3	1358.5	1358.6	1359.9
180°	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6
2.5°	780.8	781.8	782.7	783.2	783.0	782.9	782.7	782.6
5°	778.4	779.8	781.1	781.7	781.6	781.4	781.2	781.1
7.5°	771.9	773.2	774.4	774.9	774.7	774.6	774.4	774.2
10°	765.9	767.0	768.2	768.7	768.6	768.4	768.2	768.0
12.5°	758.5	759.4	760.4	760.6	760.1	759.7	759.3	758.8
15°	744.8	745.8	746.8	747.0	746.3	745.6	745.0	744.3
17.5°	727.3	728.0	728.8	729.0	728.6	728.2	727.8	727.4
20°	713.9	714.4	714.9	715.1	715.1	715.1	715.1	715.1
22.5°	699.9	700.6	701.3	701.4	700.9	700.5	700.1	699.7
25°	678.1	678.8	679.4	679.4	678.5	677.7	676.8	676.0
27.5°	652.7	653.2	653.7	653.7	653.4	653.1	652.8	652.5
30°	635.2	635.6	635.9	636.0	635.8	635.6	635.5	635.3
32.5°	618.6	618.9	619.4	619.5	619.2	619.0	618.9	618.7
35°	591.8	592.4	592.9	593.1	593.1	593.1	593.1	593.1
37.5°	563.6	564.3	565.0	565.3	565.2	565.1	565.1	565.0
40°	544.6	545.3	545.9	546.4	546.8	547.1	547.5	547.9
42.5°	527.0	527.9	528.7	529.2	529.3	529.3	529.4	529.5
45°	498.8	500.0	501.2	501.9	502.1	502.2	502.4	502.6
47.5°	469.7	471.4	473.1	474.2	474.6	474.9	475.3	475.7
50°	450.3	452.2	454.0	455.2	455.8	456.3	456.8	457.3
52.5°	430.9	432.9	434.9	436.2	436.6	436.9	437.3	437.7
55°	400.4	402.3	404.1	405.5	406.2	406.9	407.5	408.2
57.5°	370.3	372.4	374.6	375.9	376.5	377.0	377.5	378.0
60°	349.6	352.1	354.8	356.3	356.8	357.3	357.8	358.3
62.5°	328.7	331.5	334.4	336.1	336.7	337.4	338.0	338.7
65°	297.4	300.0	302.6	304.2	304.9	305.6	306.2	306.9
67.5°	265.4	268.5	271.6	273.6	274.5	275.4	276.3	277.1
70°	243.6	246.8	250.0	252.2	253.2	254.2	255.3	256.3
72.5°	223.3	226.7	230.2	232.4	233.2	233.9	234.7	235.4
75°	192.5	195.9	199.3	201.5	202.3	203.2	204.0	204.9
77.5°	161.7	165.5	169.3	171.5	172.1	172.8	173.5	174.2
80°	143.3	147.0	150.8	153.0	153.7	154.4	155.1	155.7
82.5°	125.8	129.5	133.1	135.5	136.7	137.9	139.2	140.4
85°	101.9	105.6	109.4	111.9	113.3	114.6	116.0	117.3
87.5°	86.1	90.3	94.4	97.1	98.5	99.8	101.1	102.4
90°	89.2	94.2	99.2	102.7	104.5	106.4	108.3	110.2
92.5°	86.4	91.3	96.2	99.5	100.9	102.4	103.9	105.4
95°	81.9	86.7	91.6	94.6	95.8	97.0	98.3	99.5
97.5°	96.3	93.6	90.8	90.1	91.2	92.4	93.5	94.7
100°	164.9	135.1	105.3	90.5	90.6	90.8	90.9	91.0
102.5°	264.8	261.9	259.0	250.4	236.2	222.1	207.8	193.6
105°	349.5	352.9	356.3	358.5	359.5	360.4	361.4	362.3
107.5°	425.7	429.1	432.5	434.4	434.8	435.3	435.6	436.0
110°	474.7	477.4	479.9	481.9	483.3	484.7	486.1	487.6



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CATALOG NUMBER: S125DIP-S610D1035U840-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	523.3	525.5	527.9	529.4	530.3	531.2	532.0	532.9
115°	596.9	599.1	601.3	602.2	601.9	601.6	601.2	600.9
117.5°	667.5	669.3	671.1	672.2	672.8	673.4	673.9	674.5
120°	713.4	715.8	718.2	719.4	719.3	719.2	719.1	719.0
122.5°	756.6	758.9	761.2	762.2	761.9	761.6	761.4	761.1
125°	819.9	821.7	823.5	824.6	824.8	825.0	825.1	825.3
127.5°	877.3	879.3	881.3	882.0	881.3	880.7	880.0	879.3
130°	915.1	916.9	918.6	919.3	919.0	918.8	918.5	918.2
132.5°	950.1	952.3	954.5	955.4	955.0	954.6	954.2	953.8
135°	1000.9	1002.6	1004.4	1005.0	1004.5	1004.0	1003.5	1003.1
137.5°	1048.7	1050.9	1053.0	1053.8	1053.3	1052.8	1052.4	1051.9
140°	1078.0	1080.4	1082.7	1083.5	1082.9	1082.2	1081.5	1080.9
142.5°	1107.0	1108.7	1110.3	1110.9	1110.2	1109.5	1108.9	1108.2
145°	1148.6	1149.7	1150.7	1150.9	1150.3	1149.6	1149.0	1148.3
147.5°	1184.7	1185.2	1185.7	1185.4	1184.1	1182.8	1181.4	1180.1
150°	1207.9	1208.3	1208.7	1208.2	1206.6	1204.9	1203.3	1201.6
152.5°	1228.8	1229.3	1229.7	1229.1	1227.6	1226.0	1224.5	1222.8
155°	1257.7	1258.4	1259.1	1258.5	1256.7	1254.9	1253.1	1251.3
157.5°	1281.6	1282.3	1283.0	1282.5	1280.7	1278.9	1277.1	1275.4
160°	1296.5	1297.4	1298.3	1297.8	1296.1	1294.2	1292.4	1290.6
162.5°	1310.1	1311.3	1312.6	1312.2	1310.3	1308.3	1306.4	1304.3
165°	1327.6	1329.0	1330.3	1330.1	1328.3	1326.5	1324.7	1322.9
167.5°	1340.9	1342.5	1344.1	1343.9	1341.9	1339.9	1337.9	1335.8
170°	1347.7	1349.5	1351.3	1351.1	1349.1	1347.2	1345.1	1343.1
172.5°	1352.9	1354.5	1356.1	1355.9	1353.9	1351.9	1349.9	1348.0
175°	1358.8	1360.6	1362.3	1362.2	1360.2	1358.2	1356.1	1354.1
177.5°	1361.1	1362.4	1363.6	1363.5	1362.1	1360.7	1359.3	1357.8
180°	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2

(END OF REPORT)