

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: P333385-840

Luminaire Tested: **S125DIW-S610D1050U840-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333385-840
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: S125DIW-S610D1050U840-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1050 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6096.0 lumens
Efficiency: N/A
Efficacy: 134.9 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

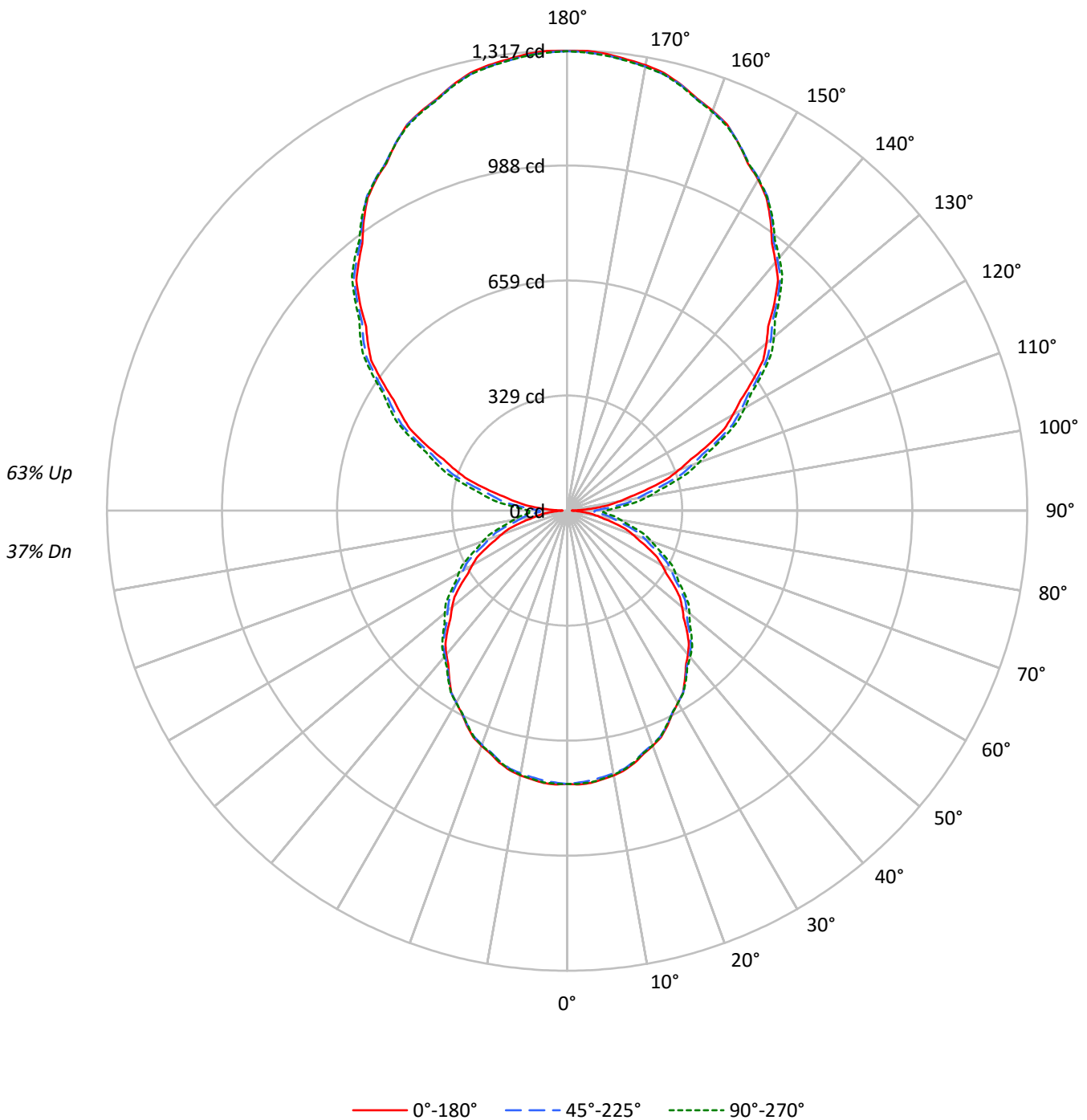
Input Watts (W): 45.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	60	60	60	45	45	45	37
1	94	90	86	82	85	82	78	75	66	64	61	52	50	49	38	37	36	30
2	86	78	72	67	77	71	66	61	57	54	50	45	42	40	33	32	30	25
3	78	68	61	55	70	62	56	51	50	46	42	40	36	34	29	27	26	21
4	71	60	53	46	64	55	48	43	45	40	36	35	32	29	26	24	22	18
5	65	54	46	40	59	49	42	37	40	35	31	31	28	25	24	21	19	15
6	60	48	40	34	54	44	37	32	36	30	26	28	24	21	21	19	17	13
7	55	43	35	30	50	39	32	28	32	27	23	26	22	19	19	17	15	12
8	51	39	31	26	46	36	29	24	29	24	20	23	20	17	18	15	13	11
9	48	36	28	23	43	33	26	22	27	22	18	22	18	15	16	14	12	9
10	44	33	25	21	40	30	23	19	25	20	16	20	16	13	15	13	11	9

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	1.2
10°-20°	210.1	3.4
20°-30°	312.4	5.1
30°-40°	370.1	6.1
40°-50°	382.6	6.3
50°-60°	352.5	5.8
60°-70°	284.9	4.7
70°-80°	190.8	3.1
80°-90°	101.8	1.7
90°-100°	143.6	2.4
100°-110°	301.0	4.9
110°-120°	467.9	7.7
120°-130°	595.3	9.8
130°-140°	656.4	10.8
140°-150°	638.0	10.5
150°-160°	534.7	8.8
160°-170°	355.4	5.8
170°-180°	124.4	2.0
0°-30°	596.5	9.8
0°-40°	966.6	15.9
0°-60°	1701.7	27.9
0°-90°	2279.2	37.4
90°-120°	912.5	15.0
90°-150°	2802.2	46.0
90°-180°	3817.0	62.6
0°-180°	6096.0	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	12
95°	76	99	135	158	166	79
105°	240	258	287	308	317	256
115°	446	456	477	489	493	441
125°	647	653	668	678	682	579
135°	839	844	850	860	860	646
145°	1015	1018	1021	1025	1025	634
155°	1160	1160	1161	1165	1160	534
165°	1262	1260	1261	1264	1259	356
175°	1312	1308	1308	1313	1307	125
180°	1315	1315	1315	1315	1315	



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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	47.5	53.4	59.5	65.6	71.7	77.9	82.0
90°	13.3	20.6	27.9	35.1	42.4	49.7	57.2	64.5	71.9	79.3	84.3
92.5°	35.9	42.1	48.5	54.7	61.1	68.2	76.0	84.0	91.9	99.8	105.0
95°	76.4	81.4	86.2	91.2	96.0	102.5	110.6	118.7	126.7	134.8	140.2
97.5°	119.6	123.7	127.9	132.1	136.2	142.7	151.5	160.2	168.8	177.6	182.7
100°	151.7	155.3	158.9	162.5	166.0	172.0	180.5	188.8	197.2	205.7	211.3
102.5°	186.3	190.5	194.7	198.9	203.2	208.6	215.5	222.3	229.1	235.9	241.7
105°	240.2	244.1	247.9	251.8	255.7	260.8	267.3	273.8	280.2	286.8	291.5
107.5°	299.8	303.4	306.8	310.2	313.7	318.4	324.4	330.3	336.3	342.2	346.3
110°	341.0	344.2	347.4	350.5	353.8	358.1	363.6	369.0	374.5	379.9	383.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	383.5	385.8	388.0	390.2	392.4	396.4	401.8	407.4	412.8	418.4	421.8
115°	445.7	447.8	449.8	451.9	454.0	457.6	462.4	467.3	472.2	477.1	479.9
117.5°	507.9	509.1	510.3	511.5	512.7	515.5	520.2	524.7	529.4	534.0	537.0
120°	547.1	548.9	550.5	552.1	553.8	556.6	560.8	565.0	569.2	573.3	576.1
122.5°	589.2	589.8	590.5	591.1	591.8	594.2	598.6	603.0	607.3	611.8	614.3
125°	646.7	647.9	649.0	650.3	651.5	653.9	657.5	661.2	664.8	668.4	670.8
127.5°	707.3	707.9	708.5	709.1	709.7	711.6	714.7	717.7	720.7	723.9	726.2
130°	744.2	745.2	746.1	747.1	748.0	749.9	752.8	755.6	758.4	761.3	763.5
132.5°	780.4	782.2	784.1	785.9	787.7	789.5	791.2	793.0	794.8	796.5	798.7
135°	838.6	839.7	840.9	842.1	843.3	844.7	846.1	847.5	848.9	850.3	852.5
137.5°	893.2	894.4	895.6	896.8	898.0	899.1	900.2	901.3	902.3	903.4	905.7
140°	927.9	929.0	930.1	931.3	932.4	933.4	934.2	935.1	935.9	936.8	939.1
142.5°	963.0	963.8	964.7	965.5	966.3	967.1	968.1	969.0	969.9	970.8	972.6
145°	1014.8	1015.5	1016.3	1017.0	1017.7	1018.4	1019.2	1019.9	1020.6	1021.2	1022.1
147.5°	1062.0	1062.5	1063.0	1063.4	1063.9	1064.5	1065.0	1065.5	1066.1	1066.6	1067.4
150°	1093.9	1093.7	1093.4	1093.2	1093.0	1093.3	1094.2	1095.1	1096.0	1096.9	1096.9
152.5°	1120.0	1120.3	1120.6	1121.1	1121.4	1121.7	1122.1	1122.4	1122.8	1123.2	1123.7
155°	1160.3	1160.3	1160.3	1160.3	1160.3	1160.4	1160.7	1160.9	1161.1	1161.4	1162.4
157.5°	1196.4	1195.9	1195.4	1194.9	1194.4	1194.3	1194.5	1194.7	1195.0	1195.2	1196.1
160°	1217.7	1217.0	1216.3	1215.7	1215.0	1214.8	1215.0	1215.2	1215.4	1215.7	1216.6
162.5°	1236.5	1236.0	1235.5	1235.0	1234.5	1234.3	1234.4	1234.4	1234.5	1234.5	1235.6
165°	1261.7	1261.2	1260.7	1260.3	1259.8	1259.7	1260.0	1260.2	1260.4	1260.6	1261.5
167.5°	1282.9	1282.0	1281.1	1280.2	1279.3	1278.9	1278.9	1278.9	1278.9	1278.9	1280.2
170°	1294.4	1293.5	1292.6	1291.7	1290.8	1290.3	1290.3	1290.3	1290.3	1290.3	1291.7
172.5°	1302.6	1301.7	1300.8	1299.9	1299.0	1298.5	1298.5	1298.5	1298.5	1298.5	1299.9
175°	1311.8	1310.9	1310.0	1309.1	1308.2	1307.7	1307.7	1307.7	1307.7	1307.7	1309.1
177.5°	1316.6	1315.8	1315.0	1314.3	1313.6	1313.1	1312.9	1312.8	1312.6	1312.4	1313.5
180°	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8



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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	98.6	99.9	101.2	102.5
90°	89.4	94.4	99.6	103.0	104.8	106.7	108.7	110.5
92.5°	110.3	115.6	120.9	124.4	126.1	127.7	129.5	131.2
95°	145.5	150.9	156.1	159.7	161.3	163.0	164.6	166.2
97.5°	187.8	192.9	197.9	201.2	202.7	204.1	205.5	206.9
100°	216.9	222.6	228.1	231.8	233.2	234.7	236.2	237.6
102.5°	247.3	253.0	258.6	262.3	264.0	265.6	267.3	268.9
105°	296.3	301.0	305.9	309.2	311.0	313.0	314.8	316.7
107.5°	350.3	354.4	358.5	361.0	362.0	363.0	364.1	365.1
110°	387.7	391.6	395.6	398.0	399.0	399.9	400.9	401.8



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CATALOG NUMBER: S125DIW-S610D1050U840-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	425.2	428.6	432.0	434.1	434.9	435.8	436.5	437.3
115°	482.8	485.6	488.5	490.3	491.1	491.9	492.6	493.4
117.5°	540.2	543.2	546.3	548.0	548.3	548.5	548.8	549.0
120°	579.1	582.0	584.9	586.3	586.5	586.6	586.7	586.8
122.5°	616.9	619.5	622.1	623.5	623.8	624.1	624.4	624.7
125°	673.0	675.3	677.5	678.9	679.6	680.2	680.9	681.5
127.5°	728.4	730.7	733.1	734.5	735.0	735.5	736.1	736.6
130°	765.6	767.8	769.9	771.2	771.6	772.0	772.4	772.8
132.5°	800.8	802.9	805.2	806.3	806.4	806.4	806.5	806.6
135°	854.7	857.0	859.2	860.3	860.2	860.2	860.1	860.0
137.5°	908.0	910.3	912.6	913.5	913.0	912.6	912.1	911.7
140°	941.5	943.8	946.1	947.1	946.5	946.1	945.6	945.2
142.5°	974.5	976.4	978.3	979.0	978.6	978.1	977.7	977.1
145°	1022.9	1023.8	1024.6	1025.0	1025.0	1025.0	1025.0	1025.0
147.5°	1068.2	1069.1	1070.0	1069.8	1068.4	1067.2	1066.0	1064.7
150°	1096.9	1096.9	1096.9	1096.8	1096.5	1096.2	1095.9	1095.6
152.5°	1124.2	1124.8	1125.3	1125.2	1124.4	1123.6	1122.9	1122.1
155°	1163.3	1164.2	1165.1	1164.9	1163.8	1162.7	1161.5	1160.3
157.5°	1197.0	1197.9	1198.8	1198.5	1197.0	1195.5	1194.0	1192.5
160°	1217.5	1218.4	1219.3	1219.1	1218.0	1216.9	1215.8	1214.6
162.5°	1236.7	1237.7	1238.8	1238.7	1237.4	1236.1	1234.8	1233.4
165°	1262.4	1263.3	1264.3	1264.0	1262.7	1261.3	1260.0	1258.6
167.5°	1281.6	1282.9	1284.3	1284.3	1282.9	1281.5	1280.1	1278.7
170°	1293.0	1294.4	1295.8	1295.7	1294.0	1292.5	1290.9	1289.3
172.5°	1301.2	1302.6	1303.9	1303.9	1302.5	1301.1	1299.7	1298.3
175°	1310.4	1311.8	1313.2	1313.0	1311.5	1309.9	1308.3	1306.7
177.5°	1314.6	1315.8	1316.8	1316.7	1315.5	1314.1	1312.9	1311.6
180°	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8	1314.8

(END OF REPORT)