

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: P333463-930

Luminaire Tested: **S125DIW-S1270D470U930-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333463-930
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-S1270D470U930-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5341.9 lumens
Efficiency: N/A
Efficacy: 101.9 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-Direct

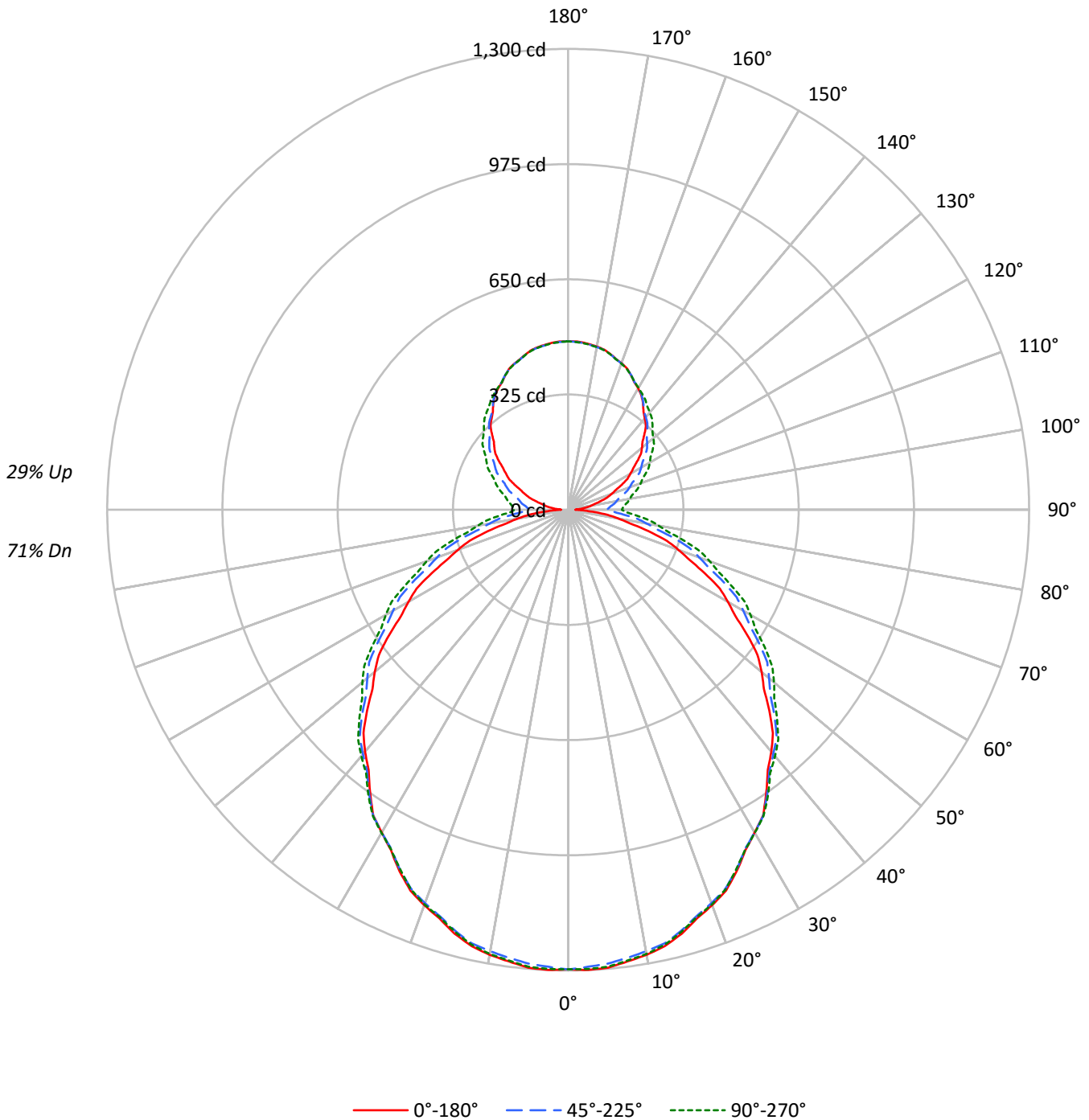
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75	71
1	101	96	92	88	96	91	87	84	82	79	76	73	71	68	65	63	61	57
2	92	84	77	71	87	79	73	68	71	66	62	63	60	56	56	53	51	47
3	84	73	65	59	79	69	62	56	62	57	52	56	51	47	50	46	43	39
4	76	65	56	50	72	61	54	48	55	49	44	50	44	40	44	40	37	34
5	70	58	49	42	66	55	47	41	49	43	38	44	39	35	40	35	32	29
6	65	52	43	37	61	49	41	36	45	38	33	40	35	30	36	31	28	25
7	60	47	38	32	56	45	37	31	40	34	29	36	31	27	33	28	25	22
8	56	43	34	29	52	41	33	28	37	30	26	33	28	24	30	26	22	20
9	52	39	31	26	49	37	30	25	34	28	23	31	25	22	28	23	20	18
10	48	36	28	23	46	34	27	22	31	25	21	28	23	20	26	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8374	8374	8374
5°	8391	8220	8245
10°	8331	8072	8060
15°	8232	7896	7825
20°	8098	7680	7590
25°	7939	7447	7300
30°	7746	7191	7036
35°	7566	6956	6795
40°	7383	6709	6552
45°	7176	6497	6337
50°	6978	6267	6147
55°	6741	6051	5923
60°	6482	5802	5695
65°	6210	5544	5437
70°	5903	5190	5173
75°	5415	4849	4849
80°	4780	4438	4496
85°	4189	4162	4384



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.6	2.3
10°-20°	348.0	6.5
20°-30°	517.6	9.7
30°-40°	613.1	11.5
40°-50°	633.9	11.9
50°-60°	583.9	10.9
60°-70°	472.0	8.8
70°-80°	316.1	5.9
80°-90°	165.0	3.1
90°-100°	123.8	2.3
100°-110°	161.7	3.0
110°-120°	204.5	3.8
120°-130°	235.2	4.4
130°-140°	245.9	4.6
140°-150°	232.2	4.3
150°-160°	193.1	3.6
160°-170°	128.4	2.4
170°-180°	44.9	0.8
0°-30°	988.2	18.5
0°-40°	1601.3	30.0
0°-60°	2819.2	52.8
0°-90°	3772.3	70.6
90°-120°	490.1	9.2
90°-150°	1203.3	22.5
90°-180°	1570.0	29.4
0°-180°	5341.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1297	1297	1297	1297	1297	
5°	1297	1294	1285	1295	1294	123
15°	1238	1239	1230	1237	1233	349
25°	1125	1128	1121	1126	1120	518
35°	974	982	979	982	983	609
45°	802	816	822	831	833	619
55°	616	637	657	671	676	551
65°	424	454	484	503	508	421
75°	234	267	308	332	339	248
85°	70	112	156	183	194	74
90°	21	64	110	140	151	15
95°	40	75	121	151	161	39
105°	96	119	158	185	196	102
115°	167	179	211	233	241	165
125°	238	240	264	283	290	212
135°	305	306	315	331	336	235
145°	368	368	369	375	379	229
155°	419	419	419	421	419	193
165°	456	455	455	457	454	128
175°	474	472	472	474	472	45
180°	475	475	475	475	475	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6
2.5°	1299.6	1299.2	1298.7	1298.3	1297.8	1296.8	1295.2	1293.6	1292.1	1290.5	1292.1
5°	1296.6	1296.0	1295.4	1294.9	1294.3	1293.1	1291.0	1289.1	1287.1	1285.2	1287.4
7.5°	1285.2	1284.9	1284.7	1284.4	1284.3	1283.1	1281.1	1279.0	1277.0	1275.0	1276.9
10°	1275.0	1275.0	1275.0	1275.0	1275.0	1273.8	1271.5	1269.3	1267.1	1264.8	1266.7
12.5°	1260.7	1260.9	1261.2	1261.4	1261.6	1260.9	1259.1	1257.2	1255.4	1253.6	1255.2
15°	1238.1	1238.4	1238.7	1238.9	1239.3	1238.4	1236.4	1234.4	1232.5	1230.4	1232.2
17.5°	1208.6	1209.2	1209.7	1210.3	1210.9	1210.1	1208.2	1206.2	1204.2	1202.2	1203.5
20°	1187.2	1187.8	1188.4	1189.0	1189.5	1188.8	1186.8	1184.9	1182.8	1180.9	1181.8
22.5°	1162.9	1163.8	1164.9	1165.9	1166.9	1166.3	1164.1	1161.9	1159.7	1157.5	1158.5
25°	1124.9	1125.8	1126.7	1127.5	1128.4	1128.0	1126.3	1124.5	1122.8	1121.1	1122.3
27.5°	1082.8	1084.0	1085.2	1086.5	1087.8	1087.4	1085.5	1083.5	1081.7	1079.7	1080.5
30°	1051.2	1053.0	1054.6	1056.3	1058.0	1058.0	1056.3	1054.6	1053.0	1051.2	1051.8
32.5°	1022.8	1024.3	1025.7	1027.2	1028.7	1028.7	1027.5	1026.3	1025.0	1023.8	1024.3
35°	973.7	975.7	977.6	979.7	981.6	982.2	981.3	980.5	979.7	978.8	979.7
37.5°	924.6	926.4	928.2	930.1	931.9	932.6	932.4	932.1	931.8	931.5	932.6
40°	891.0	893.3	895.6	897.9	900.1	901.1	900.8	900.5	900.3	900.0	901.1
42.5°	854.4	857.4	860.3	863.2	866.3	868.0	868.6	869.3	869.8	870.5	871.8
45°	802.1	805.2	808.3	811.4	814.5	816.8	818.2	819.6	821.0	822.4	824.4
47.5°	748.4	751.3	754.2	757.1	759.9	762.6	765.1	767.5	769.9	772.3	775.3
50°	711.8	714.9	718.0	721.1	724.3	727.4	730.5	733.6	736.7	739.8	742.9
52.5°	673.2	677.0	680.8	684.5	688.4	692.1	695.9	699.7	703.4	707.3	710.6
55°	616.5	621.0	625.6	630.1	634.5	639.1	643.6	648.2	652.6	657.2	660.3
57.5°	558.6	563.9	569.4	574.8	580.2	585.5	590.8	595.9	601.1	606.3	609.9
60°	519.9	525.5	531.2	536.9	542.5	548.1	553.8	559.5	565.1	570.7	574.9
62.5°	482.2	488.0	493.6	499.2	504.8	510.8	516.8	522.9	529.0	535.2	539.8
65°	424.5	431.0	437.6	444.1	450.5	457.2	464.0	470.8	477.5	484.3	488.5
67.5°	370.1	376.4	382.7	389.0	395.3	401.9	408.7	415.6	422.5	429.4	434.6
70°	330.5	337.0	343.5	350.0	356.4	363.4	370.7	378.1	385.5	392.8	398.2
72.5°	291.9	298.6	305.3	312.0	318.8	326.1	334.1	342.2	350.2	358.2	364.0
75°	233.9	241.2	248.6	255.9	263.3	271.5	280.5	289.5	298.6	307.6	313.2
77.5°	178.2	186.7	195.2	203.7	212.1	220.7	229.4	238.1	246.8	255.5	261.7
80°	143.7	152.1	160.6	169.1	177.6	186.5	196.2	205.8	215.4	225.0	231.2
82.5°	112.1	121.1	130.0	138.9	147.8	157.2	167.1	176.8	186.7	196.5	202.5
85°	70.0	79.2	88.5	97.9	107.2	116.8	126.7	136.6	146.4	156.4	162.6
87.5°	39.7	48.9	58.0	67.3	76.4	85.9	95.6	105.3	115.0	124.7	131.3
90°	20.7	30.4	40.1	49.8	59.5	69.5	79.6	89.8	100.0	110.1	117.1
92.5°	27.2	36.0	44.9	53.7	62.5	72.2	82.8	93.3	103.8	114.4	121.2
95°	40.5	48.0	55.5	63.1	70.6	79.6	90.0	100.4	110.8	121.2	128.0
97.5°	54.9	61.6	68.2	74.9	81.6	90.2	100.5	111.0	121.3	131.8	138.2
100°	65.7	71.7	77.6	83.5	89.4	97.4	107.5	117.6	127.8	137.9	144.6
102.5°	77.4	83.2	89.0	94.8	100.6	108.2	117.6	126.9	136.3	145.6	152.1
105°	95.7	100.6	105.6	110.5	115.4	122.4	131.3	140.3	149.3	158.2	164.4
107.5°	116.0	120.3	124.6	128.8	133.1	139.4	148.0	156.5	164.9	173.5	179.4
110°	130.1	133.9	137.7	141.5	145.3	151.3	159.5	167.6	175.8	183.9	189.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	145.4	148.4	151.3	154.3	157.2	162.7	170.6	178.6	186.6	194.6	199.9
115°	166.9	169.2	171.5	173.8	176.1	181.0	188.5	196.1	203.6	211.1	216.1
117.5°	188.4	189.8	191.3	192.7	194.2	198.4	205.5	212.6	219.7	226.8	231.7
120°	202.6	203.8	205.1	206.4	207.6	211.5	218.1	224.7	231.3	237.8	242.6
122.5°	217.0	217.4	218.0	218.6	219.1	222.6	229.1	235.6	242.1	248.6	253.1
125°	237.5	237.7	237.9	238.1	238.4	241.3	247.0	252.8	258.5	264.2	268.6
127.5°	258.4	258.4	258.4	258.4	258.4	260.7	265.5	270.2	275.0	279.7	283.8
130°	271.7	271.8	272.0	272.1	272.2	274.3	278.5	282.6	286.7	290.8	294.7
132.5°	284.0	284.6	285.3	285.8	286.5	288.3	291.3	294.3	297.3	300.4	304.3
135°	304.8	305.0	305.2	305.4	305.7	306.8	308.8	310.9	313.0	315.0	318.7
137.5°	324.3	324.7	324.9	325.1	325.4	326.0	327.2	328.3	329.5	330.6	334.0
140°	336.1	336.5	336.9	337.3	337.7	338.2	338.7	339.2	339.7	340.3	343.6
142.5°	348.8	348.9	349.0	349.1	349.3	349.5	349.8	350.3	350.6	351.0	353.8
145°	367.5	367.5	367.5	367.6	367.6	367.8	368.0	368.3	368.5	368.8	370.2
147.5°	383.5	383.7	383.8	384.0	384.3	384.4	384.6	384.8	385.0	385.2	385.9
150°	395.0	394.9	394.8	394.8	394.7	394.8	395.2	395.5	395.8	396.2	396.2
152.5°	404.5	404.6	404.7	404.8	405.0	405.0	405.2	405.4	405.4	405.6	405.8
155°	419.1	419.1	419.1	419.1	419.1	419.1	419.1	419.2	419.3	419.4	419.7
157.5°	432.0	431.9	431.7	431.5	431.3	431.3	431.4	431.5	431.5	431.6	431.9
160°	439.8	439.5	439.2	439.0	438.7	438.6	438.7	438.8	438.9	439.0	439.4
162.5°	446.5	446.4	446.2	446.0	445.8	445.7	445.7	445.7	445.8	445.8	446.2
165°	455.6	455.4	455.3	455.1	454.9	454.9	455.0	455.1	455.2	455.3	455.6
167.5°	463.3	463.0	462.7	462.4	462.0	461.9	461.9	461.9	461.9	461.9	462.4
170°	467.4	467.1	466.8	466.4	466.1	465.9	465.9	465.9	465.9	465.9	466.4
172.5°	470.4	470.1	469.8	469.4	469.1	469.0	469.0	469.0	469.0	469.0	469.4
175°	473.8	473.4	473.0	472.7	472.4	472.2	472.2	472.2	472.2	472.2	472.7
177.5°	475.4	475.2	474.9	474.7	474.3	474.2	474.2	474.1	474.0	473.9	474.3
180°	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6
2.5°	1293.6	1295.2	1296.8	1297.5	1297.2	1297.1	1296.8	1296.6
5°	1289.6	1291.9	1294.2	1295.2	1294.9	1294.6	1294.3	1294.0
7.5°	1278.9	1280.9	1282.9	1283.7	1283.4	1283.1	1282.9	1282.5
10°	1268.8	1270.7	1272.7	1273.6	1273.3	1273.0	1272.7	1272.4
12.5°	1256.6	1258.2	1259.7	1260.1	1259.4	1258.7	1257.9	1257.2
15°	1233.9	1235.6	1237.2	1237.5	1236.4	1235.3	1234.1	1233.0
17.5°	1204.8	1206.2	1207.5	1207.8	1207.1	1206.4	1205.7	1205.0
20°	1182.6	1183.4	1184.3	1184.7	1184.7	1184.7	1184.7	1184.7
22.5°	1159.7	1160.7	1161.8	1162.0	1161.3	1160.7	1159.9	1159.3
25°	1123.4	1124.5	1125.7	1125.5	1124.1	1122.7	1121.3	1119.9
27.5°	1081.3	1082.1	1082.9	1083.0	1082.5	1082.0	1081.5	1081.0
30°	1052.4	1053.0	1053.5	1053.6	1053.4	1053.0	1052.8	1052.5
32.5°	1024.9	1025.5	1026.1	1026.2	1025.9	1025.6	1025.3	1025.1
35°	980.5	981.3	982.2	982.6	982.6	982.6	982.6	982.6
37.5°	933.8	934.9	936.0	936.5	936.4	936.3	936.2	936.0
40°	902.2	903.4	904.5	905.3	905.9	906.4	907.0	907.6
42.5°	873.2	874.6	875.9	876.6	876.8	876.9	877.0	877.1
45°	826.4	828.3	830.3	831.4	831.8	832.0	832.3	832.6
47.5°	778.1	781.0	783.9	785.6	786.3	786.8	787.5	788.1
50°	746.0	749.1	752.3	754.2	755.0	755.9	756.8	757.6
52.5°	714.0	717.3	720.6	722.6	723.2	723.8	724.5	725.0
55°	663.4	666.5	669.6	671.7	672.9	674.0	675.1	676.3
57.5°	613.4	617.0	620.6	622.8	623.6	624.4	625.3	626.1
60°	579.2	583.4	587.7	590.2	591.1	591.9	592.8	593.6
62.5°	544.5	549.2	553.9	556.8	557.8	559.0	560.0	561.1
65°	492.8	497.0	501.2	503.9	505.1	506.2	507.4	508.4
67.5°	439.7	444.8	450.0	453.2	454.7	456.2	457.7	459.2
70°	403.5	408.9	414.3	417.8	419.5	421.2	422.9	424.5
72.5°	369.8	375.7	381.5	385.0	386.3	387.5	388.7	390.0
75°	318.9	324.6	330.2	333.8	335.2	336.6	338.0	339.4
77.5°	267.9	274.1	280.4	284.1	285.2	286.3	287.4	288.5
80°	237.4	243.6	249.9	253.6	254.6	255.8	256.9	258.0
82.5°	208.5	214.5	220.5	224.5	226.5	228.5	230.6	232.6
85°	168.8	175.0	181.2	185.5	187.7	190.0	192.2	194.4
87.5°	137.9	144.5	151.1	155.4	157.4	159.4	161.4	163.5
90°	123.9	130.9	137.8	142.4	144.6	146.8	149.0	151.2
92.5°	128.0	134.8	141.6	146.1	148.2	150.4	152.5	154.7
95°	134.9	141.6	148.4	152.9	155.0	157.2	159.3	161.4
97.5°	144.7	151.2	157.6	161.9	163.9	165.9	168.0	170.0
100°	151.2	157.9	164.6	168.8	170.7	172.6	174.4	176.3
102.5°	158.7	165.2	171.7	175.9	177.8	179.8	181.6	183.6
105°	170.5	176.7	182.8	186.9	189.2	191.4	193.6	195.9
107.5°	185.2	191.0	196.8	200.6	202.4	204.1	205.9	207.6
110°	195.1	200.7	206.4	210.1	212.0	213.9	215.8	217.7



TEST NUMBER: P333463-930

CATALOG NUMBER: S125DIW-S1270D470U930-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	205.1	210.3	215.6	219.2	221.0	222.8	224.7	226.5
115°	221.0	226.1	231.1	234.4	235.9	237.6	239.2	240.8
117.5°	236.6	241.4	246.3	249.6	251.1	252.7	254.3	255.9
120°	247.4	252.3	257.1	260.2	261.5	262.9	264.2	265.6
122.5°	257.6	262.1	266.6	269.5	271.0	272.4	273.9	275.3
125°	273.0	277.3	281.7	284.5	285.8	287.1	288.5	289.8
127.5°	287.9	292.0	296.1	298.9	300.4	301.8	303.3	304.8
130°	298.6	302.5	306.3	308.9	310.1	311.4	312.6	313.9
132.5°	308.1	312.0	315.8	318.3	319.2	320.2	321.1	322.1
135°	322.4	326.0	329.7	332.1	333.2	334.3	335.3	336.4
137.5°	337.5	341.0	344.4	346.4	347.2	347.9	348.6	349.3
140°	346.8	350.1	353.4	355.4	356.1	356.8	357.5	358.2
142.5°	356.4	359.2	362.0	363.7	364.4	365.2	365.9	366.6
145°	371.6	373.0	374.5	375.6	376.5	377.3	378.2	379.1
147.5°	386.5	387.1	387.8	388.1	388.0	388.0	387.9	387.9
150°	396.2	396.2	396.2	396.2	396.3	396.4	396.6	396.6
152.5°	406.0	406.2	406.3	406.3	406.1	405.9	405.6	405.4
155°	420.0	420.4	420.7	420.7	420.3	419.9	419.5	419.1
157.5°	432.3	432.6	432.9	432.8	432.3	431.7	431.2	430.6
160°	439.7	440.0	440.3	440.3	439.9	439.4	439.0	438.6
162.5°	446.6	446.9	447.4	447.4	446.9	446.4	445.9	445.4
165°	455.9	456.2	456.6	456.5	456.0	455.5	455.0	454.5
167.5°	462.8	463.3	463.8	463.8	463.3	462.8	462.3	461.8
170°	466.9	467.4	468.0	467.9	467.3	466.8	466.2	465.6
172.5°	469.9	470.4	470.9	470.9	470.3	469.9	469.4	468.9
175°	473.2	473.8	474.3	474.2	473.6	473.0	472.5	471.9
177.5°	474.7	475.2	475.6	475.5	475.1	474.6	474.1	473.7
180°	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8

(END OF REPORT)