

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: P333463-940

Luminaire Tested: **S125DIW-S1270D470U940-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333463-940
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-S1270D470U940-4F0-1E-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: 5842.6 lumens
Efficiency: N/A
Efficacy: 111.5 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

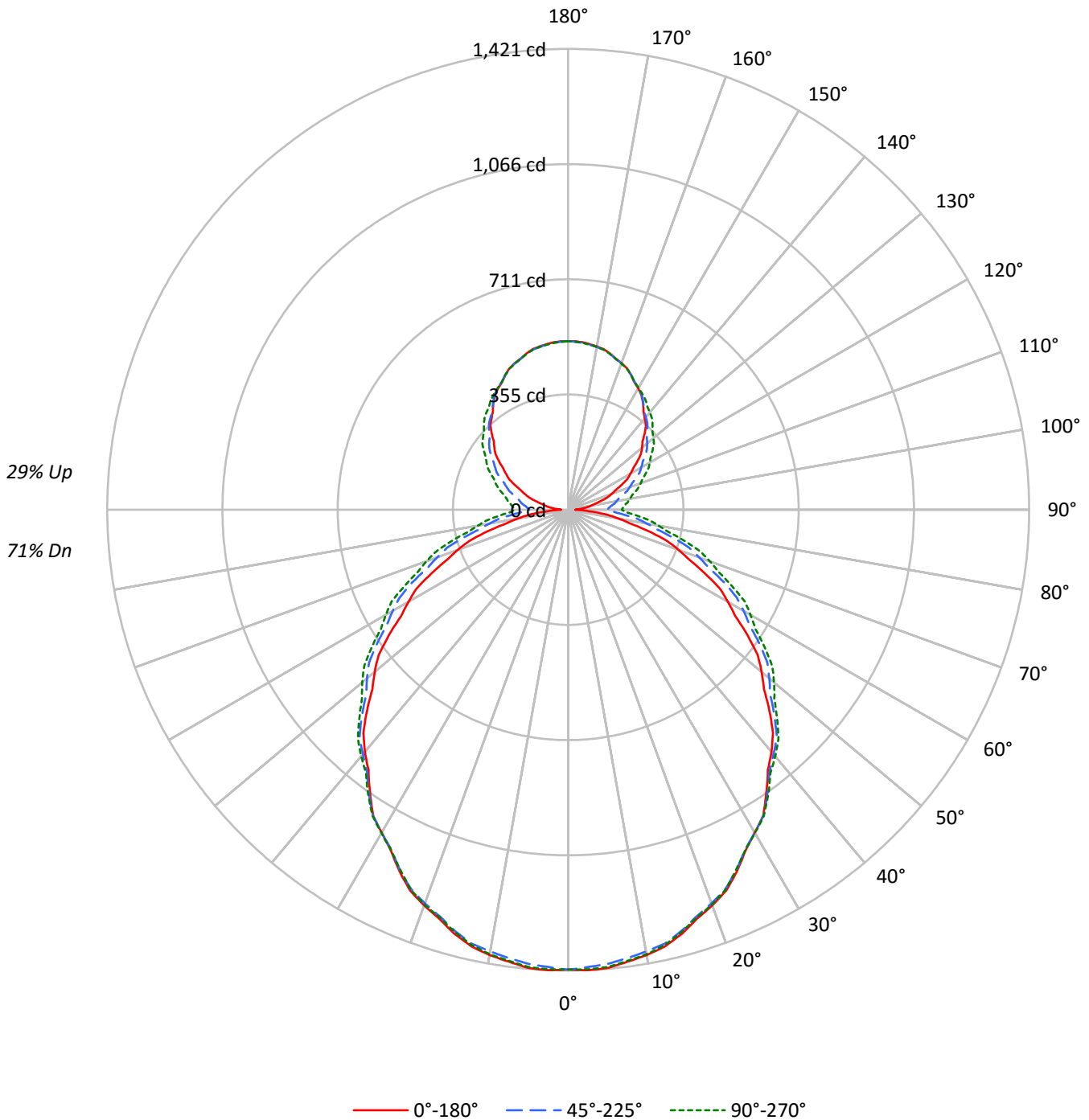
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	9159	9159	9159
5°	9177	8990	9018
10°	9112	8829	8816
15°	9004	8637	8558
20°	8857	8400	8301
25°	8683	8145	7984
30°	8473	7865	7696
35°	8276	7608	7432
40°	8075	7338	7167
45°	7849	7106	6931
50°	7633	6854	6723
55°	7373	6618	6478
60°	7089	6346	6229
65°	6792	6064	5947
70°	6457	5677	5658
75°	5923	5304	5304
80°	5225	4854	4918
85°	4578	4550	4797



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.1	2.3
10°-20°	380.7	6.5
20°-30°	566.1	9.7
30°-40°	670.6	11.5
40°-50°	693.3	11.9
50°-60°	638.7	10.9
60°-70°	516.3	8.8
70°-80°	345.7	5.9
80°-90°	180.4	3.1
90°-100°	135.4	2.3
100°-110°	176.9	3.0
110°-120°	223.7	3.8
120°-130°	257.2	4.4
130°-140°	268.9	4.6
140°-150°	254.0	4.3
150°-160°	211.2	3.6
160°-170°	140.4	2.4
170°-180°	49.1	0.8
0°-30°	1080.9	18.5
0°-40°	1751.4	30.0
0°-60°	3083.4	52.8
0°-90°	4125.8	70.6
90°-120°	536.0	9.2
90°-150°	1316.0	22.5
90°-180°	1717.0	29.4
0°-180°	5842.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1418	1418	1418	1418	1418	
5°	1418	1415	1406	1416	1415	134
15°	1354	1355	1346	1353	1348	381
25°	1230	1234	1226	1231	1225	566
35°	1065	1074	1070	1074	1075	666
45°	877	892	900	909	911	677
55°	674	696	719	734	740	603
65°	464	496	530	550	556	461
75°	256	292	336	363	371	271
85°	76	123	171	201	213	81
90°	23	71	120	153	165	16
95°	44	82	133	165	177	42
105°	105	130	173	202	214	112
115°	182	195	231	255	263	181
125°	260	262	289	310	317	232
135°	333	335	345	362	368	257
145°	402	402	403	410	415	251
155°	458	458	459	460	458	211
165°	498	498	498	499	497	141
175°	518	517	516	519	516	49
180°	519	519	519	519	519	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1
2.5°	1421.4	1420.9	1420.4	1420.0	1419.4	1418.4	1416.6	1414.9	1413.2	1411.4	1413.2
5°	1418.1	1417.5	1416.8	1416.2	1415.6	1414.3	1412.0	1409.9	1407.7	1405.6	1408.0
7.5°	1405.6	1405.3	1405.1	1404.8	1404.6	1403.4	1401.1	1398.9	1396.7	1394.5	1396.6
10°	1394.5	1394.5	1394.5	1394.5	1394.5	1393.2	1390.7	1388.3	1385.8	1383.3	1385.5
12.5°	1378.9	1379.1	1379.4	1379.7	1379.8	1379.0	1377.1	1375.0	1373.1	1371.1	1372.8
15°	1354.2	1354.4	1354.8	1355.0	1355.4	1354.4	1352.3	1350.1	1348.0	1345.8	1347.6
17.5°	1321.9	1322.5	1323.1	1323.7	1324.4	1323.6	1321.4	1319.3	1317.1	1314.9	1316.3
20°	1298.5	1299.1	1299.8	1300.4	1301.0	1300.2	1298.1	1295.9	1293.7	1291.6	1292.5
22.5°	1271.8	1272.9	1274.1	1275.1	1276.3	1275.6	1273.2	1270.8	1268.4	1266.0	1267.1
25°	1230.4	1231.4	1232.3	1233.1	1234.1	1233.7	1231.8	1229.9	1228.1	1226.2	1227.4
27.5°	1184.3	1185.6	1187.0	1188.3	1189.7	1189.3	1187.2	1185.1	1183.0	1180.9	1181.8
30°	1149.8	1151.6	1153.4	1155.3	1157.2	1157.2	1155.3	1153.4	1151.6	1149.8	1150.4
32.5°	1118.7	1120.3	1121.9	1123.5	1125.1	1125.2	1123.8	1122.5	1121.1	1119.7	1120.3
35°	1065.0	1067.1	1069.3	1071.5	1073.6	1074.2	1073.3	1072.4	1071.5	1070.5	1071.5
37.5°	1011.3	1013.3	1015.2	1017.3	1019.2	1020.0	1019.8	1019.4	1019.1	1018.8	1020.0
40°	974.6	977.0	979.5	982.0	984.4	985.5	985.3	984.9	984.6	984.4	985.5
42.5°	934.5	937.7	940.9	944.1	947.4	949.3	950.0	950.7	951.4	952.1	953.5
45°	877.3	880.7	884.0	887.4	890.8	893.3	894.9	896.4	898.0	899.5	901.7
47.5°	818.6	821.7	824.9	828.0	831.2	834.1	836.8	839.5	842.0	844.7	847.9
50°	778.6	781.9	785.3	788.7	792.2	795.6	799.0	802.4	805.7	809.1	812.5
52.5°	736.3	740.5	744.6	748.7	752.9	757.0	761.2	765.3	769.4	773.6	777.2
55°	674.3	679.2	684.2	689.1	694.0	699.0	703.9	708.9	713.8	718.8	722.2
57.5°	610.9	616.8	622.8	628.7	634.6	640.4	646.1	651.8	657.5	663.2	667.1
60°	568.6	574.8	580.9	587.2	593.3	599.5	605.7	611.9	618.0	624.2	628.8
62.5°	527.4	533.7	539.8	546.0	552.1	558.7	565.3	571.9	578.6	585.3	590.4
65°	464.3	471.4	478.6	485.7	492.8	500.1	507.5	514.9	522.3	529.7	534.3
67.5°	404.8	411.7	418.6	425.4	432.3	439.5	447.0	454.6	462.1	469.7	475.3
70°	361.5	368.5	375.7	382.8	389.9	397.4	405.5	413.6	421.6	429.6	435.5
72.5°	319.2	326.5	333.9	341.3	348.7	356.7	365.4	374.3	383.0	391.8	398.1
75°	255.8	263.9	271.9	279.9	287.9	296.9	306.7	316.6	326.5	336.4	342.6
77.5°	194.9	204.2	213.5	222.7	232.0	241.4	250.9	260.4	269.9	279.5	286.2
80°	157.1	166.4	175.7	184.9	194.2	204.0	214.5	225.1	235.6	246.1	252.9
82.5°	122.6	132.4	142.1	151.9	161.7	171.9	182.7	193.4	204.2	214.9	221.5
85°	76.5	86.7	96.8	107.1	117.3	127.8	138.6	149.4	160.2	171.0	177.8
87.5°	43.4	53.5	63.5	73.6	83.6	93.9	104.5	115.2	125.8	136.4	143.7
90°	22.6	33.3	43.9	54.5	65.1	76.0	87.0	98.2	109.3	120.5	128.0
92.5°	29.8	39.4	49.1	58.8	68.4	79.0	90.5	102.0	113.5	125.1	132.5
95°	44.3	52.5	60.7	69.0	77.2	87.0	98.4	109.8	121.2	132.6	140.0
97.5°	60.0	67.3	74.6	81.9	89.3	98.6	109.9	121.4	132.7	144.1	151.1
100°	71.9	78.4	84.9	91.3	97.8	106.6	117.6	128.7	139.7	150.8	158.1
102.5°	84.6	91.0	97.4	103.7	110.0	118.3	128.6	138.8	149.1	159.3	166.4
105°	104.7	110.0	115.5	120.8	126.3	133.8	143.7	153.5	163.3	173.1	179.8
107.5°	126.9	131.5	136.3	140.9	145.5	152.5	161.8	171.1	180.4	189.8	196.2
110°	142.3	146.4	150.6	154.8	158.9	165.5	174.4	183.3	192.3	201.2	207.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	159.1	162.3	165.5	168.7	171.9	177.9	186.6	195.4	204.1	212.9	218.6
115°	182.5	185.0	187.6	190.1	192.6	198.0	206.2	214.5	222.7	230.9	236.3
117.5°	206.1	207.6	209.2	210.8	212.4	217.0	224.8	232.6	240.3	248.1	253.4
120°	221.6	222.9	224.4	225.7	227.0	231.3	238.5	245.8	253.0	260.1	265.4
122.5°	237.3	237.8	238.4	239.1	239.6	243.4	250.6	257.7	264.7	271.9	276.8
125°	259.8	260.0	260.2	260.5	260.7	263.9	270.2	276.5	282.8	289.0	293.8
127.5°	282.7	282.7	282.7	282.6	282.6	285.2	290.3	295.5	300.8	305.9	310.4
130°	297.2	297.3	297.5	297.6	297.7	300.1	304.6	309.1	313.6	318.1	322.4
132.5°	310.6	311.3	312.0	312.6	313.3	315.3	318.6	321.9	325.2	328.5	332.8
135°	333.4	333.6	333.9	334.0	334.3	335.6	337.8	340.0	342.3	344.6	348.6
137.5°	354.7	355.1	355.3	355.6	355.9	356.6	357.8	359.1	360.3	361.6	365.3
140°	367.6	368.0	368.5	368.9	369.3	369.9	370.4	371.0	371.6	372.2	375.8
142.5°	381.5	381.6	381.7	381.8	382.0	382.3	382.6	383.1	383.4	383.9	386.9
145°	401.9	402.0	402.0	402.1	402.1	402.3	402.5	402.8	403.1	403.3	404.9
147.5°	419.5	419.6	419.8	420.0	420.3	420.4	420.6	420.9	421.1	421.3	422.0
150°	432.0	431.9	431.9	431.8	431.7	431.9	432.2	432.6	432.9	433.3	433.3
152.5°	442.4	442.6	442.6	442.7	442.9	443.0	443.2	443.4	443.4	443.6	443.8
155°	458.3	458.3	458.3	458.3	458.3	458.3	458.4	458.5	458.6	458.7	459.1
157.5°	472.5	472.3	472.2	472.0	471.7	471.7	471.8	471.9	472.0	472.1	472.4
160°	481.0	480.7	480.4	480.1	479.8	479.7	479.8	479.9	480.0	480.1	480.5
162.5°	488.4	488.2	488.0	487.8	487.6	487.5	487.5	487.5	487.6	487.6	488.0
165°	498.3	498.1	497.9	497.8	497.6	497.6	497.7	497.8	497.8	497.9	498.3
167.5°	506.8	506.4	506.0	505.7	505.3	505.2	505.2	505.2	505.2	505.2	505.7
170°	511.2	510.9	510.5	510.1	509.8	509.6	509.6	509.6	509.6	509.6	510.1
172.5°	514.5	514.2	513.8	513.4	513.1	512.9	512.9	512.9	512.9	512.9	513.4
175°	518.2	517.7	517.4	517.0	516.7	516.5	516.5	516.5	516.5	516.5	517.0
177.5°	520.0	519.7	519.4	519.2	518.8	518.6	518.6	518.5	518.4	518.4	518.8
180°	519.3	519.3	519.3	519.3	519.3	519.3	519.3	519.3	519.3	519.3	519.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1
2.5°	1414.9	1416.6	1418.4	1419.1	1418.8	1418.6	1418.4	1418.1
5°	1410.5	1413.0	1415.5	1416.6	1416.2	1415.9	1415.6	1415.3
7.5°	1398.7	1401.0	1403.1	1404.0	1403.7	1403.4	1403.1	1402.8
10°	1387.7	1389.8	1392.0	1392.9	1392.6	1392.3	1392.0	1391.7
12.5°	1374.4	1376.1	1377.8	1378.2	1377.4	1376.6	1375.8	1375.0
15°	1349.5	1351.4	1353.2	1353.5	1352.3	1351.0	1349.8	1348.5
17.5°	1317.8	1319.2	1320.6	1321.0	1320.2	1319.5	1318.8	1317.9
20°	1293.4	1294.3	1295.3	1295.7	1295.7	1295.7	1295.7	1295.7
22.5°	1268.4	1269.5	1270.7	1270.9	1270.2	1269.4	1268.6	1267.9
25°	1228.7	1229.9	1231.2	1231.0	1229.5	1227.9	1226.4	1224.9
27.5°	1182.7	1183.5	1184.4	1184.5	1183.9	1183.4	1182.9	1182.3
30°	1151.0	1151.6	1152.3	1152.4	1152.1	1151.7	1151.5	1151.1
32.5°	1121.0	1121.6	1122.2	1122.4	1122.0	1121.8	1121.4	1121.1
35°	1072.4	1073.3	1074.2	1074.7	1074.7	1074.7	1074.7	1074.7
37.5°	1021.3	1022.5	1023.8	1024.3	1024.1	1024.0	1024.0	1023.8
40°	986.8	988.0	989.3	990.2	990.8	991.4	992.0	992.7
42.5°	955.0	956.5	958.0	958.8	958.9	959.0	959.2	959.3
45°	903.8	906.0	908.1	909.4	909.7	910.0	910.3	910.6
47.5°	851.0	854.2	857.4	859.3	860.0	860.6	861.3	862.0
50°	815.9	819.3	822.8	824.9	825.8	826.8	827.7	828.6
52.5°	780.9	784.5	788.1	790.3	790.9	791.7	792.4	793.0
55°	725.6	729.0	732.4	734.7	735.9	737.2	738.4	739.7
57.5°	670.9	674.8	678.8	681.2	682.1	683.0	683.9	684.8
60°	633.5	638.1	642.7	645.5	646.5	647.4	648.4	649.3
62.5°	595.6	600.7	605.8	608.9	610.1	611.4	612.5	613.7
65°	539.0	543.6	548.2	551.2	552.4	553.7	554.9	556.1
67.5°	480.9	486.5	492.1	495.7	497.3	498.9	500.6	502.2
70°	441.3	447.2	453.1	456.9	458.8	460.7	462.5	464.3
72.5°	404.5	410.9	417.2	421.1	422.5	423.8	425.2	426.5
75°	348.8	355.0	361.1	365.1	366.6	368.1	369.7	371.2
77.5°	293.0	299.8	306.7	310.7	311.9	313.1	314.3	315.6
80°	259.7	266.4	273.3	277.3	278.5	279.7	281.0	282.2
82.5°	228.0	234.6	241.1	245.5	247.7	249.9	252.2	254.4
85°	184.6	191.4	198.2	202.9	205.3	207.8	210.3	212.7
87.5°	150.8	158.0	165.2	170.0	172.1	174.3	176.6	178.8
90°	135.5	143.1	150.7	155.7	158.1	160.5	163.0	165.4
92.5°	140.0	147.4	154.9	159.8	162.1	164.5	166.8	169.2
95°	147.5	154.9	162.3	167.2	169.5	171.9	174.2	176.6
97.5°	158.3	165.3	172.4	177.1	179.2	181.5	183.7	185.9
100°	165.4	172.7	180.0	184.7	186.7	188.8	190.7	192.8
102.5°	173.5	180.7	187.8	192.4	194.5	196.6	198.7	200.8
105°	186.5	193.2	199.9	204.5	207.0	209.4	211.8	214.3
107.5°	202.5	208.9	215.3	219.5	221.3	223.2	225.2	227.0
110°	213.4	219.5	225.7	229.8	231.8	234.0	236.0	238.1



TEST NUMBER: P333463-940

CATALOG NUMBER: S125DIW-S1270D470U940-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	224.4	230.1	235.9	239.7	241.7	243.7	245.8	247.7
115°	241.7	247.3	252.7	256.4	258.1	259.8	261.6	263.4
117.5°	258.8	264.0	269.4	273.0	274.6	276.4	278.1	279.9
120°	270.6	275.9	281.2	284.5	286.0	287.5	289.0	290.5
122.5°	281.7	286.7	291.6	294.8	296.4	297.9	299.5	301.1
125°	298.5	303.3	308.1	311.2	312.6	314.1	315.6	317.0
127.5°	314.9	319.3	323.9	326.9	328.5	330.1	331.7	333.3
130°	326.5	330.8	335.0	337.9	339.2	340.5	341.9	343.3
132.5°	337.0	341.3	345.4	348.1	349.1	350.2	351.2	352.3
135°	352.6	356.6	360.6	363.2	364.4	365.6	366.8	367.9
137.5°	369.1	372.9	376.7	378.9	379.7	380.5	381.3	382.0
140°	379.3	382.9	386.5	388.7	389.5	390.2	391.0	391.8
142.5°	389.9	392.9	395.9	397.8	398.6	399.4	400.2	400.9
145°	406.4	408.0	409.6	410.8	411.8	412.7	413.7	414.6
147.5°	422.7	423.4	424.1	424.5	424.4	424.4	424.3	424.3
150°	433.3	433.3	433.3	433.3	433.5	433.5	433.7	433.8
152.5°	444.1	444.3	444.4	444.4	444.2	443.9	443.6	443.4
155°	459.4	459.8	460.1	460.1	459.7	459.2	458.8	458.3
157.5°	472.8	473.1	473.5	473.4	472.8	472.2	471.6	471.0
160°	480.9	481.3	481.6	481.5	481.1	480.6	480.2	479.7
162.5°	488.5	488.8	489.3	489.3	488.7	488.2	487.7	487.1
165°	498.6	499.0	499.4	499.3	498.7	498.2	497.7	497.1
167.5°	506.2	506.8	507.3	507.3	506.7	506.1	505.6	505.1
170°	510.7	511.2	511.8	511.8	511.1	510.5	509.9	509.3
172.5°	514.0	514.5	515.1	515.1	514.4	513.9	513.4	512.8
175°	517.5	518.2	518.7	518.6	518.0	517.4	516.7	516.1
177.5°	519.2	519.7	520.1	520.0	519.6	519.1	518.5	518.1
180°	519.3	519.3	519.3	519.3	519.3	519.3	519.3	519.3

(END OF REPORT)