

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: P333433

Luminaire Tested: **S125DIW-S1090D470U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333433
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-S1090D470U835-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 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: 5891.3 lumens
Efficiency: N/A
Efficacy: 127.5 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

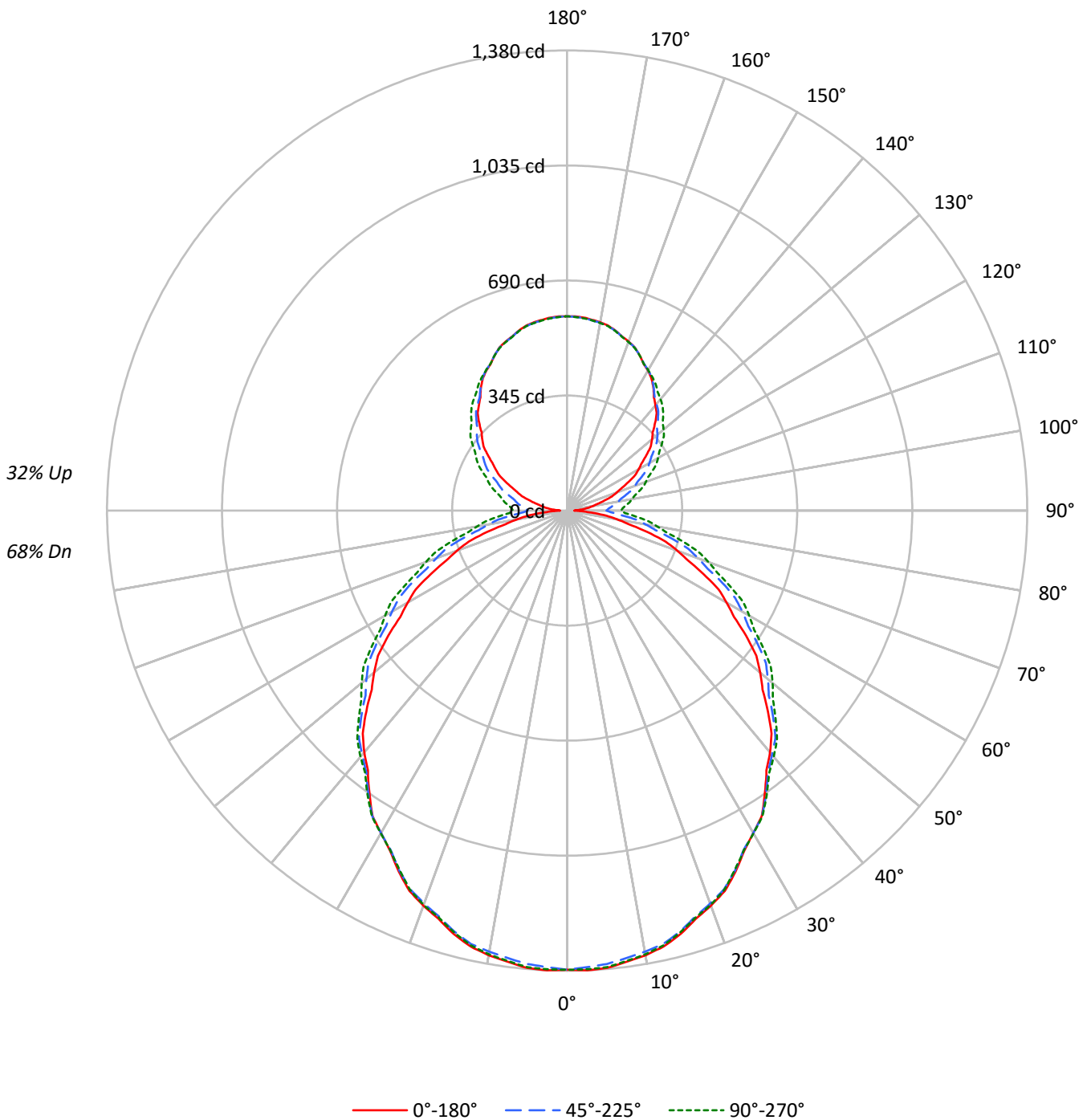
Input Watts (W): 46.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	111	111	111	105	105	105	105	93	93	93	83	83	83	73	73	73	68
1	101	96	92	88	95	91	87	83	80	77	75	71	69	67	63	61	59	55
2	91	83	76	71	86	79	73	67	70	65	61	62	58	55	55	52	49	45
3	83	73	65	59	78	69	62	56	61	56	51	54	50	46	48	45	41	38
4	76	64	56	49	71	61	53	47	54	48	43	48	43	39	43	39	36	32
5	70	57	49	42	65	54	46	41	49	42	37	43	38	34	38	34	31	28
6	64	51	43	37	60	49	41	35	44	37	32	39	34	30	35	30	27	24
7	59	46	38	32	56	44	36	31	40	33	29	36	30	26	32	27	24	22
8	55	42	34	28	52	40	33	27	36	30	25	33	27	23	29	25	21	19
9	52	39	31	25	48	37	30	25	33	27	23	30	25	21	27	23	19	17
10	48	36	28	23	45	34	27	22	31	25	21	28	23	19	25	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8893	8893	8893
5°	8911	8729	8756
10°	8847	8573	8560
15°	8743	8387	8310
20°	8601	8156	8061
25°	8432	7909	7752
30°	8227	7637	7473
35°	8036	7388	7217
40°	7841	7125	6959
45°	7621	6900	6730
50°	7412	6656	6528
55°	7159	6425	6290
60°	6883	6162	6048
65°	6596	5888	5775
70°	6269	5512	5495
75°	5751	5151	5149
80°	5072	4712	4775
85°	4441	4417	4657



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	2.2
10°-20°	369.6	6.3
20°-30°	549.7	9.3
30°-40°	651.1	11.1
40°-50°	673.2	11.4
50°-60°	620.1	10.5
60°-70°	501.3	8.5
70°-80°	335.7	5.7
80°-90°	175.4	3.0
90°-100°	136.7	2.3
100°-110°	187.2	3.2
110°-120°	243.4	4.1
120°-130°	284.2	4.8
130°-140°	299.7	5.1
140°-150°	284.4	4.8
150°-160°	236.9	4.0
160°-170°	157.4	2.7
170°-180°	55.1	0.9
0°-30°	1049.5	17.8
0°-40°	1700.6	28.9
0°-60°	2994.0	50.8
0°-90°	4006.3	68.0
90°-120°	567.3	9.6
90°-150°	1435.6	24.4
90°-180°	1885.0	32.0
0°-180°	5891.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1377	1377	1377	1377	1377	
5°	1377	1374	1365	1375	1374	131
15°	1315	1316	1307	1314	1310	370
25°	1195	1198	1191	1195	1189	550
35°	1034	1043	1040	1043	1044	647
45°	852	866	873	882	884	657
55°	655	676	698	712	718	585
65°	451	482	514	534	540	447
75°	248	284	327	353	360	263
85°	74	119	166	195	206	79
90°	22	69	118	150	162	16
95°	47	84	133	165	177	45
105°	116	140	183	211	223	123
115°	203	216	251	274	282	201
125°	290	293	319	339	346	260
135°	373	375	385	402	407	288
145°	450	451	452	459	463	281
155°	514	514	514	516	514	237
165°	559	558	558	560	558	158
175°	581	579	579	582	579	55
180°	582	582	582	582	582	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0
2.5°	1380.2	1379.7	1379.2	1378.8	1378.3	1377.2	1375.5	1373.8	1372.2	1370.5	1372.2
5°	1377.0	1376.4	1375.8	1375.2	1374.6	1373.2	1371.1	1369.0	1366.9	1364.8	1367.2
7.5°	1364.8	1364.6	1364.3	1364.1	1363.9	1362.7	1360.5	1358.3	1356.2	1354.0	1356.1
10°	1354.0	1354.0	1354.0	1354.0	1354.0	1352.8	1350.4	1348.0	1345.6	1343.2	1345.3
12.5°	1338.9	1339.1	1339.4	1339.6	1339.9	1339.0	1337.1	1335.2	1333.3	1331.3	1333.0
15°	1314.9	1315.2	1315.5	1315.8	1316.1	1315.2	1313.1	1311.0	1308.9	1306.8	1308.6
17.5°	1283.5	1284.1	1284.7	1285.3	1285.9	1285.2	1283.1	1281.0	1278.9	1276.8	1278.2
20°	1260.9	1261.5	1262.1	1262.7	1263.3	1262.5	1260.4	1258.3	1256.2	1254.1	1255.0
22.5°	1234.9	1236.0	1237.1	1238.2	1239.3	1238.6	1236.3	1234.0	1231.6	1229.3	1230.4
25°	1194.7	1195.6	1196.5	1197.4	1198.3	1197.9	1196.1	1194.3	1192.5	1190.7	1191.9
27.5°	1149.9	1151.2	1152.5	1153.9	1155.2	1154.8	1152.8	1150.7	1148.7	1146.7	1147.5
30°	1116.4	1118.2	1120.0	1121.8	1123.6	1123.6	1121.8	1120.0	1118.2	1116.4	1117.0
32.5°	1086.2	1087.7	1089.3	1090.9	1092.4	1092.5	1091.2	1089.9	1088.6	1087.3	1087.9
35°	1034.1	1036.2	1038.3	1040.4	1042.5	1043.1	1042.2	1041.3	1040.4	1039.5	1040.4
37.5°	982.0	983.9	985.8	987.7	989.6	990.5	990.2	989.9	989.6	989.3	990.5
40°	946.3	948.7	951.1	953.5	955.9	957.0	956.7	956.4	956.1	955.8	957.0
42.5°	907.4	910.6	913.7	916.8	919.9	921.8	922.5	923.1	923.8	924.5	925.9
45°	851.8	855.1	858.4	861.7	865.0	867.4	868.9	870.4	871.9	873.4	875.5
47.5°	794.9	797.9	801.0	804.0	807.1	809.9	812.5	815.1	817.7	820.2	823.3
50°	756.0	759.3	762.6	765.9	769.2	772.5	775.8	779.1	782.4	785.7	789.0
52.5°	714.9	719.0	723.0	727.0	731.0	735.0	739.1	743.1	747.1	751.1	754.7
55°	654.7	659.5	664.3	669.1	673.9	678.7	683.5	688.3	693.1	697.9	701.2
57.5°	593.2	598.9	604.7	610.5	616.2	621.9	627.4	632.9	638.4	643.9	647.7
60°	552.1	558.1	564.1	570.1	576.1	582.1	588.1	594.1	600.1	606.1	610.6
62.5°	512.2	518.2	524.2	530.2	536.2	542.4	548.9	555.4	561.9	568.3	573.3
65°	450.9	457.8	464.7	471.6	478.5	485.5	492.7	499.9	507.1	514.3	518.8
67.5°	393.1	399.8	406.4	413.1	419.7	426.7	434.1	441.4	448.7	456.0	461.5
70°	351.0	357.9	364.8	371.7	378.6	385.9	393.7	401.5	409.3	417.1	422.8
72.5°	310.0	317.1	324.2	331.4	338.5	346.3	354.9	363.4	371.9	380.4	386.6
75°	248.4	256.2	264.0	271.8	279.6	288.3	297.9	307.5	317.1	326.7	332.7
77.5°	189.3	198.3	207.3	216.3	225.3	234.4	243.6	252.9	262.1	271.3	277.9
80°	152.5	161.5	170.5	179.5	188.5	198.1	208.3	218.5	228.7	238.9	245.5
82.5°	119.1	128.5	138.0	147.5	157.0	166.9	177.4	187.8	198.3	208.7	215.1
85°	74.2	84.1	94.0	103.9	113.8	124.0	134.5	145.0	155.5	166.0	172.6
87.5°	42.2	52.0	61.7	71.5	81.3	91.3	101.6	112.0	122.3	132.7	139.7
90°	22.1	32.5	42.9	53.3	63.7	74.3	85.2	96.1	107.0	117.9	125.4
92.5°	30.4	39.9	49.3	58.7	68.2	78.6	89.9	101.2	112.5	123.8	131.1
95°	47.0	55.0	63.0	71.0	79.0	88.6	99.8	111.0	122.2	133.4	140.8
97.5°	64.9	72.0	79.1	86.2	93.3	102.4	113.7	124.9	136.1	147.4	154.3
100°	78.3	84.6	90.9	97.2	103.5	112.1	123.0	133.9	144.8	155.7	162.9
102.5°	92.8	99.0	105.3	111.5	117.7	125.8	135.9	145.9	155.9	165.9	173.0
105°	115.5	120.8	126.1	131.4	136.7	144.2	153.8	163.4	173.0	182.6	189.2
107.5°	140.7	145.3	149.9	154.5	159.0	165.9	175.0	184.1	193.2	202.3	208.5
110°	158.1	162.2	166.3	170.4	174.5	180.9	189.6	198.3	207.0	215.7	221.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	177.0	180.1	183.3	186.4	189.5	195.4	203.9	212.5	221.0	229.5	235.1
115°	203.4	205.9	208.5	211.0	213.5	218.7	226.7	234.7	242.7	250.7	256.0
117.5°	230.0	231.6	233.1	234.7	236.3	240.8	248.4	255.9	263.5	271.1	276.2
120°	247.4	248.8	250.2	251.6	253.0	257.2	264.2	271.2	278.2	285.2	290.3
122.5°	265.2	265.8	266.4	267.0	267.6	271.4	278.3	285.2	292.1	299.0	303.8
125°	290.5	290.8	291.1	291.4	291.7	294.9	301.0	307.1	313.2	319.3	323.9
127.5°	316.3	316.4	316.4	316.5	316.5	319.0	324.1	329.1	334.2	339.2	343.5
130°	332.6	332.9	333.1	333.3	333.5	335.8	340.2	344.6	349.0	353.4	357.5
132.5°	347.9	348.7	349.4	350.2	350.9	352.9	356.1	359.3	362.5	365.7	369.8
135°	373.4	373.8	374.1	374.4	374.7	375.9	378.1	380.3	382.5	384.7	388.6
137.5°	397.5	397.8	398.2	398.5	398.8	399.6	400.9	402.1	403.4	404.6	408.3
140°	412.0	412.5	413.0	413.5	414.0	414.6	415.2	415.8	416.4	417.0	420.5
142.5°	427.6	427.8	427.9	428.1	428.3	428.6	429.1	429.5	429.9	430.4	433.3
145°	450.5	450.6	450.7	450.8	450.9	451.1	451.4	451.7	452.0	452.3	453.8
147.5°	470.4	470.6	470.8	471.0	471.3	471.5	471.7	472.0	472.2	472.5	473.2
150°	484.5	484.4	484.3	484.2	484.1	484.3	484.7	485.1	485.5	485.9	485.9
152.5°	496.1	496.3	496.4	496.5	496.7	496.8	497.0	497.2	497.3	497.5	497.7
155°	514.0	514.0	514.0	514.0	514.0	514.0	514.1	514.2	514.3	514.4	514.8
157.5°	529.9	529.7	529.5	529.3	529.0	529.0	529.1	529.2	529.3	529.4	529.8
160°	539.4	539.1	538.7	538.4	538.1	538.0	538.1	538.2	538.3	538.4	538.9
162.5°	547.7	547.5	547.3	547.0	546.8	546.7	546.7	546.7	546.8	546.8	547.3
165°	558.8	558.6	558.4	558.2	558.0	558.0	558.1	558.2	558.3	558.4	558.8
167.5°	568.3	567.9	567.5	567.1	566.7	566.5	566.5	566.5	566.5	566.5	567.1
170°	573.3	572.9	572.5	572.1	571.7	571.5	571.5	571.5	571.5	571.5	572.1
172.5°	577.0	576.6	576.2	575.8	575.4	575.2	575.2	575.2	575.2	575.2	575.8
175°	581.1	580.6	580.2	579.8	579.4	579.2	579.2	579.2	579.2	579.2	579.8
177.5°	583.1	582.8	582.5	582.2	581.8	581.6	581.6	581.5	581.4	581.3	581.8
180°	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0
2.5°	1373.8	1375.5	1377.2	1377.9	1377.7	1377.4	1377.2	1377.0
5°	1369.6	1372.0	1374.4	1375.5	1375.2	1374.9	1374.6	1374.3
7.5°	1358.2	1360.3	1362.4	1363.3	1363.0	1362.7	1362.4	1362.1
10°	1347.4	1349.5	1351.6	1352.5	1352.2	1351.9	1351.6	1351.3
12.5°	1334.6	1336.2	1337.8	1338.2	1337.5	1336.7	1335.9	1335.1
15°	1310.4	1312.2	1314.0	1314.3	1313.1	1311.9	1310.7	1309.5
17.5°	1279.6	1280.9	1282.3	1282.6	1281.9	1281.2	1280.5	1279.8
20°	1255.9	1256.8	1257.7	1258.2	1258.2	1258.2	1258.2	1258.2
22.5°	1231.6	1232.7	1233.8	1234.0	1233.3	1232.6	1231.9	1231.2
25°	1193.1	1194.3	1195.5	1195.3	1193.8	1192.3	1190.8	1189.3
27.5°	1148.3	1149.2	1150.0	1150.2	1149.6	1149.1	1148.5	1148.0
30°	1117.6	1118.2	1118.8	1119.0	1118.7	1118.4	1118.1	1117.8
32.5°	1088.5	1089.1	1089.7	1089.8	1089.5	1089.2	1088.9	1088.6
35°	1041.3	1042.2	1043.1	1043.5	1043.5	1043.5	1043.5	1043.5
37.5°	991.7	992.9	994.1	994.6	994.5	994.4	994.2	994.1
40°	958.2	959.4	960.6	961.5	962.1	962.7	963.3	963.9
42.5°	927.3	928.8	930.2	931.0	931.1	931.2	931.4	931.5
45°	877.6	879.7	881.8	883.0	883.3	883.6	883.9	884.2
47.5°	826.4	829.4	832.5	834.3	835.0	835.7	836.3	837.0
50°	792.3	795.6	798.9	801.0	801.9	802.8	803.7	804.6
52.5°	758.2	761.7	765.3	767.4	768.0	768.7	769.4	770.0
55°	704.5	707.8	711.1	713.4	714.6	715.8	717.0	718.2
57.5°	651.5	655.3	659.1	661.4	662.3	663.2	664.1	665.0
60°	615.1	619.6	624.1	626.8	627.7	628.6	629.5	630.4
62.5°	578.3	583.3	588.3	591.3	592.5	593.6	594.7	595.9
65°	523.3	527.8	532.3	535.2	536.4	537.6	538.8	540.0
67.5°	466.9	472.4	477.9	481.4	482.9	484.5	486.0	487.6
70°	428.5	434.2	439.9	443.7	445.5	447.3	449.1	450.9
72.5°	392.8	399.0	405.1	408.9	410.2	411.5	412.8	414.2
75°	338.7	344.7	350.7	354.4	355.9	357.4	358.9	360.4
77.5°	284.5	291.1	297.7	301.6	302.8	304.0	305.2	306.4
80°	252.1	258.7	265.3	269.2	270.4	271.6	272.8	274.0
82.5°	221.4	227.8	234.1	238.4	240.6	242.7	244.9	247.0
85°	179.2	185.8	192.4	196.9	199.3	201.7	204.1	206.5
87.5°	146.7	153.7	160.7	165.2	167.4	169.6	171.7	173.9
90°	132.8	140.2	147.6	152.5	154.9	157.3	159.7	162.1
92.5°	138.4	145.8	153.1	157.9	160.2	162.5	164.9	167.2
95°	148.1	155.4	162.7	167.5	169.8	172.1	174.4	176.7
97.5°	161.3	168.3	175.2	179.8	181.9	184.1	186.3	188.4
100°	170.2	177.4	184.6	189.2	191.2	193.2	195.2	197.2
102.5°	180.0	187.1	194.1	198.7	200.8	202.8	204.9	207.0
105°	195.8	202.4	209.0	213.5	215.9	218.3	220.7	223.1
107.5°	214.8	221.0	227.3	231.3	233.1	235.0	236.8	238.7
110°	227.7	233.7	239.7	243.7	245.7	247.7	249.7	251.7



TEST NUMBER: P333433

CATALOG NUMBER: S125DIW-S1090D470U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	240.7	246.3	251.9	255.7	257.6	259.5	261.5	263.4
115°	261.3	266.6	271.9	275.4	277.1	278.8	280.5	282.2
117.5°	281.4	286.6	291.8	295.2	296.8	298.5	300.1	301.7
120°	295.4	300.5	305.6	308.9	310.3	311.7	313.1	314.5
122.5°	308.6	313.4	318.2	321.3	322.8	324.2	325.7	327.2
125°	328.5	333.1	337.7	340.7	342.1	343.5	344.9	346.3
127.5°	347.9	352.2	356.6	359.5	361.0	362.6	364.1	365.7
130°	361.6	365.7	369.8	372.5	373.8	375.1	376.4	377.7
132.5°	373.9	378.0	382.1	384.7	385.6	386.6	387.6	388.6
135°	392.5	396.4	400.3	402.8	403.9	405.0	406.1	407.2
137.5°	411.9	415.6	419.3	421.4	422.1	422.8	423.5	424.2
140°	424.0	427.5	431.0	433.1	433.8	434.5	435.2	435.8
142.5°	436.3	439.2	442.2	444.0	444.7	445.4	446.1	446.8
145°	455.3	456.8	458.3	459.5	460.4	461.3	462.2	463.1
147.5°	473.9	474.6	475.3	475.6	475.5	475.3	475.2	475.1
150°	485.9	485.9	485.9	485.9	486.0	486.1	486.2	486.3
152.5°	498.0	498.2	498.4	498.4	498.1	497.8	497.5	497.2
155°	515.2	515.6	516.0	516.0	515.5	515.0	514.5	514.0
157.5°	530.2	530.6	531.0	530.9	530.2	529.5	528.9	528.2
160°	539.3	539.7	540.1	540.0	539.5	539.0	538.5	538.0
162.5°	547.8	548.2	548.7	548.7	548.1	547.5	546.9	546.3
165°	559.2	559.6	560.0	559.9	559.3	558.7	558.1	557.5
167.5°	567.7	568.3	568.9	568.9	568.2	567.6	567.0	566.4
170°	572.7	573.3	574.0	573.9	573.2	572.5	571.8	571.1
172.5°	576.4	577.0	577.6	577.6	576.9	576.3	575.7	575.1
175°	580.4	581.1	581.7	581.6	580.9	580.2	579.5	578.8
177.5°	582.3	582.8	583.3	583.2	582.7	582.1	581.5	581.0
180°	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4

(END OF REPORT)