

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: P333462-830

Luminaire Tested: **S125DIW-S1270D470U830-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333462-830
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: S125DIW-S1270D470U830-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6410.3 lumens
Efficiency: N/A
Efficacy: 122.3 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

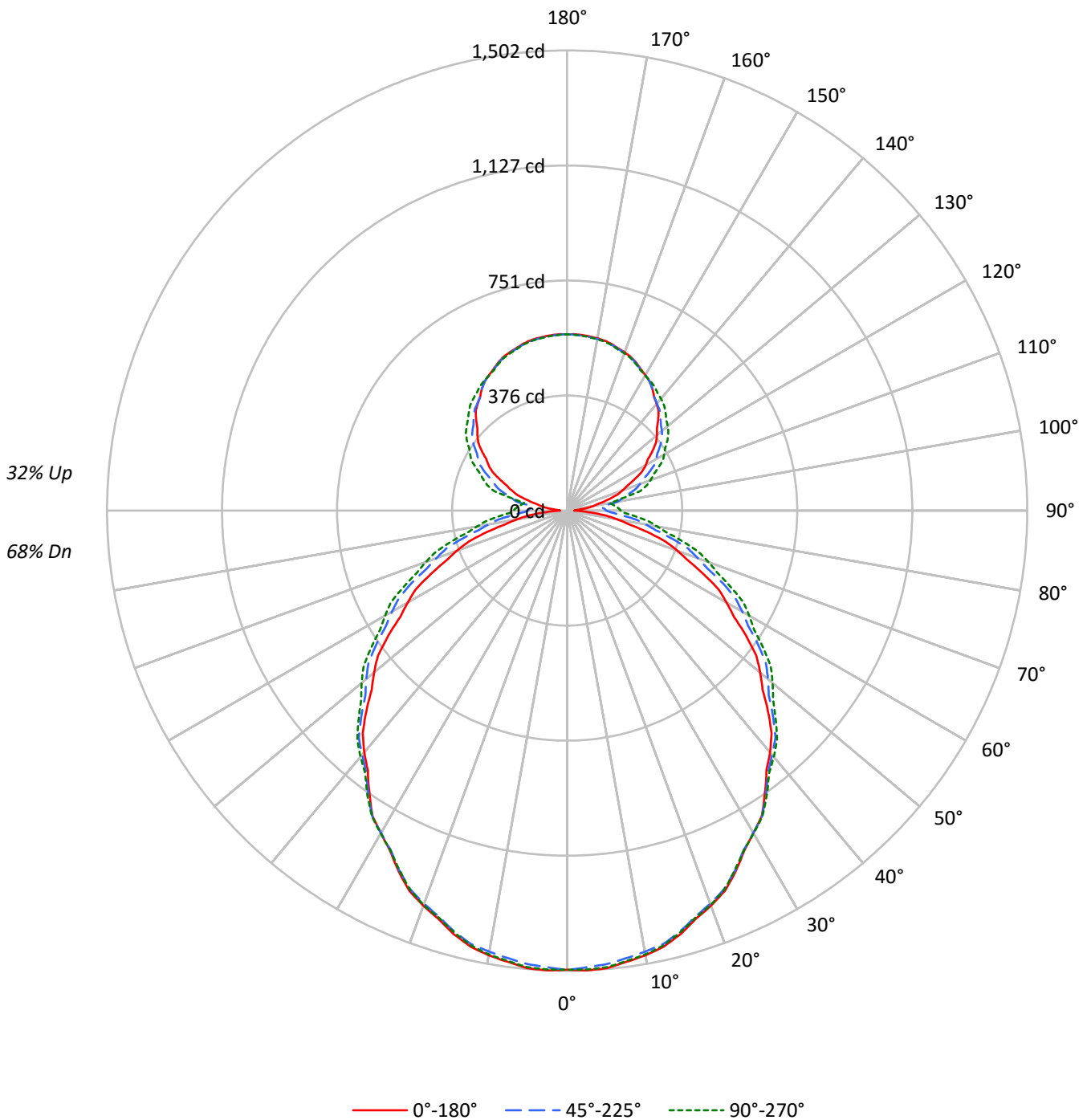
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333462-830

CATALOG NUMBER: S125DIW-S1270D470U830-4F0-1E-UDD-D

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	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	42	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°	9680	9680	9680
5°	9700	9502	9532
10°	9630	9332	9318
15°	9517	9129	9046
20°	9362	8878	8774
25°	9178	8609	8439
30°	8955	8314	8134
35°	8748	8042	7856
40°	8535	7756	7574
45°	8297	7510	7326
50°	8068	7245	7106
55°	7794	6995	6847
60°	7494	6708	6584
65°	7180	6410	6286
70°	6825	6000	5981
75°	6261	5606	5607
80°	5525	5130	5198
85°	4842	4811	5069



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.7	2.2
10°-20°	402.4	6.3
20°-30°	598.4	9.3
30°-40°	708.8	11.1
40°-50°	732.8	11.4
50°-60°	675.1	10.5
60°-70°	545.7	8.5
70°-80°	365.5	5.7
80°-90°	190.7	3.0
90°-100°	127.3	2.0
100°-110°	207.2	3.2
110°-120°	286.2	4.5
120°-130°	329.7	5.1
130°-140°	335.6	5.2
140°-150°	305.4	4.8
150°-160°	244.9	3.8
160°-170°	158.4	2.5
170°-180°	54.6	0.9
0°-30°	1142.5	17.8
0°-40°	1851.2	28.9
0°-60°	3259.1	50.8
0°-90°	4361.0	68.0
90°-120°	620.7	9.7
90°-150°	1591.3	24.8
90°-180°	2049.0	32.0
0°-180°	6410.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1499	1499	1499	1499	1499	
5°	1499	1496	1486	1497	1496	142
15°	1431	1432	1422	1430	1425	403
25°	1300	1304	1296	1301	1295	598
35°	1126	1135	1132	1136	1136	704
45°	927	943	951	961	962	715
55°	713	736	760	775	782	637
65°	491	525	560	581	588	487
75°	270	309	356	384	392	287
85°	81	130	181	212	225	86
90°	24	75	127	162	175	17
95°	44	80	114	147	159	46
105°	139	165	208	236	247	147
115°	244	258	295	319	326	242
125°	341	344	372	392	399	304
135°	420	422	431	448	454	324
145°	485	485	485	492	496	303
155°	533	531	531	532	529	245
165°	562	560	560	563	559	159
175°	575	573	573	576	573	55
180°	575	575	575	575	575	



TEST NUMBER: P333462-830

CATALOG NUMBER: S125DIW-S1270D470U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1502.4	1501.9	1501.4	1500.9	1500.3	1499.2	1497.3	1495.5	1493.7	1491.9	1493.7
5°	1498.9	1498.3	1497.6	1496.9	1496.3	1494.9	1492.5	1490.3	1488.0	1485.7	1488.3
7.5°	1485.7	1485.4	1485.2	1484.9	1484.7	1483.4	1481.0	1478.7	1476.3	1473.9	1476.2
10°	1473.9	1473.9	1473.9	1473.9	1473.9	1472.6	1470.0	1467.4	1464.8	1462.2	1464.4
12.5°	1457.5	1457.7	1458.0	1458.3	1458.5	1457.6	1455.6	1453.4	1451.3	1449.3	1451.0
15°	1431.3	1431.6	1432.0	1432.3	1432.7	1431.6	1429.4	1427.1	1424.8	1422.5	1424.5
17.5°	1397.2	1397.9	1398.5	1399.2	1399.9	1399.0	1396.8	1394.5	1392.1	1389.9	1391.4
20°	1372.5	1373.2	1373.9	1374.5	1375.2	1374.3	1372.1	1369.8	1367.4	1365.2	1366.2
22.5°	1344.3	1345.5	1346.7	1347.8	1349.1	1348.3	1345.8	1343.2	1340.7	1338.1	1339.4
25°	1300.5	1301.6	1302.5	1303.4	1304.5	1304.0	1302.0	1300.0	1298.1	1296.1	1297.4
27.5°	1251.8	1253.2	1254.6	1256.0	1257.5	1257.1	1254.9	1252.6	1250.5	1248.2	1249.2
30°	1215.3	1217.3	1219.2	1221.2	1223.1	1223.1	1221.2	1219.2	1217.3	1215.3	1216.0
32.5°	1182.4	1184.1	1185.8	1187.5	1189.2	1189.3	1187.9	1186.5	1185.0	1183.6	1184.2
35°	1125.7	1127.9	1130.2	1132.6	1134.8	1135.5	1134.4	1133.5	1132.6	1131.5	1132.6
37.5°	1068.9	1071.0	1073.1	1075.3	1077.3	1078.2	1077.9	1077.5	1077.2	1076.9	1078.2
40°	1030.1	1032.7	1035.4	1038.0	1040.6	1041.7	1041.4	1041.0	1040.8	1040.5	1041.7
42.5°	987.8	991.2	994.6	998.0	1001.5	1003.4	1004.2	1004.9	1005.6	1006.4	1007.9
45°	927.3	930.9	934.4	938.0	941.6	944.2	945.9	947.5	949.1	950.7	953.1
47.5°	865.3	868.6	871.9	875.2	878.5	881.7	884.5	887.3	890.0	892.9	896.3
50°	822.9	826.5	830.1	833.7	837.4	840.9	844.5	848.1	851.7	855.3	858.8
52.5°	778.3	782.7	787.0	791.4	795.8	800.1	804.6	808.9	813.2	817.7	821.5
55°	712.8	717.9	723.2	728.4	733.6	738.9	744.0	749.3	754.5	759.8	763.4
57.5°	645.7	652.0	658.3	664.5	670.8	676.9	683.0	688.9	694.9	701.0	705.1
60°	601.1	607.6	614.1	620.7	627.2	633.7	640.3	646.8	653.3	659.8	664.7
62.5°	557.5	564.1	570.6	577.1	583.6	590.5	597.5	604.5	611.6	618.7	624.1
65°	490.8	498.3	505.9	513.4	520.8	528.6	536.4	544.2	552.0	559.9	564.8
67.5°	427.9	435.2	442.4	449.7	456.9	464.6	472.5	480.5	488.4	496.4	502.4
70°	382.1	389.6	397.1	404.6	412.1	420.1	428.6	437.2	445.6	454.1	460.3
72.5°	337.4	345.2	353.0	360.7	368.5	377.0	386.3	395.6	404.8	414.2	420.8
75°	270.4	278.9	287.4	295.9	304.3	313.9	324.2	334.7	345.2	355.6	362.1
77.5°	206.0	215.8	225.6	235.4	245.2	255.1	265.2	275.2	285.3	295.4	302.6
80°	166.1	175.9	185.7	195.5	205.3	215.7	226.8	237.9	249.0	260.1	267.3
82.5°	129.6	140.0	150.2	160.6	170.9	181.7	193.1	204.4	215.8	227.2	234.1
85°	80.9	91.6	102.4	113.2	123.9	135.1	146.5	157.9	169.3	180.8	187.9
87.5°	45.9	56.6	67.1	77.8	88.3	99.2	110.5	121.8	133.0	144.2	151.8
90°	23.9	35.2	46.4	57.6	68.8	80.3	92.0	103.8	115.6	127.3	135.3
92.5°	27.7	36.9	46.0	55.1	64.3	74.8	86.8	98.7	110.7	122.6	130.4
95°	43.5	51.7	59.9	68.1	76.3	84.1	91.6	99.1	106.6	114.1	121.8
97.5°	68.1	76.3	84.4	92.6	100.7	106.6	110.2	113.8	117.3	120.9	125.1
100°	87.4	94.5	101.7	108.8	115.9	124.9	135.7	146.6	157.4	168.2	161.0
102.5°	107.0	113.7	120.4	127.1	133.7	142.3	152.8	163.2	173.6	184.0	187.9
105°	138.6	144.2	149.8	155.4	161.0	168.7	178.5	188.3	198.1	207.9	214.4
107.5°	171.4	175.9	180.3	184.7	189.2	196.2	205.9	215.5	225.0	234.6	241.1
110°	192.7	196.7	200.7	204.5	208.5	215.1	224.4	233.8	243.1	252.4	258.4



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CATALOG NUMBER: S125DIW-S1270D470U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	214.0	217.3	220.6	224.0	227.3	233.6	242.5	251.6	260.5	269.6	275.1
115°	244.2	246.9	249.7	252.5	255.2	260.9	269.5	278.1	286.6	295.2	300.8
117.5°	275.6	277.0	278.5	280.0	281.4	286.4	294.8	303.2	311.6	320.0	325.1
120°	296.1	296.9	297.7	298.7	299.5	303.9	311.7	319.5	327.3	335.1	340.4
122.5°	312.9	313.8	314.5	315.4	316.2	320.3	327.7	335.1	342.4	349.8	355.0
125°	340.6	340.9	341.3	341.6	342.0	345.3	351.9	358.4	365.0	371.6	376.4
127.5°	365.8	366.0	366.1	366.3	366.5	369.1	374.5	379.8	385.0	390.3	394.9
130°	382.2	382.4	382.5	382.7	382.8	385.2	389.8	394.5	399.2	403.9	408.1
132.5°	397.4	397.8	398.4	398.9	399.4	401.2	404.5	407.8	411.2	414.5	419.1
135°	420.4	420.7	420.8	421.1	421.3	422.5	424.6	426.7	428.9	430.9	435.0
137.5°	441.5	441.8	442.0	442.1	442.4	443.0	443.9	444.9	445.8	446.8	450.6
140°	454.3	454.5	454.7	454.9	455.1	455.2	455.5	455.7	456.0	456.2	460.0
142.5°	466.9	466.7	466.7	466.5	466.4	466.4	466.6	466.7	466.9	467.1	470.2
145°	485.4	485.3	485.1	485.0	484.8	484.8	484.8	484.8	484.8	484.8	486.5
147.5°	500.2	500.1	500.1	500.0	500.0	500.0	500.2	500.3	500.4	500.5	501.1
150°	510.4	510.2	510.0	509.8	509.6	509.6	509.8	510.0	510.2	510.4	510.6
152.5°	520.3	519.9	519.4	519.1	518.6	518.5	518.7	518.9	519.1	519.2	519.4
155°	533.0	532.4	531.9	531.3	530.7	530.6	530.7	530.9	531.1	531.3	531.6
157.5°	542.8	542.4	542.2	541.8	541.4	541.3	541.3	541.3	541.3	541.4	541.7
160°	549.6	549.0	548.5	547.9	547.3	547.1	547.2	547.3	547.4	547.5	547.9
162.5°	555.1	554.5	553.9	553.4	552.8	552.6	552.7	552.8	552.9	553.0	553.5
165°	562.4	561.8	561.3	560.7	560.2	559.9	560.0	560.1	560.2	560.2	560.8
167.5°	567.9	567.3	566.8	566.1	565.5	565.2	565.3	565.4	565.5	565.6	566.4
170°	571.0	570.3	569.6	568.9	568.3	568.0	568.1	568.2	568.3	568.4	569.1
172.5°	573.0	572.3	571.7	571.0	570.3	570.1	570.2	570.4	570.6	570.8	571.5
175°	575.2	574.7	574.1	573.5	573.0	572.7	572.8	572.9	573.0	573.1	573.8
177.5°	576.3	575.8	575.3	574.9	574.4	574.2	574.3	574.4	574.5	574.6	575.0
180°	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2



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CATALOG NUMBER: S125DIW-S1270D470U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1495.5	1497.3	1499.2	1500.0	1499.7	1499.5	1499.2	1498.9
5°	1490.9	1493.6	1496.2	1497.3	1496.9	1496.7	1496.3	1496.0
7.5°	1478.5	1480.8	1483.1	1484.0	1483.8	1483.4	1483.1	1482.7
10°	1466.8	1469.0	1471.3	1472.3	1472.0	1471.7	1471.3	1471.0
12.5°	1452.7	1454.5	1456.3	1456.8	1455.9	1455.1	1454.2	1453.4
15°	1426.4	1428.4	1430.3	1430.7	1429.4	1428.0	1426.7	1425.4
17.5°	1392.9	1394.4	1395.9	1396.3	1395.4	1394.7	1393.9	1393.1
20°	1367.2	1368.1	1369.1	1369.6	1369.6	1369.6	1369.6	1369.6
22.5°	1340.7	1341.9	1343.1	1343.3	1342.6	1341.8	1341.0	1340.2
25°	1298.7	1300.0	1301.4	1301.2	1299.6	1297.9	1296.3	1294.7
27.5°	1250.1	1250.9	1251.9	1252.1	1251.4	1250.8	1250.3	1249.7
30°	1216.6	1217.3	1218.0	1218.0	1217.8	1217.4	1217.1	1216.7
32.5°	1184.9	1185.5	1186.2	1186.4	1186.0	1185.7	1185.3	1185.1
35°	1133.5	1134.4	1135.5	1136.0	1136.0	1136.0	1136.0	1136.0
37.5°	1079.5	1080.8	1082.1	1082.7	1082.5	1082.4	1082.3	1082.1
40°	1043.0	1044.3	1045.7	1046.6	1047.3	1047.9	1048.6	1049.2
42.5°	1009.5	1011.1	1012.6	1013.4	1013.6	1013.7	1013.9	1014.0
45°	955.4	957.6	959.9	961.2	961.6	961.9	962.2	962.5
47.5°	899.6	902.9	906.3	908.2	909.0	909.6	910.4	911.2
50°	862.4	866.0	869.7	871.9	872.9	873.9	874.9	875.8
52.5°	825.4	829.2	833.0	835.4	836.0	836.8	837.5	838.2
55°	766.9	770.5	774.1	776.6	777.9	779.2	780.5	781.8
57.5°	709.2	713.3	717.5	720.0	721.0	721.9	722.9	723.9
60°	669.6	674.5	679.4	682.3	683.3	684.3	685.3	686.3
62.5°	629.5	634.9	640.4	643.7	644.9	646.2	647.4	648.7
65°	569.7	574.6	579.5	582.6	583.9	585.2	586.5	587.8
67.5°	508.3	514.3	520.2	524.0	525.7	527.4	529.1	530.8
70°	466.5	472.7	478.9	483.0	484.9	486.9	488.9	490.8
72.5°	427.5	434.3	441.0	445.1	446.6	448.0	449.4	450.8
75°	368.7	375.2	381.7	385.9	387.5	389.1	390.8	392.4
77.5°	309.7	316.9	324.1	328.4	329.7	330.9	332.2	333.6
80°	274.5	281.6	288.9	293.1	294.4	295.7	297.0	298.3
82.5°	241.0	248.0	254.9	259.5	261.8	264.2	266.6	268.9
85°	195.1	202.3	209.5	214.4	217.0	219.6	222.3	224.8
87.5°	159.4	167.0	174.7	179.6	181.9	184.3	186.6	189.0
90°	143.3	151.3	159.3	164.6	167.1	169.7	172.3	174.8
92.5°	138.1	145.8	153.5	158.6	161.0	163.4	165.9	168.2
95°	129.4	137.0	144.8	149.7	152.0	154.3	156.6	158.8
97.5°	129.3	133.5	137.6	140.8	143.1	145.3	147.5	149.8
100°	153.7	146.5	139.2	136.4	137.9	139.5	141.1	142.7
102.5°	191.9	195.8	199.7	199.4	194.9	190.5	186.0	181.5
105°	220.9	227.5	234.0	238.4	240.5	242.8	245.0	247.1
107.5°	247.6	254.1	260.5	264.7	266.4	268.2	269.8	271.6
110°	264.3	270.2	276.1	280.2	282.7	285.0	287.4	289.7



TEST NUMBER: P333462-830

CATALOG NUMBER: S125DIW-S1270D470U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	280.7	286.3	291.9	295.8	297.9	300.0	302.2	304.3
115°	306.2	311.7	317.3	320.7	322.1	323.5	324.9	326.2
117.5°	330.1	335.2	340.3	343.7	345.7	347.7	349.7	351.7
120°	345.8	351.2	356.6	360.0	361.5	362.9	364.4	365.9
122.5°	360.1	365.1	370.2	373.4	374.8	376.3	377.7	379.1
125°	381.2	386.1	390.9	394.0	395.3	396.7	398.0	399.4
127.5°	399.5	404.2	408.9	411.7	412.9	414.2	415.3	416.5
130°	412.5	416.7	421.0	423.8	424.9	426.0	427.3	428.4
132.5°	423.6	428.0	432.5	435.3	436.2	437.1	438.0	438.8
135°	439.0	443.1	447.1	449.7	450.7	451.9	452.9	453.9
137.5°	454.6	458.5	462.3	464.7	465.5	466.3	467.1	468.0
140°	463.7	467.5	471.4	473.6	474.3	475.0	475.8	476.5
142.5°	473.3	476.5	479.6	481.5	482.2	483.0	483.7	484.5
145°	488.2	490.0	491.7	492.9	493.7	494.5	495.2	495.9
147.5°	501.8	502.4	503.0	503.3	503.2	503.1	503.0	502.9
150°	510.8	511.0	511.1	511.0	510.6	510.2	509.7	509.3
152.5°	519.6	519.8	520.0	519.8	519.2	518.6	517.9	517.4
155°	531.9	532.2	532.4	532.2	531.4	530.7	529.9	529.1
157.5°	542.0	542.2	542.5	542.3	541.6	540.8	540.1	539.3
160°	548.3	548.7	549.0	548.8	548.1	547.3	546.6	545.8
162.5°	554.0	554.6	555.1	555.0	554.1	553.3	552.4	551.6
165°	561.5	562.0	562.6	562.5	561.8	560.9	560.2	559.4
167.5°	567.0	567.7	568.4	568.4	567.4	566.6	565.7	564.9
170°	569.9	570.7	571.5	571.4	570.5	569.7	568.8	568.0
172.5°	572.1	572.8	573.5	573.4	572.6	571.7	570.9	570.0
175°	574.6	575.3	576.1	576.1	575.2	574.4	573.5	572.7
177.5°	575.6	576.1	576.6	576.6	576.0	575.4	574.8	574.2
180°	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2

(END OF REPORT)