

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

Luminaire Tested: **S125DIW-S1270D470U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333463
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-S1270D470U835-4F0-1E-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: 6552.1 lumens
Efficiency: N/A
Efficacy: 125.0 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

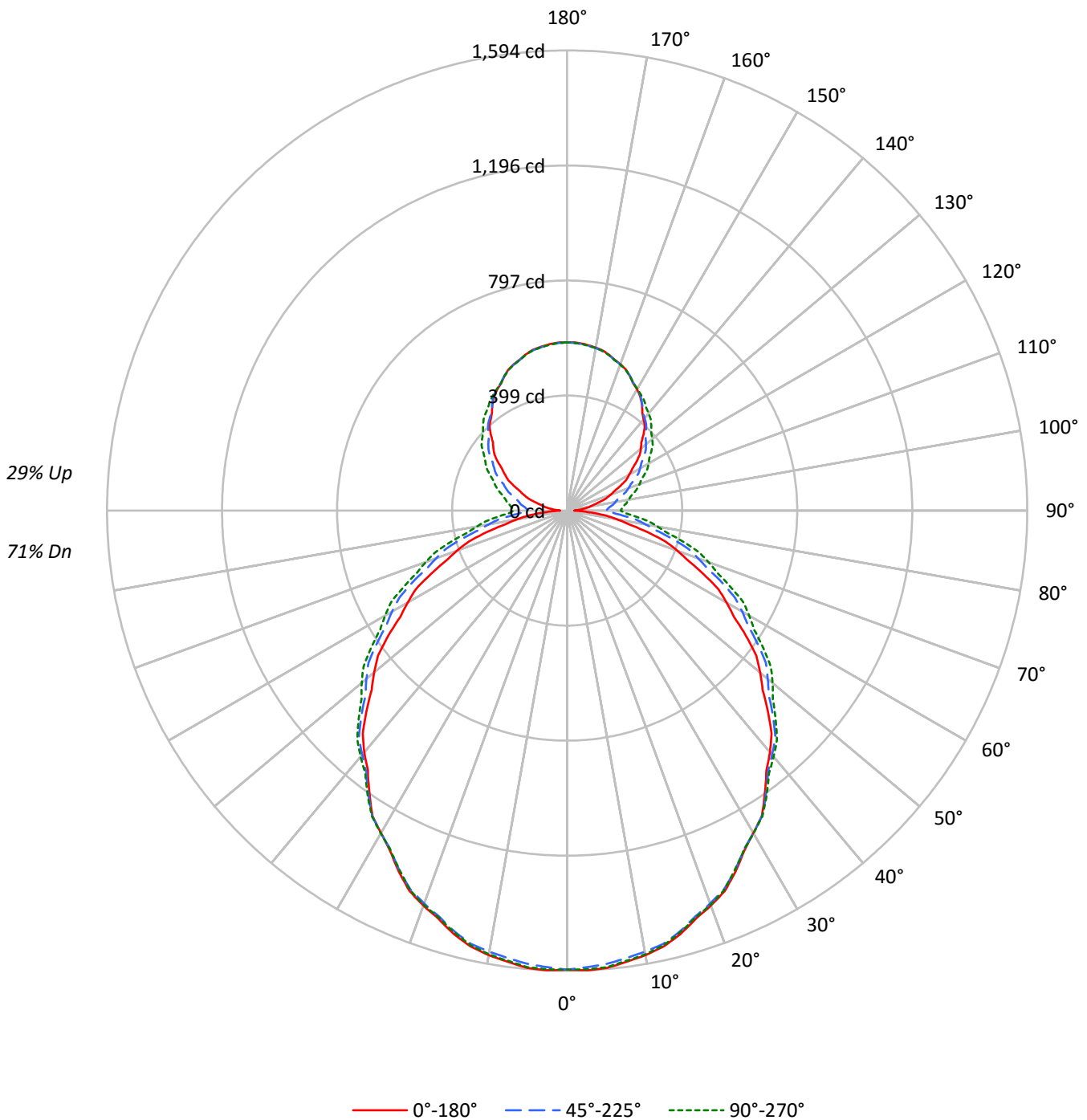
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75	75	75	75	71	
1	101	96	92	88	96	91	87	84	82	79	76	73	71	68	65	63	61	61	61	61	57	
2	92	84	77	71	87	79	73	68	71	66	62	63	60	56	56	53	51	51	51	51	47	
3	84	73	65	59	79	69	62	56	62	57	52	56	51	47	50	46	43	43	43	43	39	
4	76	65	56	50	72	61	54	48	55	49	44	50	44	40	44	40	37	37	37	37	34	
5	70	58	49	42	66	55	47	41	49	43	38	44	39	35	40	35	32	32	32	32	29	
6	65	52	43	37	61	49	41	36	45	38	33	40	35	30	36	31	28	28	28	28	25	
7	60	47	38	32	56	45	37	31	40	34	29	36	31	27	33	28	25	25	25	25	22	
8	56	43	34	29	52	41	33	28	37	30	26	33	28	24	30	26	22	22	22	22	20	
9	52	39	31	26	49	37	30	25	34	28	23	31	25	22	28	23	20	20	20	20	18	
10	48	36	28	23	46	34	27	22	31	25	21	28	23	20	26	21	18	18	18	18	16	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10271	10271	10271
5°	10291	10081	10113
10°	10218	9901	9886
15°	10097	9686	9597
20°	9933	9419	9309
25°	9738	9134	8953
30°	9501	8820	8630
35°	9281	8532	8335
40°	9056	8229	8036
45°	8802	7969	7773
50°	8560	7687	7539
55°	8269	7421	7265
60°	7950	7117	6985
65°	7617	6800	6669
70°	7241	6366	6346
75°	6643	5948	5948
80°	5861	5444	5515
85°	5135	5104	5378



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.4	2.3
10°-20°	426.9	6.5
20°-30°	634.8	9.7
30°-40°	752.0	11.5
40°-50°	777.5	11.9
50°-60°	716.2	10.9
60°-70°	579.0	8.8
70°-80°	387.7	5.9
80°-90°	202.4	3.1
90°-100°	151.8	2.3
100°-110°	198.4	3.0
110°-120°	250.9	3.8
120°-130°	288.4	4.4
130°-140°	301.6	4.6
140°-150°	284.8	4.3
150°-160°	236.9	3.6
160°-170°	157.4	2.4
170°-180°	55.1	0.8
0°-30°	1212.1	18.5
0°-40°	1964.1	30.0
0°-60°	3457.8	52.8
0°-90°	4626.9	70.6
90°-120°	601.1	9.2
90°-150°	1475.9	22.5
90°-180°	1925.0	29.4
0°-180°	6552.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1590	1590	1590	1590	1590	
5°	1590	1587	1576	1588	1587	151
15°	1519	1519	1509	1518	1512	428
25°	1380	1384	1375	1381	1374	635
35°	1194	1204	1200	1205	1205	747
45°	984	1000	1009	1019	1021	759
55°	756	781	806	823	830	676
65°	521	557	594	616	624	517
75°	287	328	377	407	416	304
85°	86	137	192	225	238	91
90°	25	79	135	172	186	18
95°	50	92	149	185	198	47
105°	117	146	194	227	240	125
115°	205	219	259	285	295	202
125°	291	294	324	347	356	261
135°	374	376	386	406	413	288
145°	451	451	452	460	465	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°	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3
2.5°	1594.0	1593.5	1592.9	1592.4	1591.8	1590.6	1588.6	1586.7	1584.8	1582.8	1584.8
5°	1590.3	1589.6	1588.9	1588.2	1587.5	1586.0	1583.5	1581.1	1578.7	1576.3	1579.0
7.5°	1576.3	1576.0	1575.7	1575.4	1575.2	1573.8	1571.3	1568.8	1566.3	1563.8	1566.2
10°	1563.8	1563.8	1563.8	1563.8	1563.8	1562.4	1559.6	1556.9	1554.1	1551.3	1553.7
12.5°	1546.3	1546.6	1546.9	1547.2	1547.4	1546.5	1544.3	1542.0	1539.8	1537.6	1539.5
15°	1518.6	1518.9	1519.3	1519.6	1520.0	1518.9	1516.5	1514.1	1511.7	1509.2	1511.3
17.5°	1482.4	1483.1	1483.8	1484.5	1485.2	1484.3	1481.9	1479.5	1477.0	1474.6	1476.2
20°	1456.2	1456.9	1457.6	1458.3	1459.0	1458.1	1455.7	1453.3	1450.8	1448.4	1449.5
22.5°	1426.3	1427.5	1428.8	1430.0	1431.3	1430.5	1427.8	1425.1	1422.4	1419.7	1421.0
25°	1379.8	1380.9	1381.9	1382.9	1384.0	1383.5	1381.4	1379.3	1377.2	1375.1	1376.5
27.5°	1328.1	1329.6	1331.1	1332.6	1334.2	1333.7	1331.4	1329.0	1326.7	1324.3	1325.3
30°	1289.4	1291.5	1293.5	1295.6	1297.7	1297.7	1295.6	1293.5	1291.5	1289.4	1290.1
32.5°	1254.5	1256.3	1258.1	1259.9	1261.7	1261.8	1260.3	1258.8	1257.2	1255.7	1256.4
35°	1194.3	1196.7	1199.1	1201.6	1204.0	1204.7	1203.6	1202.6	1201.6	1200.5	1201.6
37.5°	1134.1	1136.3	1138.5	1140.8	1143.0	1143.9	1143.6	1143.2	1142.9	1142.5	1143.9
40°	1092.9	1095.7	1098.5	1101.3	1104.0	1105.2	1104.9	1104.5	1104.2	1103.9	1105.2
42.5°	1048.0	1051.6	1055.2	1058.8	1062.5	1064.6	1065.4	1066.2	1066.9	1067.7	1069.3
45°	983.8	987.6	991.4	995.2	999.0	1001.8	1003.6	1005.3	1007.0	1008.7	1011.2
47.5°	918.0	921.5	925.1	928.6	932.1	935.4	938.4	941.4	944.3	947.3	950.9
50°	873.1	876.9	880.7	884.5	888.4	892.2	896.0	899.8	903.6	907.4	911.2
52.5°	825.7	830.4	835.0	839.6	844.3	848.9	853.6	858.2	862.8	867.5	871.6
55°	756.2	761.7	767.3	772.8	778.3	783.9	789.4	795.0	800.5	806.1	809.9
57.5°	685.1	691.7	698.4	705.0	711.7	718.2	724.6	730.9	737.3	743.7	748.1
60°	637.7	644.6	651.5	658.5	665.4	672.3	679.3	686.2	693.1	700.0	705.2
62.5°	591.5	598.5	605.4	612.3	619.2	626.5	633.9	641.4	648.9	656.4	662.1
65°	520.7	528.7	536.7	544.7	552.6	560.8	569.1	577.4	585.7	594.0	599.2
67.5°	454.0	461.7	469.4	477.1	484.8	492.9	501.3	509.8	518.2	526.7	533.0
70°	405.4	413.3	421.3	429.3	437.2	445.7	454.7	463.8	472.8	481.8	488.4
72.5°	358.0	366.2	374.5	382.7	391.0	400.0	409.8	419.7	429.5	439.4	446.5
75°	286.9	295.9	304.9	313.9	322.9	333.0	344.0	355.1	366.2	377.3	384.2
77.5°	218.6	229.0	239.4	249.8	260.2	270.7	281.4	292.0	302.7	313.4	321.0
80°	176.2	186.6	197.0	207.4	217.8	228.8	240.6	252.4	264.2	276.0	283.6
82.5°	137.5	148.5	159.4	170.4	181.3	192.8	204.9	216.9	229.0	241.0	248.4
85°	85.8	97.2	108.6	120.1	131.5	143.3	155.4	167.5	179.6	191.8	199.4
87.5°	48.7	60.0	71.2	82.5	93.7	105.3	117.2	129.2	141.1	153.0	161.1
90°	25.4	37.3	49.2	61.1	73.0	85.2	97.6	110.1	122.6	135.1	143.6
92.5°	33.4	44.2	55.1	65.9	76.7	88.6	101.5	114.4	127.3	140.3	148.6
95°	49.7	58.9	68.1	77.4	86.6	97.6	110.4	123.1	135.9	148.7	157.0
97.5°	67.3	75.5	83.7	91.9	100.1	110.6	123.3	136.1	148.8	161.6	169.5
100°	80.6	87.9	95.2	102.4	109.7	119.5	131.9	144.3	156.7	169.1	177.3
102.5°	94.9	102.1	109.2	116.3	123.4	132.7	144.2	155.7	167.2	178.6	186.6
105°	117.4	123.4	129.5	135.5	141.6	150.1	161.1	172.1	183.1	194.1	201.6
107.5°	142.3	147.5	152.8	158.0	163.2	171.0	181.5	191.9	202.3	212.8	220.0
110°	159.6	164.2	168.9	173.6	178.2	185.6	195.6	205.6	215.6	225.6	232.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	178.4	182.0	185.6	189.2	192.8	199.5	209.3	219.1	228.9	238.7	245.2
115°	204.7	207.5	210.4	213.2	216.0	222.0	231.2	240.5	249.7	258.9	265.0
117.5°	231.1	232.8	234.6	236.4	238.2	243.4	252.1	260.8	269.5	278.2	284.2
120°	248.5	250.0	251.6	253.1	254.6	259.4	267.5	275.6	283.7	291.7	297.6
122.5°	266.1	266.7	267.4	268.1	268.7	273.0	281.0	289.0	296.9	304.9	310.4
125°	291.3	291.6	291.8	292.1	292.4	296.0	303.0	310.1	317.1	324.1	329.5
127.5°	317.0	317.0	317.0	316.9	316.9	319.8	325.6	331.4	337.3	343.1	348.1
130°	333.3	333.4	333.6	333.7	333.9	336.5	341.6	346.6	351.7	356.7	361.5
132.5°	348.3	349.1	349.9	350.6	351.4	353.6	357.3	361.0	364.7	368.4	373.2
135°	373.9	374.1	374.4	374.6	374.9	376.3	378.8	381.3	383.9	386.4	390.9
137.5°	397.8	398.2	398.5	398.8	399.1	399.9	401.3	402.7	404.1	405.5	409.7
140°	412.2	412.7	413.2	413.7	414.2	414.8	415.4	416.1	416.7	417.4	421.4
142.5°	427.8	427.9	428.1	428.2	428.4	428.7	429.1	429.6	430.0	430.5	433.9
145°	450.7	450.8	450.8	450.9	450.9	451.1	451.4	451.7	452.0	452.3	454.1
147.5°	470.4	470.6	470.8	471.0	471.3	471.5	471.7	472.0	472.2	472.5	473.3
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°	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3
2.5°	1586.7	1588.6	1590.6	1591.4	1591.1	1590.9	1590.6	1590.3
5°	1581.8	1584.6	1587.4	1588.6	1588.2	1587.9	1587.5	1587.2
7.5°	1568.6	1571.1	1573.5	1574.5	1574.2	1573.8	1573.5	1573.1
10°	1556.2	1558.6	1561.0	1562.1	1561.7	1561.4	1561.0	1560.7
12.5°	1541.3	1543.2	1545.1	1545.6	1544.7	1543.8	1542.9	1542.0
15°	1513.4	1515.5	1517.5	1517.9	1516.5	1515.1	1513.7	1512.3
17.5°	1477.8	1479.4	1481.0	1481.4	1480.5	1479.7	1478.9	1478.0
20°	1450.5	1451.5	1452.6	1453.1	1453.1	1453.1	1453.1	1453.1
22.5°	1422.4	1423.7	1425.0	1425.2	1424.4	1423.6	1422.7	1421.9
25°	1377.9	1379.3	1380.7	1380.5	1378.8	1377.0	1375.3	1373.6
27.5°	1326.3	1327.2	1328.2	1328.4	1327.7	1327.1	1326.5	1325.9
30°	1290.8	1291.5	1292.2	1292.3	1292.0	1291.6	1291.3	1290.9
32.5°	1257.1	1257.8	1258.5	1258.7	1258.3	1258.0	1257.6	1257.3
35°	1202.6	1203.6	1204.7	1205.2	1205.2	1205.2	1205.2	1205.2
37.5°	1145.3	1146.7	1148.1	1148.7	1148.5	1148.4	1148.3	1148.1
40°	1106.6	1108.0	1109.4	1110.4	1111.1	1111.8	1112.5	1113.2
42.5°	1071.0	1072.7	1074.3	1075.2	1075.4	1075.5	1075.7	1075.8
45°	1013.6	1016.0	1018.4	1019.8	1020.2	1020.5	1020.9	1021.2
47.5°	954.4	957.9	961.5	963.6	964.4	965.1	965.9	966.7
50°	915.0	918.8	922.7	925.1	926.1	927.2	928.2	929.2
52.5°	875.7	879.8	883.8	886.3	887.0	887.8	888.6	889.3
55°	813.7	817.5	821.3	823.9	825.3	826.7	828.1	829.5
57.5°	752.4	756.8	761.2	763.9	764.9	765.9	767.0	768.0
60°	710.4	715.6	720.8	723.9	725.0	726.0	727.1	728.1
62.5°	667.9	673.6	679.4	682.9	684.2	685.6	686.9	688.2
65°	604.4	609.6	614.8	618.1	619.5	620.9	622.3	623.6
67.5°	539.3	545.6	551.9	555.9	557.7	559.5	561.4	563.2
70°	494.9	501.5	508.1	512.4	514.5	516.6	518.7	520.7
72.5°	453.6	460.8	467.9	472.2	473.8	475.3	476.8	478.3
75°	391.2	398.1	405.0	409.4	411.1	412.8	414.6	416.3
77.5°	328.6	336.2	343.9	348.4	349.8	351.1	352.5	353.9
80°	291.2	298.8	306.5	311.0	312.3	313.7	315.1	316.5
82.5°	255.7	263.1	270.4	275.3	277.8	280.3	282.8	285.3
85°	207.0	214.6	222.3	227.5	230.2	233.0	235.8	238.5
87.5°	169.1	177.2	185.3	190.6	193.0	195.5	198.0	200.5
90°	152.0	160.5	169.0	174.6	177.3	180.0	182.8	185.5
92.5°	157.0	165.3	173.7	179.2	181.8	184.5	187.1	189.8
95°	165.4	173.7	182.0	187.5	190.1	192.8	195.4	198.0
97.5°	177.5	185.4	193.3	198.6	201.0	203.5	206.0	208.5
100°	185.5	193.7	201.9	207.1	209.4	211.7	213.9	216.2
102.5°	194.6	202.6	210.6	215.8	218.1	220.5	222.8	225.2
105°	209.1	216.7	224.2	229.3	232.1	234.8	237.5	240.3
107.5°	227.1	234.3	241.4	246.1	248.2	250.3	252.5	254.6
110°	239.3	246.2	253.1	257.7	260.0	262.4	264.7	267.0



TEST NUMBER: P333463

CATALOG NUMBER: S125DIW-S1270D470U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	251.6	258.0	264.5	268.8	271.1	273.3	275.6	277.8
115°	271.1	277.3	283.4	287.5	289.4	291.4	293.4	295.4
117.5°	290.2	296.1	302.1	306.1	308.0	310.0	311.9	313.9
120°	303.5	309.4	315.3	319.1	320.7	322.4	324.1	325.8
122.5°	315.9	321.5	327.0	330.6	332.4	334.1	335.9	337.7
125°	334.8	340.1	345.5	349.0	350.6	352.2	353.9	355.5
127.5°	353.1	358.1	363.2	366.6	368.4	370.2	372.0	373.8
130°	366.2	371.0	375.7	378.9	380.4	381.9	383.4	385.0
132.5°	377.9	382.7	387.4	390.4	391.5	392.7	393.9	395.1
135°	395.4	399.9	404.4	407.3	408.7	410.0	411.3	412.6
137.5°	413.9	418.2	422.4	424.9	425.8	426.7	427.6	428.4
140°	425.4	429.4	433.4	435.9	436.8	437.6	438.5	439.4
142.5°	437.2	440.6	444.0	446.1	447.0	447.9	448.8	449.6
145°	455.8	457.5	459.3	460.7	461.8	462.8	463.9	465.0
147.5°	474.0	474.8	475.6	476.0	475.9	475.9	475.8	475.8
150°	485.9	485.9	485.9	485.9	486.1	486.2	486.4	486.5
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)