

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: P333469-830

Luminaire Tested: **S125DIW-S1270D770U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333469-830
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-S1270D770U830-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7153.5 lumens
Efficiency: N/A
Efficacy: 119.6 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

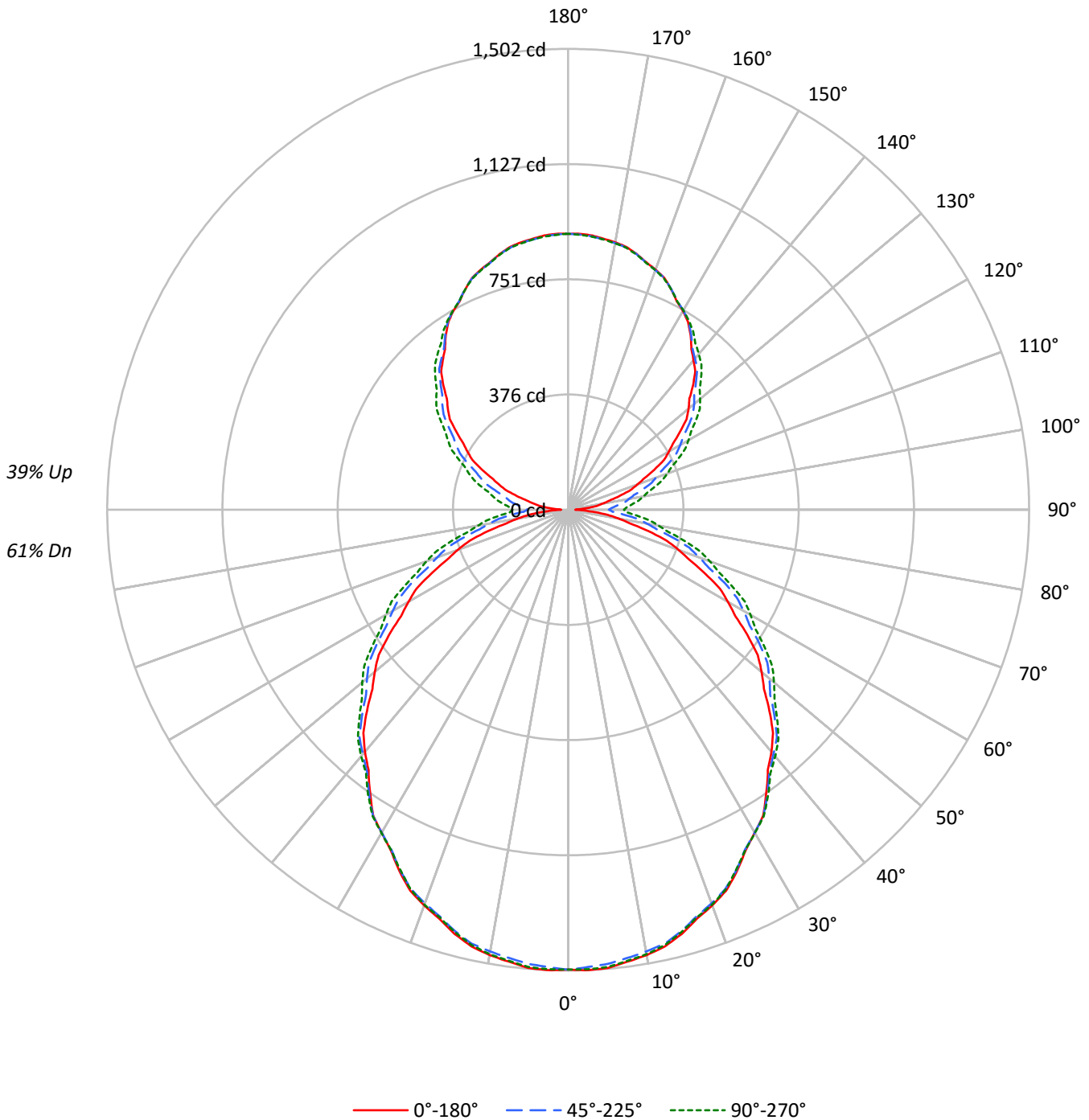
Input Watts (W): 59.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66
1	99	95	90	86	93	88	85	81	77	74	72	67	65	63	57	56	54
2	90	82	75	70	84	77	71	66	67	63	59	58	55	52	50	47	45
3	82	72	64	58	76	67	60	55	59	53	49	51	47	43	44	41	38
4	75	63	55	49	70	60	52	46	52	46	41	45	41	37	39	35	32
5	69	56	48	42	64	53	45	40	47	40	36	41	36	32	35	31	28
6	63	51	42	36	59	48	40	34	42	36	31	37	32	28	32	28	25
7	59	46	37	32	55	43	36	30	38	32	27	33	28	25	29	25	22
8	54	42	33	28	51	39	32	27	35	29	24	31	26	22	27	23	20
9	51	38	30	25	47	36	29	24	32	26	22	28	23	20	25	21	18
10	47	35	27	22	44	33	26	21	29	24	20	26	21	18	23	19	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	2.0
10°-20°	402.4	5.6
20°-30°	598.4	8.4
30°-40°	708.8	9.9
40°-50°	732.8	10.2
50°-60°	675.1	9.4
60°-70°	545.7	7.6
70°-80°	365.5	5.1
80°-90°	191.5	2.7
90°-100°	166.6	2.3
100°-110°	256.2	3.6
110°-120°	353.7	4.9
120°-130°	426.2	6.0
130°-140°	457.2	6.4
140°-150°	438.0	6.1
150°-160°	365.7	5.1
160°-170°	243.1	3.4
170°-180°	85.1	1.2
0°-30°	1142.5	16.0
0°-40°	1851.2	25.9
0°-60°	3259.1	45.6
0°-90°	4361.8	61.0
90°-120°	776.6	10.9
90°-150°	2098.0	29.3
90°-180°	2792.0	39.0
0°-180°	7153.5	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	77	132	168	181	18
95°	65	105	161	197	210	64
105°	173	201	248	280	294	184
115°	310	325	363	388	397	307
125°	446	450	479	500	508	399
135°	575	578	589	607	613	443
145°	695	696	698	705	710	434
155°	793	793	794	797	793	365
165°	863	861	862	864	861	243
175°	897	894	894	898	894	85
180°	899	899	899	899	899	



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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°	46.0	56.6	67.4	78.0	88.8	99.8	111.1	122.4	133.7	145.1	152.8
90°	24.2	35.9	47.6	59.3	71.0	82.9	95.1	107.4	119.5	131.7	140.0
92.5°	38.1	48.6	59.2	69.7	80.2	91.9	104.5	117.3	130.0	142.7	150.9
95°	64.6	73.4	82.2	91.0	99.8	110.6	123.2	135.8	148.5	161.2	169.5
97.5°	92.9	100.7	108.4	116.2	123.9	134.3	147.1	160.0	172.9	185.7	193.6
100°	114.1	121.0	127.8	134.7	141.6	151.2	163.7	176.2	188.6	201.1	209.3
102.5°	137.0	143.9	150.9	157.9	164.9	173.9	185.1	196.3	207.5	218.8	226.9
105°	172.8	178.8	184.7	190.8	196.8	205.1	215.8	226.6	237.3	248.1	255.5
107.5°	212.4	217.6	222.8	228.1	233.3	240.9	251.1	261.2	271.4	281.4	288.4
110°	239.8	244.5	249.2	253.9	258.5	265.7	275.3	284.9	294.5	304.2	310.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	268.9	272.4	276.0	279.6	283.0	289.5	299.1	308.5	318.0	327.4	333.6
115°	310.4	313.3	316.2	319.1	322.0	327.9	336.7	345.4	354.3	363.1	368.8
117.5°	352.0	353.8	355.6	357.3	359.1	364.2	372.5	380.8	389.2	397.5	403.1
120°	378.9	380.6	382.4	384.2	385.9	390.6	398.3	406.0	413.6	421.3	426.9
122.5°	406.8	407.6	408.3	409.1	409.7	414.0	421.6	429.2	437.0	444.6	449.8
125°	446.0	446.6	447.2	447.8	448.4	452.0	458.7	465.4	472.1	478.8	483.7
127.5°	486.5	486.7	486.9	487.1	487.3	490.2	495.7	501.2	506.8	512.4	517.0
130°	511.7	512.2	512.6	513.0	513.5	516.1	521.0	525.9	530.8	535.6	540.1
132.5°	535.7	536.9	538.1	539.3	540.5	542.9	546.3	549.8	553.3	556.8	561.2
135°	575.3	575.9	576.5	577.1	577.7	579.2	581.6	584.1	586.5	589.0	593.2
137.5°	612.5	613.1	613.8	614.4	615.1	616.1	617.6	619.0	620.5	621.9	625.9
140°	635.4	636.2	637.0	637.7	638.5	639.3	640.1	640.8	641.7	642.4	646.4
142.5°	659.5	659.9	660.3	660.6	661.0	661.6	662.2	662.9	663.5	664.2	667.4
145°	694.8	695.1	695.5	695.8	696.1	696.4	696.9	697.4	697.9	698.3	699.9
147.5°	726.1	726.5	726.8	727.2	727.5	727.8	728.2	728.6	729.0	729.3	730.3
150°	748.0	747.8	747.6	747.5	747.3	747.6	748.2	748.9	749.4	750.1	750.1
152.5°	765.9	766.1	766.3	766.6	766.8	766.9	767.2	767.5	767.7	768.0	768.4
155°	793.4	793.4	793.4	793.4	793.4	793.5	793.7	793.8	794.0	794.2	794.8
157.5°	818.1	817.7	817.4	817.1	816.7	816.6	816.8	816.9	817.1	817.3	817.8
160°	832.6	832.2	831.7	831.2	830.8	830.6	830.8	830.9	831.0	831.2	831.9
162.5°	845.6	845.2	844.8	844.5	844.1	844.0	844.0	844.0	844.0	844.1	844.9
165°	862.7	862.4	862.1	861.8	861.5	861.4	861.6	861.7	861.9	862.0	862.6
167.5°	877.3	876.7	876.0	875.4	874.8	874.5	874.5	874.5	874.5	874.5	875.4
170°	885.1	884.5	883.8	883.3	882.6	882.3	882.3	882.3	882.3	882.3	883.3
172.5°	890.7	890.0	889.5	888.8	888.3	887.9	887.9	887.9	887.9	887.9	888.8
175°	897.0	896.4	895.8	895.1	894.5	894.2	894.2	894.2	894.2	894.2	895.1
177.5°	900.2	899.8	899.2	898.7	898.2	898.0	897.8	897.7	897.6	897.4	898.1
180°	899.1	899.1	899.1	899.1	899.1	899.1	899.1	899.1	899.1	899.1	899.1



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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°	160.4	168.1	175.8	180.8	183.1	185.5	187.9	190.3
90°	148.3	156.6	164.9	170.4	173.1	175.9	178.6	181.3
92.5°	159.2	167.5	175.8	181.3	183.9	186.4	189.1	191.7
95°	177.7	186.0	194.3	199.7	202.3	204.9	207.5	210.1
97.5°	201.5	209.3	217.3	222.3	224.8	227.2	229.6	232.1
100°	217.6	225.8	234.1	239.4	241.7	243.9	246.2	248.5
102.5°	235.1	243.2	251.3	256.6	258.9	261.3	263.7	266.1
105°	263.0	270.4	277.9	283.0	285.8	288.5	291.2	294.0
107.5°	295.3	302.3	309.2	313.7	315.7	317.6	319.6	321.6
110°	317.5	324.1	330.8	335.3	337.3	339.5	341.7	343.7



TEST NUMBER: P333469-830

CATALOG NUMBER: S125DIW-S1270D770U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	339.8	345.9	352.1	356.2	358.2	360.1	362.2	364.2
115°	374.6	380.2	386.0	389.7	391.5	393.3	395.1	396.9
117.5°	408.8	414.4	420.2	423.8	425.4	427.0	428.6	430.2
120°	432.4	437.9	443.5	447.0	448.3	449.6	450.9	452.3
122.5°	454.9	460.1	465.2	468.5	470.0	471.5	473.0	474.4
125°	488.6	493.5	498.4	501.6	503.1	504.6	506.1	507.6
127.5°	521.7	526.4	531.0	534.2	535.7	537.3	538.9	540.5
130°	544.5	548.9	553.4	556.2	557.5	558.8	560.2	561.5
132.5°	565.5	570.0	574.4	577.1	578.0	578.9	579.9	580.8
135°	597.5	601.7	606.0	608.6	609.6	610.7	611.6	612.7
137.5°	630.0	634.0	638.1	640.4	640.9	641.4	642.0	642.4
140°	650.3	654.1	658.1	660.3	660.8	661.4	661.9	662.4
142.5°	670.7	673.9	677.2	679.1	679.7	680.1	680.7	681.2
145°	701.5	703.2	704.8	706.1	706.9	707.8	708.6	709.5
147.5°	731.1	732.1	732.9	733.1	732.7	732.3	731.8	731.3
150°	750.1	750.1	750.1	750.1	750.1	750.1	750.2	750.2
152.5°	768.7	769.1	769.5	769.4	768.9	768.5	767.9	767.4
155°	795.4	796.0	796.6	796.5	795.8	795.0	794.2	793.4
157.5°	818.5	819.1	819.7	819.5	818.5	817.5	816.4	815.4
160°	832.5	833.1	833.7	833.7	832.8	832.1	831.3	830.6
162.5°	845.6	846.3	847.1	847.1	846.1	845.2	844.3	843.4
165°	863.3	863.9	864.5	864.3	863.5	862.5	861.6	860.6
167.5°	876.4	877.3	878.2	878.2	877.2	876.3	875.3	874.3
170°	884.2	885.1	886.1	886.0	884.9	883.8	882.7	881.7
172.5°	889.8	890.7	891.6	891.6	890.7	889.7	888.7	887.8
175°	896.1	897.0	898.0	897.9	896.7	895.7	894.6	893.5
177.5°	898.9	899.7	900.4	900.3	899.5	898.6	897.8	896.8
180°	899.1	899.1	899.1	899.1	899.1	899.1	899.1	899.1

(END OF REPORT)