

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: P333318-830

Luminaire Tested: **S125DIP-S1270D810U830-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333318-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S1270D810U830-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7385.9 lumens
Efficiency: N/A
Efficacy: 121.7 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: General Diffuse

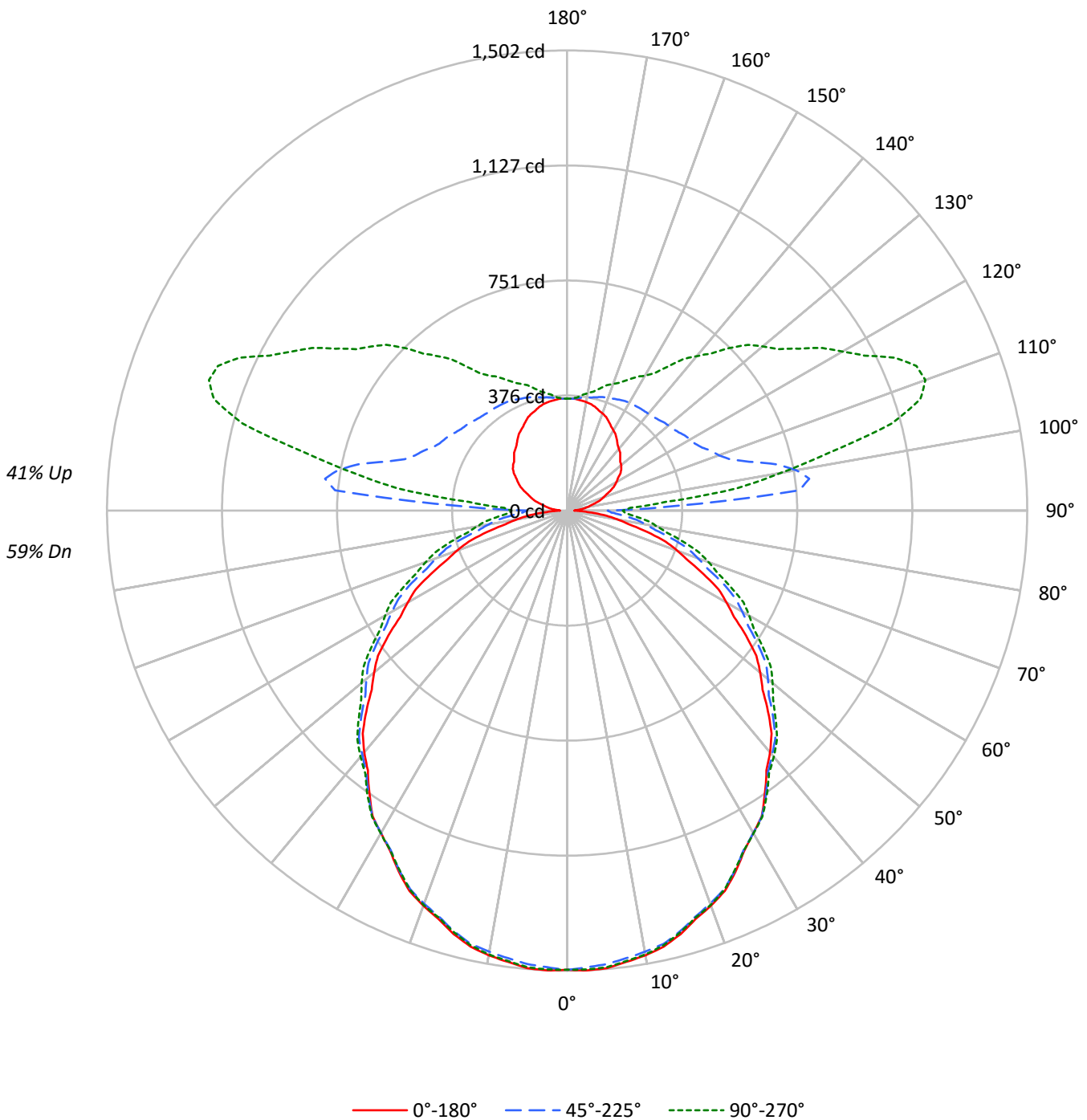
Input Watts (W): 60.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64
1	99	94	90	86	92	88	84	81	76	73	71	65	63	61	56	54	53
2	90	82	75	70	83	76	71	66	66	62	58	57	54	51	48	46	44
3	82	72	64	58	76	67	60	54	58	53	48	50	46	42	43	39	37
4	75	63	55	49	69	59	52	46	52	46	41	45	40	36	38	34	32
5	68	56	48	41	63	53	45	39	46	40	35	40	35	31	34	30	27
6	63	50	42	36	59	47	40	34	41	35	31	36	31	27	31	27	24
7	58	46	37	31	54	43	35	30	38	31	27	33	28	24	28	24	21
8	54	41	33	28	50	39	32	27	34	28	24	30	25	21	26	22	19
9	50	38	30	25	47	36	29	24	31	26	21	28	23	19	24	20	17
10	47	35	27	22	44	33	26	21	29	23	19	25	21	17	22	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	1.9
10°-20°	402.4	5.4
20°-30°	598.4	8.1
30°-40°	708.8	9.6
40°-50°	732.8	9.9
50°-60°	675.1	9.1
60°-70°	545.7	7.4
70°-80°	365.5	4.9
80°-90°	191.6	2.6
90°-100°	371.3	5.0
100°-110°	648.0	8.8
110°-120°	587.1	7.9
120°-130°	463.0	6.3
130°-140°	360.7	4.9
140°-150°	265.0	3.6
150°-160°	184.7	2.5
160°-170°	108.8	1.5
170°-180°	35.4	0.5
0°-30°	1142.5	15.5
0°-40°	1851.2	25.1
0°-60°	3259.1	44.1
0°-90°	4361.9	59.1
90°-120°	1606.4	21.7
90°-150°	2695.1	36.5
90°-180°	3024.0	40.9
0°-180°	7385.9	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	182	17
95°	44	130	760	435	323	41
105°	96	154	615	1161	1097	102
115°	158	200	486	1007	1180	155
125°	212	248	445	792	922	188
135°	245	293	420	647	750	190
145°	283	322	410	518	575	177
155°	321	346	399	451	471	148
165°	351	360	383	406	413	99
175°	365	365	368	372	371	35
180°	366	366	366	366	366	



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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	67.3	78.0	88.8	99.9	111.1	122.5	133.8	145.2	152.9
90°	24.2	35.4	47.3	59.3	71.2	83.4	95.3	107.9	119.7	132.3	140.5
92.5°	30.2	41.8	57.6	76.4	98.8	130.7	182.4	261.3	345.8	353.4	315.4
95°	43.5	52.7	67.0	83.6	108.3	151.3	241.3	414.5	629.0	760.3	753.4
97.5°	57.7	66.3	78.0	93.8	116.0	149.0	212.0	341.5	565.0	797.2	915.2
100°	67.8	76.1	85.9	100.9	121.7	152.5	205.7	311.9	508.1	759.5	950.6
102.5°	79.0	86.1	94.9	109.9	129.0	158.8	207.1	297.7	464.8	698.8	920.9
105°	96.5	101.7	110.7	123.2	140.3	168.4	210.7	286.0	418.9	615.1	833.2
107.5°	113.6	119.5	127.5	138.0	154.7	180.1	220.9	286.5	396.3	556.4	745.3
110°	126.0	131.4	138.3	148.8	163.8	189.5	228.8	288.8	387.1	527.4	694.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	139.6	144.1	149.7	159.4	173.6	198.2	236.1	292.9	382.7	508.6	655.2
115°	157.7	161.5	166.0	174.8	188.2	212.0	247.8	299.0	378.2	486.3	610.8
117.5°	173.9	177.6	181.4	189.6	203.7	226.2	260.0	307.0	376.5	471.6	581.1
120°	185.7	188.9	192.8	200.4	214.0	236.6	269.9	312.8	377.0	463.4	564.0
122.5°	196.9	199.0	201.8	208.9	223.0	245.3	278.3	319.2	376.7	455.7	548.5
125°	212.3	213.4	216.7	223.0	236.7	259.0	289.8	328.1	377.3	445.1	526.9
127.5°	223.0	224.9	229.2	237.3	251.9	273.6	302.4	336.9	379.6	436.5	506.5
130°	230.6	232.5	238.1	247.3	262.5	283.8	311.2	343.8	381.5	431.8	493.9
132.5°	235.4	238.1	245.2	255.8	271.8	292.8	319.1	348.8	383.1	427.1	482.1
135°	244.7	247.3	255.8	267.3	282.4	303.3	328.4	355.1	384.6	420.0	466.3
137.5°	256.5	258.4	266.4	278.0	292.8	313.8	335.6	360.1	387.1	415.7	453.1
140°	262.3	264.6	273.4	285.2	299.2	319.2	340.9	363.4	387.3	412.7	445.7
142.5°	270.6	271.9	279.9	291.5	304.6	323.3	343.6	364.5	387.0	410.9	440.0
145°	283.0	284.2	291.2	301.1	314.1	330.9	350.1	368.4	388.4	409.7	433.5
147.5°	294.5	295.4	301.7	311.3	322.8	337.7	354.5	371.2	389.1	407.8	427.8
150°	302.2	303.6	308.8	318.4	328.7	341.2	357.4	372.9	389.1	406.0	423.8
152.5°	310.4	311.3	315.8	324.2	334.0	345.3	360.3	374.1	388.5	403.7	419.6
155°	321.3	321.3	325.7	333.1	340.4	350.8	363.4	375.1	386.9	399.4	412.7
157.5°	331.0	330.9	334.4	340.7	347.2	355.1	365.8	375.9	385.0	395.0	406.2
160°	337.5	336.8	339.8	344.9	350.8	357.4	367.0	375.9	383.2	392.1	401.0
162.5°	342.8	342.1	345.1	349.6	354.3	359.8	368.2	375.2	381.4	388.5	396.2
165°	350.8	349.3	351.6	355.2	358.2	362.6	368.4	374.4	378.8	383.2	389.1
167.5°	356.1	355.3	356.7	358.7	360.8	363.6	368.4	372.6	374.7	378.1	382.2
170°	359.7	358.9	359.7	361.1	362.6	364.8	368.4	371.5	372.9	375.1	378.1
172.5°	362.0	360.7	361.4	362.9	363.7	364.8	367.9	370.2	370.5	371.6	373.9
175°	364.8	363.4	364.1	364.8	364.8	364.8	367.0	368.4	367.8	367.8	368.4
177.5°	366.1	365.0	365.0	365.5	365.0	365.0	366.1	366.7	365.5	365.5	366.1
180°	365.5	365.5	365.5	365.5	365.5	365.5	365.5	365.5	365.5	365.5	365.5



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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°	160.5	168.1	175.8	181.1	183.3	185.6	188.0	190.3
90°	148.8	157.0	165.3	171.6	173.9	176.3	179.3	181.5
92.5°	260.9	232.3	216.1	210.0	202.8	203.4	204.6	205.8
95°	651.5	546.7	463.3	406.0	356.0	336.2	332.6	323.1
97.5°	902.8	831.0	749.7	668.1	624.8	585.8	566.6	559.4
100°	1014.3	985.0	916.0	843.7	794.8	743.7	718.4	708.6
102.5°	1048.5	1077.3	1047.5	999.9	947.5	911.7	884.1	877.2
105°	1016.5	1124.1	1163.0	1159.3	1138.0	1116.0	1103.5	1097.0
107.5°	926.2	1067.4	1157.2	1199.9	1213.9	1215.8	1212.9	1209.0
110°	859.7	1006.0	1116.1	1183.0	1218.4	1234.7	1242.2	1244.4



TEST NUMBER: P333318-830

CATALOG NUMBER: S125DIP-S1270D810U830-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	806.2	945.0	1056.1	1134.1	1184.8	1211.2	1226.2	1233.8
115°	738.2	858.4	965.2	1049.4	1108.9	1146.2	1168.8	1180.3
117.5°	691.4	795.3	887.9	965.4	1025.1	1063.9	1086.7	1094.8
120°	665.4	759.4	846.0	914.6	971.1	1008.4	1030.3	1038.1
122.5°	644.2	731.5	809.0	873.4	924.0	958.4	980.2	987.5
125°	614.0	694.3	763.6	820.1	863.1	894.9	912.8	921.7
127.5°	582.8	657.8	722.5	775.5	814.8	843.4	860.6	865.7
130°	564.0	633.4	695.5	746.5	784.9	811.0	827.3	833.4
132.5°	544.6	609.8	666.7	715.8	753.9	779.7	794.6	801.0
135°	517.7	572.8	624.2	669.1	703.2	729.2	744.0	750.1
137.5°	495.4	540.4	583.4	621.7	652.1	675.4	689.0	695.1
140°	482.5	520.8	558.3	591.6	620.2	640.6	653.1	658.1
142.5°	471.5	503.9	536.1	565.1	589.6	607.1	618.9	623.3
145°	458.0	482.5	506.9	528.3	547.3	561.1	570.5	574.8
147.5°	446.3	465.4	483.5	499.1	513.7	524.2	529.6	531.5
150°	440.0	456.2	470.1	483.6	495.0	504.2	507.5	508.5
152.5°	434.0	448.6	461.4	471.6	481.1	488.1	491.2	492.0
155°	425.3	437.1	447.3	455.4	462.8	468.0	470.1	470.9
157.5°	416.4	426.1	434.0	440.5	446.2	450.4	452.5	452.3
160°	410.5	417.8	425.3	430.4	435.5	439.2	440.7	440.0
162.5°	404.0	410.8	417.0	421.5	425.6	428.6	429.0	428.8
165°	395.0	400.2	404.6	408.3	411.2	412.7	412.7	412.7
167.5°	386.4	389.8	393.2	395.9	397.4	398.7	398.1	397.9
170°	381.7	384.0	386.2	387.7	389.1	389.8	389.8	389.1
172.5°	376.5	378.6	380.3	381.2	381.4	382.8	381.6	380.9
175°	370.7	370.7	372.2	372.2	372.2	372.9	371.5	370.7
177.5°	366.7	367.3	367.3	367.3	366.7	367.3	365.5	365.5
180°	365.5	365.5	365.5	365.5	365.5	365.5	365.5	365.5

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