

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: P333298-830

Luminaire Tested: **S125DIP-S1270D365U830-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333298-830  
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: S125DIP-S1270D365U830-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 365 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6023.8 lumens  
Efficiency: N/A  
Efficacy: 121.0 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

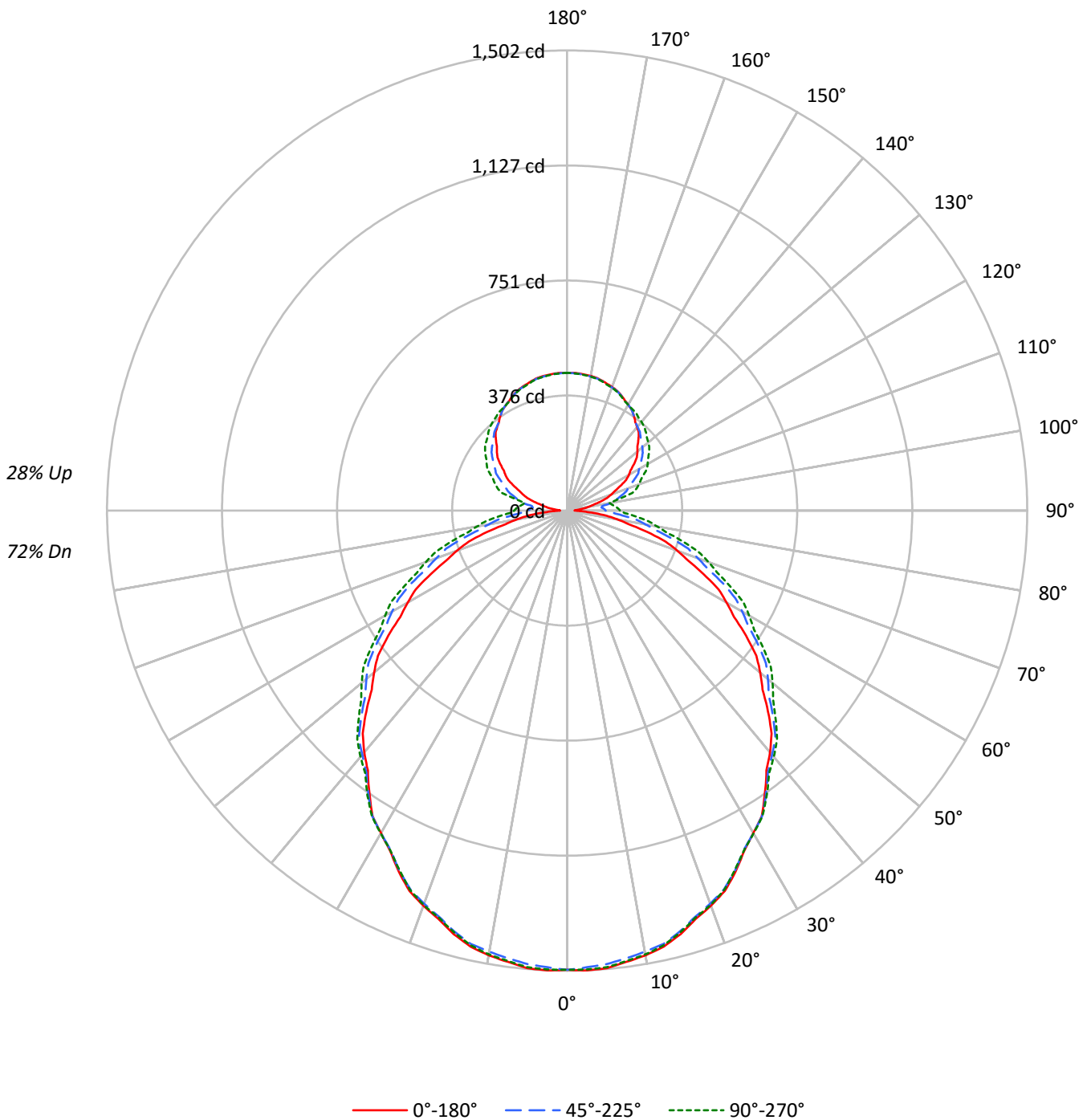
Input Watts (W): 49.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333298-830

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### Luminous Intensity Polar Plot





TEST NUMBER: P333298-830

CATALOG NUMBER: S125DIP-S1270D365U830-4F0-1E-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	0
RCR																				
0	112	112	112	112	107	107	107	107	96	96	96		86	86	86		77	77	77	72
1	102	97	92	88	96	92	88	84	83	79	77		74	72	69		66	64	63	59
2	92	84	77	71	87	80	74	68	72	67	63		64	61	57		58	55	52	48
3	84	74	65	59	79	70	63	57	63	57	52		57	52	48		51	47	44	40
4	77	65	56	50	72	62	54	48	56	49	44		50	45	41		45	41	37	34
5	70	58	49	43	66	55	47	41	50	43	38		45	40	35		41	36	33	30
6	65	52	43	37	61	50	42	36	45	38	33		41	35	31		37	32	29	26
7	60	47	38	32	57	45	37	31	41	34	29		37	31	27		34	29	25	23
8	56	43	34	29	53	41	33	28	37	31	26		34	28	24		31	26	23	20
9	52	39	31	26	49	37	30	25	34	28	23		31	26	22		28	24	20	18
10	49	36	28	23	46	34	27	23	32	25	21		29	24	20		26	22	19	17

**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	2.4
10°-20°	402.4	6.7
20°-30°	598.4	9.9
30°-40°	708.8	11.8
40°-50°	732.8	12.2
50°-60°	675.1	11.2
60°-70°	545.7	9.1
70°-80°	365.5	6.1
80°-90°	190.5	3.2
90°-100°	122.7	2.0
100°-110°	179.1	3.0
110°-120°	235.1	3.9
120°-130°	264.1	4.4
130°-140°	265.0	4.4
140°-150°	239.2	4.0
150°-160°	191.4	3.2
160°-170°	123.8	2.1
170°-180°	42.7	0.7
0°-30°	1142.5	19.0
0°-40°	1851.2	30.7
0°-60°	3259.1	54.1
0°-90°	4360.8	72.4
90°-120°	536.9	8.9
90°-150°	1305.2	21.7
90°-180°	1663.0	27.6
0°-180°	6023.8	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	74	126	160	173	16
95°	38	75	113	145	157	39
105°	111	137	180	208	219	118
115°	193	206	243	267	275	191
125°	267	270	298	319	326	239
135°	329	330	339	357	363	254
145°	380	379	379	386	390	237
155°	416	415	415	416	414	192
165°	439	438	438	440	437	124
175°	449	448	448	450	447	43
180°	449	449	449	449	449	



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CATALOG NUMBER: S125DIP-S1270D365U830-4F0-1E-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	56.5	67.0	77.7	88.2	99.1	110.3	121.5	132.7	143.9	151.5
90°	23.8	34.9	45.9	56.9	68.1	79.4	91.0	102.5	114.2	125.8	133.7
92.5°	26.3	35.5	44.8	54.0	63.3	73.8	85.7	97.5	109.3	121.1	128.8
95°	38.1	46.4	54.7	62.9	71.2	79.5	87.8	96.0	104.3	112.6	120.2
97.5°	57.0	65.0	73.0	81.2	89.2	95.8	100.9	106.0	111.2	116.3	121.1
100°	71.8	78.9	86.0	93.0	100.1	109.1	119.8	130.5	141.3	152.0	147.9
102.5°	86.9	93.5	100.1	106.7	113.4	121.9	132.2	142.6	153.0	163.3	167.9
105°	111.2	116.7	122.2	127.7	133.3	140.9	150.7	160.5	170.3	180.1	186.6
107.5°	136.5	140.9	145.3	149.8	154.2	161.3	170.8	180.3	189.9	199.4	205.9
110°	152.9	156.8	160.7	164.7	168.5	175.1	184.5	193.8	203.0	212.4	218.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	169.4	172.8	176.1	179.4	182.7	188.8	197.7	206.7	215.7	224.7	230.4
115°	192.7	195.4	198.0	200.7	203.3	209.0	217.5	226.1	234.7	243.2	248.8
117.5°	216.9	218.4	219.9	221.4	222.8	227.7	236.1	244.4	252.7	261.0	266.2
120°	232.9	233.8	234.7	235.6	236.5	240.8	248.5	256.3	264.0	271.7	277.2
122.5°	245.8	246.6	247.3	248.1	248.8	252.9	260.2	267.6	274.9	282.3	287.4
125°	267.4	267.6	267.8	268.0	268.2	271.5	278.1	284.6	291.2	297.7	302.6
127.5°	286.8	286.8	286.9	286.9	287.0	289.6	295.0	300.3	305.6	310.9	315.6
130°	299.6	299.6	299.7	299.7	299.7	302.1	306.8	311.4	316.0	320.7	325.1
132.5°	311.2	311.6	312.0	312.3	312.6	314.5	317.9	321.3	324.6	328.0	332.5
135°	329.1	329.2	329.3	329.5	329.6	330.7	332.8	335.0	337.1	339.2	343.4
137.5°	345.5	345.6	345.8	345.9	346.0	346.6	347.6	348.6	349.5	350.5	354.4
140°	355.3	355.4	355.6	355.7	355.9	356.1	356.4	356.6	356.8	357.1	360.8
142.5°	365.1	365.0	364.9	364.7	364.5	364.5	364.7	364.8	365.0	365.1	368.3
145°	379.7	379.5	379.3	379.1	378.9	378.8	378.8	378.8	378.8	378.8	380.5
147.5°	390.8	390.8	390.8	390.7	390.7	390.7	390.8	390.9	391.0	391.1	391.7
150°	398.8	398.7	398.5	398.3	398.2	398.2	398.3	398.5	398.7	398.8	399.0
152.5°	406.5	406.2	405.9	405.6	405.2	405.1	405.3	405.5	405.6	405.8	405.9
155°	416.5	416.0	415.6	415.1	414.7	414.5	414.7	414.8	415.0	415.1	415.4
157.5°	424.1	423.9	423.6	423.3	423.1	422.9	422.9	423.0	423.0	423.0	423.2
160°	429.4	429.0	428.6	428.1	427.7	427.5	427.5	427.6	427.7	427.8	428.1
162.5°	433.8	433.3	432.8	432.3	432.0	431.8	431.9	431.9	432.0	432.1	432.4
165°	439.4	439.0	438.6	438.1	437.7	437.5	437.5	437.6	437.7	437.8	438.2
167.5°	443.7	443.3	442.8	442.3	441.9	441.7	441.8	441.9	442.0	442.0	442.5
170°	446.1	445.6	445.1	444.6	444.0	443.8	443.9	443.9	444.0	444.1	444.7
172.5°	447.7	447.2	446.7	446.2	445.6	445.4	445.5	445.7	445.8	446.0	446.5
175°	449.4	449.0	448.6	448.1	447.7	447.5	447.5	447.6	447.7	447.8	448.4
177.5°	450.3	449.9	449.5	449.2	448.8	448.7	448.7	448.8	448.8	448.9	449.3
180°	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4



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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°	159.1	166.6	174.3	179.2	181.5	183.9	186.2	188.5
90°	141.6	149.5	157.3	162.6	165.0	167.6	170.0	172.6
92.5°	136.4	144.0	151.7	156.7	159.0	161.4	163.8	166.2
95°	127.7	135.3	142.8	147.8	150.1	152.3	154.6	156.9
97.5°	125.8	130.6	135.4	138.9	141.1	143.4	145.5	147.8
100°	143.6	139.5	135.3	134.0	135.7	137.4	139.0	140.7
102.5°	172.3	176.8	181.3	182.1	179.0	175.9	172.9	169.8
105°	193.1	199.7	206.2	210.6	212.8	215.0	217.3	219.4
107.5°	212.4	218.9	225.4	229.5	231.3	233.1	234.9	236.7
110°	224.3	230.3	236.3	240.4	242.8	245.2	247.5	249.9





TEST NUMBER: P333298-830

CATALOG NUMBER: S125DIP-S1270D365U830-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	236.0	241.7	247.3	251.3	253.4	255.6	257.8	260.0
115°	254.4	260.0	265.5	269.1	270.6	272.1	273.6	275.1
117.5°	271.4	276.5	281.7	285.3	287.3	289.4	291.3	293.4
120°	282.6	287.9	293.4	296.9	298.5	300.1	301.6	303.2
122.5°	292.6	297.7	302.8	306.1	307.7	309.2	310.8	312.3
125°	307.6	312.5	317.4	320.6	322.0	323.4	324.8	326.2
127.5°	320.3	324.9	329.6	332.6	333.9	335.3	336.7	338.0
130°	329.4	333.8	338.1	340.9	342.1	343.5	344.7	345.9
132.5°	337.1	341.6	346.1	348.8	349.9	350.9	351.9	352.9
135°	347.4	351.6	355.6	358.3	359.5	360.7	361.8	363.1
137.5°	358.3	362.1	366.0	368.4	369.4	370.2	371.2	372.1
140°	364.6	368.3	372.0	374.4	375.2	376.1	376.9	377.8
142.5°	371.4	374.5	377.6	379.6	380.4	381.3	382.1	383.0
145°	382.2	383.9	385.7	386.9	387.8	388.6	389.6	390.4
147.5°	392.3	392.9	393.5	393.9	393.9	394.0	394.0	394.1
150°	399.1	399.3	399.4	399.4	399.1	398.8	398.5	398.3
152.5°	406.0	406.1	406.3	406.1	405.7	405.2	404.7	404.3
155°	415.6	415.8	416.0	415.8	415.3	414.6	414.1	413.5
157.5°	423.5	423.7	424.0	423.8	423.2	422.5	422.0	421.4
160°	428.4	428.7	429.0	428.9	428.2	427.6	427.1	426.5
162.5°	432.9	433.3	433.8	433.6	432.9	432.3	431.7	431.0
165°	438.7	439.1	439.6	439.5	438.9	438.3	437.7	437.2
167.5°	443.1	443.6	444.1	444.0	443.4	442.7	442.1	441.4
170°	445.3	445.9	446.5	446.5	445.8	445.2	444.4	443.7
172.5°	447.0	447.6	448.1	448.1	447.4	446.7	446.0	445.4
175°	448.9	449.6	450.2	450.2	449.4	448.7	448.1	447.4
177.5°	449.8	450.2	450.5	450.5	450.1	449.6	449.1	448.7
180°	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4

(END OF REPORT)