

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: P333300-830

Luminaire Tested: **S125DIP-S1270D365U830-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333300-830  
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-S1270D365U830-4F0-1E-UDD-D4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5882.6 lumens  
Efficiency: N/A  
Efficacy: 118.1 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

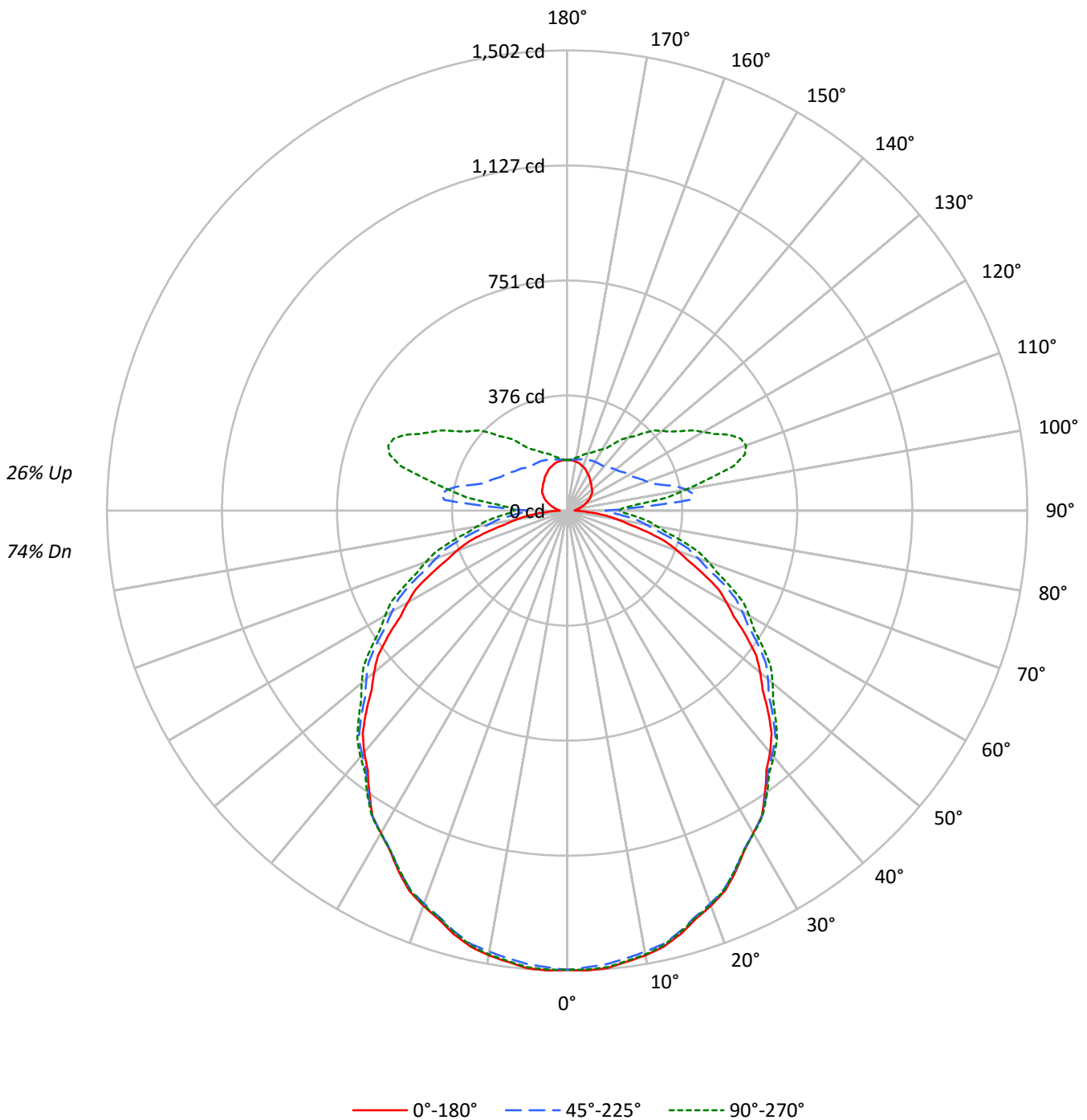
Input Watts (W): 49.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																				
0	113	113	113	113	107	107	107	107	97	97	97		87	87	87		78	78	78	74
1	102	97	93	89	97	92	88	85	83	80	77		75	73	70		67	66	64	60
2	93	84	77	72	88	80	74	69	72	68	63		65	61	58		59	56	53	50
3	84	74	66	59	80	70	63	57	64	58	53		57	53	49		52	48	45	41
4	77	65	57	50	73	62	54	48	56	50	45		51	46	41		46	42	38	35
5	71	58	49	43	67	55	47	41	50	44	39		46	40	36		41	37	33	30
6	65	52	43	37	62	50	42	36	45	39	34		41	36	31		38	33	29	27
7	60	47	39	33	57	45	37	32	41	35	30		38	32	28		34	29	26	23
8	56	43	35	29	53	41	33	28	38	31	26		34	29	25		31	27	23	21
9	52	39	31	26	50	38	30	25	35	28	24		32	26	22		29	24	21	19
10	49	36	28	23	46	35	28	23	32	26	21		29	24	20		27	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	6.8
20°-30°	598.4	10.2
30°-40°	708.8	12.0
40°-50°	732.8	12.5
50°-60°	675.1	11.5
60°-70°	545.7	9.3
70°-80°	365.5	6.2
80°-90°	190.5	3.2
90°-100°	226.1	3.8
100°-110°	335.9	5.7
110°-120°	294.2	5.0
120°-130°	225.6	3.8
130°-140°	170.2	2.9
140°-150°	121.2	2.1
150°-160°	83.5	1.4
160°-170°	49.2	0.8
170°-180°	16.0	0.3
0°-30°	1142.5	19.4
0°-40°	1851.2	31.5
0°-60°	3259.1	55.4
0°-90°	4360.8	74.1
90°-120°	856.1	14.6
90°-150°	1373.2	23.3
90°-180°	1522.0	25.9
0°-180°	5882.6	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	172	16
95°	30	90	402	272	228	27
105°	51	91	322	585	562	54
115°	76	102	251	501	584	75
125°	99	115	220	389	452	88
135°	112	134	196	309	360	87
145°	129	146	185	238	267	80
155°	145	156	181	204	213	67
165°	158	163	173	184	186	45
175°	165	165	166	168	168	16
180°	165	165	165	165	165	



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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°	45.9	56.5	67.0	77.6	88.2	99.1	110.3	121.5	132.7	143.9	151.5
90°	23.8	34.6	45.7	56.8	68.0	79.5	90.9	102.6	114.0	125.8	133.7
92.5°	25.3	35.7	48.3	62.0	77.4	97.6	127.2	169.1	213.6	223.2	210.0
95°	30.1	38.9	50.0	62.2	78.0	102.8	149.6	233.9	337.1	402.4	403.2
97.5°	35.6	43.6	53.2	64.5	78.7	98.7	133.0	197.4	304.3	415.1	472.2
100°	39.5	47.0	55.2	65.7	78.9	97.6	127.3	181.1	275.5	394.8	484.9
102.5°	43.9	50.6	58.1	68.3	80.4	98.4	125.8	172.4	253.4	364.9	468.8
105°	50.9	56.1	63.0	71.5	82.1	99.0	123.4	162.9	228.3	322.3	424.4
107.5°	57.6	62.8	68.8	76.0	86.0	101.2	124.8	159.7	214.4	291.9	380.8
110°	62.6	67.2	72.4	79.4	88.2	103.5	126.2	158.3	207.8	276.3	355.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	68.7	72.5	76.7	82.8	91.0	105.4	127.4	158.0	203.4	265.1	334.7
115°	76.1	79.1	82.4	87.7	94.9	108.6	129.4	157.2	197.7	251.2	310.7
117.5°	82.7	85.1	87.7	92.2	99.3	112.2	131.9	157.5	193.3	240.7	293.2
120°	87.9	89.9	92.3	96.2	102.8	115.5	134.6	158.2	191.2	234.4	283.0
122.5°	92.4	93.6	95.1	98.6	105.2	117.3	136.3	158.7	188.7	228.4	273.1
125°	99.2	99.5	100.9	103.5	109.5	121.3	138.7	159.7	185.5	219.7	259.6
127.5°	103.2	103.9	105.7	109.1	115.6	126.8	142.7	161.3	183.4	212.1	246.4
130°	106.7	107.4	109.7	113.7	120.4	131.1	146.0	163.2	182.9	208.0	238.7
132.5°	108.2	109.3	112.5	117.3	124.5	134.9	148.7	164.1	181.5	203.3	230.7
135°	112.2	113.2	116.9	121.9	128.6	138.6	151.1	164.4	179.0	196.3	219.5
137.5°	117.3	118.1	121.6	126.7	133.3	142.9	153.4	165.0	178.0	191.4	210.5
140°	119.4	120.4	124.4	129.7	136.0	145.2	155.1	165.5	176.5	188.1	205.1
142.5°	123.1	123.6	127.1	132.1	137.9	146.3	155.5	165.0	175.2	186.1	200.9
145°	128.8	129.0	132.1	136.4	142.0	149.6	158.3	166.5	175.5	185.2	196.8
147.5°	133.1	133.5	136.4	140.7	145.9	152.6	160.2	167.8	175.9	184.4	193.7
150°	136.6	137.2	139.6	143.9	148.5	154.2	161.6	168.5	175.9	183.5	191.5
152.5°	140.3	140.7	142.8	146.6	151.0	156.1	162.9	169.1	175.6	182.5	189.6
155°	145.2	145.2	147.2	150.5	153.9	158.5	164.2	169.6	174.8	180.6	186.5
157.5°	149.7	149.6	151.2	154.0	156.9	160.5	165.3	169.8	174.0	178.5	183.6
160°	152.6	152.2	153.5	155.9	158.5	161.6	165.9	169.8	173.2	177.2	181.3
162.5°	155.0	154.7	156.0	158.1	160.1	162.6	166.5	169.7	172.4	175.6	179.1
165°	158.5	157.9	158.9	160.5	161.9	163.9	166.5	169.2	171.3	173.2	175.9
167.5°	161.0	160.6	161.3	162.1	163.1	164.4	166.5	168.4	169.4	170.9	172.8
170°	162.6	162.2	162.6	163.2	163.9	164.9	166.5	167.9	168.5	169.6	170.9
172.5°	163.6	163.1	163.3	164.0	164.4	164.9	166.3	167.4	167.5	168.0	169.0
175°	164.9	164.2	164.6	164.9	164.9	164.9	165.9	166.5	166.3	166.3	166.5
177.5°	165.5	164.9	164.9	165.2	164.9	164.9	165.5	165.8	165.2	165.2	165.5
180°	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2



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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	174.2	179.3	181.5	183.8	186.2	188.4
90°	141.5	149.4	157.2	162.8	165.0	167.3	169.9	172.2
92.5°	189.4	180.4	177.0	176.9	174.9	176.3	178.2	179.9
95°	361.2	317.7	283.9	260.7	239.3	231.6	231.2	228.2
97.5°	470.3	441.7	408.6	374.3	355.9	339.5	332.1	330.0
100°	517.5	508.0	480.6	450.3	429.3	407.3	396.9	393.5
102.5°	530.1	546.8	536.9	517.7	495.1	480.0	468.6	466.6
105°	511.0	563.1	584.3	585.0	576.6	568.0	563.5	561.8
107.5°	466.2	533.6	577.7	599.3	606.7	608.7	608.5	607.8
110°	433.2	502.8	555.9	588.4	605.8	614.3	619.0	621.2





TEST NUMBER: P333300-830

CATALOG NUMBER: S125DIP-S1270D365U830-4F0-1E-UDD-D4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	406.1	472.2	525.7	563.2	587.3	600.5	608.6	613.2
115°	371.6	429.0	480.5	520.8	548.7	566.7	578.0	584.3
117.5°	346.1	396.2	441.0	478.2	506.4	525.2	536.7	541.5
120°	331.8	377.3	419.5	452.6	479.2	497.2	508.1	512.7
122.5°	319.4	361.7	399.6	430.7	454.7	471.3	482.2	486.6
125°	301.7	340.9	375.1	402.6	422.8	438.1	447.1	452.0
127.5°	283.5	320.1	351.9	377.8	396.6	410.6	419.3	422.7
130°	272.9	306.7	337.2	362.0	380.3	392.9	401.2	404.8
132.5°	261.5	293.5	321.6	345.4	363.4	375.9	383.3	387.0
135°	245.1	272.3	297.8	319.8	336.1	348.7	356.4	360.0
137.5°	231.7	254.1	275.7	294.5	308.9	320.2	327.0	330.5
140°	223.7	242.9	261.8	278.2	291.9	301.8	308.1	311.1
142.5°	216.8	233.1	249.4	263.7	275.4	284.1	290.1	292.8
145°	208.8	220.7	232.7	243.2	252.5	259.5	264.4	267.0
147.5°	202.3	211.2	219.7	227.1	233.9	239.0	241.8	243.0
150°	198.9	206.2	212.5	218.7	224.0	228.3	230.0	230.6
152.5°	196.2	202.7	208.5	213.2	217.4	220.7	222.2	222.5
155°	192.2	197.6	202.2	205.9	209.2	211.5	212.5	212.8
157.5°	188.2	192.6	196.2	199.1	201.7	203.6	204.5	204.4
160°	185.6	188.9	192.2	194.5	196.9	198.5	199.2	198.9
162.5°	182.6	185.7	188.5	190.6	192.4	193.7	193.9	193.8
165°	178.5	180.9	182.9	184.5	185.9	186.5	186.5	186.5
167.5°	174.7	176.3	177.8	179.0	179.6	180.2	179.9	179.8
170°	172.6	173.5	174.6	175.2	175.9	176.3	176.3	175.9
172.5°	170.1	171.2	171.9	172.3	172.4	173.1	172.5	172.1
175°	167.6	167.6	168.2	168.2	168.2	168.5	167.9	167.6
177.5°	165.8	166.0	166.0	166.0	165.8	166.0	165.2	165.2
180°	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2

(END OF REPORT)