

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: P333298-840

Luminaire Tested: **S125DIP-S1270D365U840-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333298-840  
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-S1270D365U840-4F0-1E-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: 6454.0 lumens  
Efficiency: N/A  
Efficacy: 129.6 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

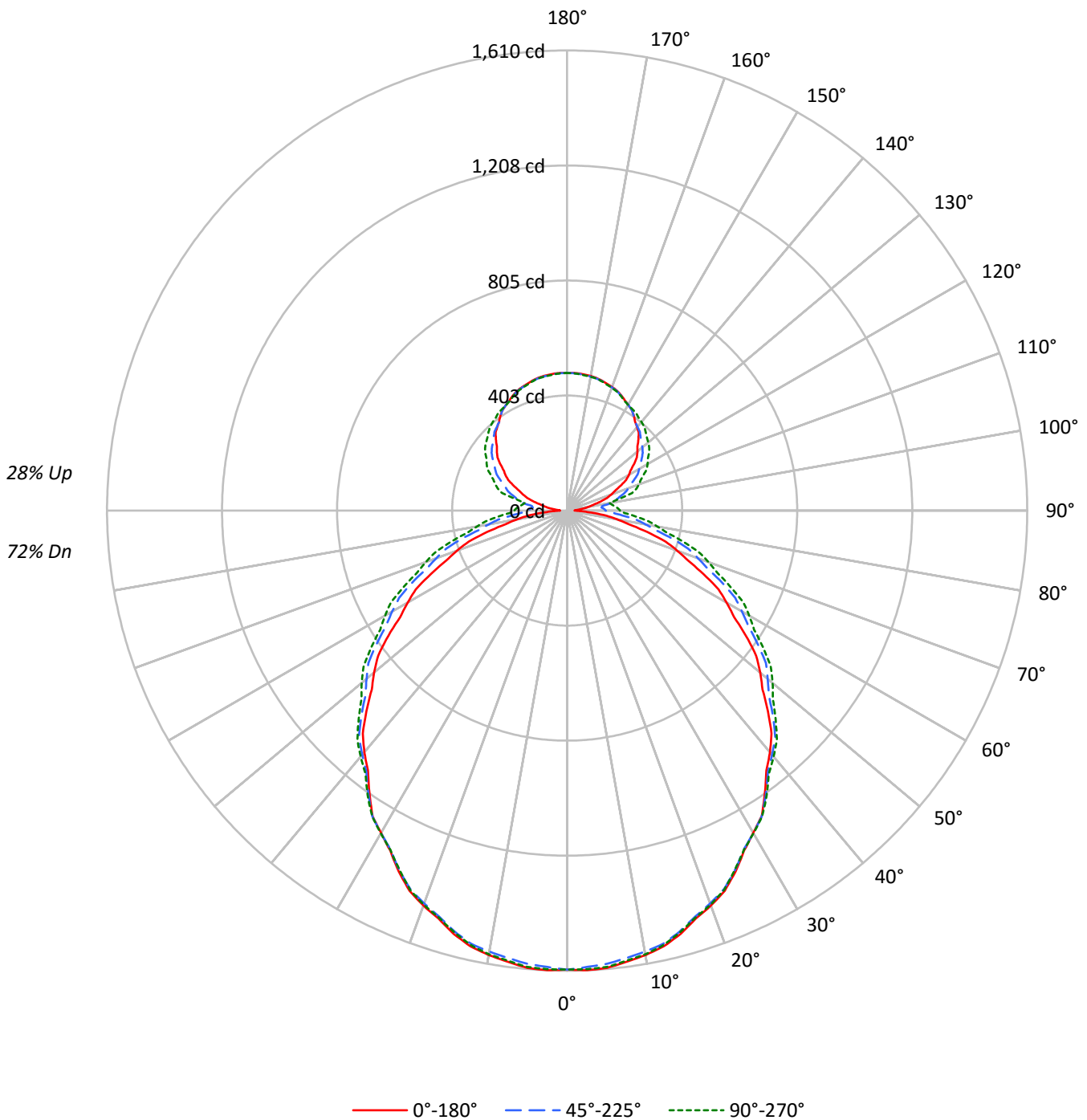
Input Watts (W): 49.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333298-840

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### Luminous Intensity Polar Plot





TEST NUMBER: P333298-840

CATALOG NUMBER: S125DIP-S1270D365U840-4F0-1E-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°	10372	10372	10372
5°	10393	10181	10213
10°	10318	9998	9984
15°	10197	9781	9692
20°	10031	9512	9401
25°	9834	9224	9042
30°	9595	8907	8715
35°	9372	8616	8417
40°	9145	8310	8116
45°	8889	8048	7849
50°	8644	7763	7614
55°	8351	7495	7337
60°	8029	7187	7054
65°	7692	6868	6736
70°	7312	6430	6408
75°	6707	6007	6007
80°	5917	5497	5569
85°	5183	5154	5432



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.9	2.4
10°-20°	431.1	6.7
20°-30°	641.1	9.9
30°-40°	759.4	11.8
40°-50°	785.2	12.2
50°-60°	723.3	11.2
60°-70°	584.7	9.1
70°-80°	391.6	6.1
80°-90°	204.1	3.2
90°-100°	131.4	2.0
100°-110°	191.9	3.0
110°-120°	251.9	3.9
120°-130°	283.0	4.4
130°-140°	284.0	4.4
140°-150°	256.3	4.0
150°-160°	205.0	3.2
160°-170°	132.6	2.1
170°-180°	45.7	0.7
0°-30°	1224.1	19.0
0°-40°	1983.5	30.7
0°-60°	3491.9	54.1
0°-90°	4672.2	72.4
90°-120°	575.2	8.9
90°-150°	1398.5	21.7
90°-180°	1782.0	27.6
0°-180°	6454.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1606	1606	1606	1606	1606	
5°	1606	1602	1592	1604	1603	152
15°	1534	1534	1524	1533	1527	432
25°	1393	1397	1389	1394	1387	641
35°	1206	1216	1212	1217	1217	755
45°	994	1010	1019	1029	1031	766
55°	764	789	814	831	838	682
65°	526	562	600	623	630	522
75°	290	331	381	411	420	307
85°	87	139	194	227	241	92
90°	26	79	135	171	185	18
95°	41	81	121	156	168	42
105°	119	147	193	223	235	126
115°	206	221	260	286	295	205
125°	286	289	319	342	350	256
135°	353	354	364	382	389	272
145°	407	406	406	414	418	254
155°	446	444	445	446	443	206
165°	471	469	469	471	468	133
175°	482	480	480	482	479	46
180°	482	482	482	482	482	



TEST NUMBER: P333298-840

CATALOG NUMBER: S125DIP-S1270D365U840-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0
2.5°	1609.7	1609.2	1608.6	1608.1	1607.5	1606.3	1604.3	1602.4	1600.4	1598.4	1600.4
5°	1606.0	1605.3	1604.6	1603.9	1603.2	1601.6	1599.1	1596.7	1594.3	1591.9	1594.6
7.5°	1591.9	1591.5	1591.2	1590.9	1590.7	1589.3	1586.8	1584.3	1581.8	1579.2	1581.7
10°	1579.2	1579.2	1579.2	1579.2	1579.2	1577.8	1575.0	1572.3	1569.4	1566.6	1569.0
12.5°	1561.6	1561.9	1562.2	1562.5	1562.7	1561.8	1559.5	1557.2	1555.0	1552.8	1554.7
15°	1533.6	1533.9	1534.3	1534.6	1535.0	1533.9	1531.5	1529.0	1526.6	1524.1	1526.2
17.5°	1497.0	1497.7	1498.4	1499.1	1499.9	1498.9	1496.5	1494.1	1491.6	1489.1	1490.8
20°	1470.6	1471.3	1472.0	1472.7	1473.4	1472.5	1470.1	1467.6	1465.1	1462.7	1463.8
22.5°	1440.4	1441.6	1442.9	1444.1	1445.4	1444.6	1441.9	1439.2	1436.4	1433.7	1435.0
25°	1393.4	1394.5	1395.5	1396.5	1397.7	1397.1	1395.0	1392.9	1390.8	1388.7	1390.1
27.5°	1341.2	1342.7	1344.2	1345.7	1347.4	1346.9	1344.5	1342.1	1339.8	1337.4	1338.4
30°	1302.1	1304.2	1306.3	1308.4	1310.5	1310.5	1308.4	1306.3	1304.2	1302.1	1302.8
32.5°	1266.9	1268.7	1270.5	1272.3	1274.1	1274.2	1272.7	1271.2	1269.6	1268.1	1268.8
35°	1206.1	1208.5	1210.9	1213.5	1215.9	1216.6	1215.5	1214.5	1213.5	1212.3	1213.5
37.5°	1145.3	1147.5	1149.7	1152.1	1154.3	1155.2	1154.9	1154.5	1154.2	1153.8	1155.2
40°	1103.7	1106.5	1109.3	1112.2	1114.9	1116.1	1115.8	1115.4	1115.1	1114.8	1116.1
42.5°	1058.3	1062.0	1065.6	1069.2	1073.0	1075.1	1075.9	1076.7	1077.4	1078.2	1079.8
45°	993.5	997.3	1001.2	1005.0	1008.9	1011.7	1013.5	1015.2	1016.9	1018.7	1021.2
47.5°	927.1	930.6	934.2	937.8	941.3	944.6	947.7	950.7	953.6	956.6	960.3
50°	881.7	885.6	889.4	893.2	897.2	901.0	904.8	908.7	912.5	916.4	920.2
52.5°	833.8	838.6	843.2	847.9	852.6	857.3	862.0	866.7	871.3	876.1	880.2
55°	763.7	769.2	774.9	780.4	786.0	791.6	797.2	802.8	808.4	814.1	817.9
57.5°	691.9	698.5	705.3	712.0	718.7	725.3	731.7	738.1	744.6	751.0	755.5
60°	644.0	651.0	657.9	665.0	672.0	678.9	686.0	693.0	699.9	706.9	712.2
62.5°	597.3	604.4	611.4	618.3	625.3	632.7	640.2	647.7	655.3	662.9	668.6
65°	525.8	533.9	542.0	550.1	558.1	566.3	574.7	583.1	591.5	599.9	605.1
67.5°	458.5	466.3	474.0	481.8	489.6	497.8	506.2	514.8	523.3	531.9	538.3
70°	409.4	417.4	425.5	433.5	441.5	450.1	459.2	468.4	477.5	486.6	493.2
72.5°	361.5	369.8	378.2	386.5	394.9	403.9	413.8	423.8	433.7	443.7	450.9
75°	289.7	298.8	307.9	317.0	326.1	336.3	347.4	358.6	369.8	381.0	388.0
77.5°	220.8	231.3	241.8	252.3	262.8	273.4	284.2	294.9	305.7	316.5	324.2
80°	177.9	188.4	198.9	209.4	219.9	231.1	243.0	254.9	266.8	278.7	286.4
82.5°	138.9	150.0	161.0	172.1	183.1	194.7	206.9	219.0	231.3	243.4	250.9
85°	86.6	98.2	109.7	121.3	132.8	144.7	156.9	169.2	181.4	193.7	201.4
87.5°	49.2	60.5	71.8	83.2	94.5	106.1	118.2	130.2	142.2	154.2	162.3
90°	25.5	37.4	49.2	61.0	72.9	85.0	97.5	109.9	122.4	134.8	143.3
92.5°	28.2	38.1	48.0	57.9	67.9	79.1	91.8	104.4	117.1	129.8	137.9
95°	40.8	49.7	58.6	67.4	76.2	85.1	94.0	102.9	111.8	120.7	128.8
97.5°	61.1	69.7	78.3	86.9	95.5	102.6	108.1	113.6	119.2	124.6	129.8
100°	77.0	84.5	92.1	99.7	107.2	116.8	128.4	139.9	151.4	162.9	158.4
102.5°	93.1	100.2	107.2	114.3	121.5	130.6	141.7	152.8	163.9	175.0	179.9
105°	119.2	125.0	131.0	136.8	142.8	151.0	161.5	172.0	182.5	193.0	200.0
107.5°	146.2	151.0	155.7	160.5	165.2	172.8	183.0	193.2	203.5	213.7	220.7
110°	163.8	168.0	172.2	176.4	180.6	187.6	197.6	207.6	217.5	227.5	233.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	181.5	185.1	188.6	192.2	195.7	202.3	211.9	221.5	231.2	240.8	246.8
115°	206.5	209.3	212.2	215.0	217.8	223.9	233.1	242.3	251.5	260.5	266.6
117.5°	232.4	234.0	235.6	237.2	238.7	244.0	253.0	261.9	270.7	279.6	285.2
120°	249.5	250.5	251.5	252.5	253.4	258.0	266.3	274.6	282.9	291.1	297.0
122.5°	263.4	264.2	265.0	265.8	266.6	270.9	278.8	286.7	294.6	302.5	307.9
125°	286.5	286.7	286.9	287.1	287.3	290.9	297.9	305.0	311.9	318.9	324.2
127.5°	307.3	307.3	307.4	307.4	307.5	310.3	316.1	321.7	327.4	333.2	338.1
130°	321.0	321.0	321.1	321.1	321.1	323.7	328.7	333.7	338.6	343.7	348.3
132.5°	333.5	333.9	334.3	334.6	335.0	337.0	340.6	344.3	347.8	351.4	356.3
135°	352.6	352.7	352.8	353.0	353.1	354.4	356.6	358.9	361.2	363.5	367.9
137.5°	370.2	370.3	370.5	370.6	370.7	371.3	372.4	373.4	374.5	375.6	379.7
140°	380.7	380.8	381.0	381.1	381.3	381.5	381.8	382.0	382.3	382.6	386.6
142.5°	391.2	391.0	390.9	390.7	390.5	390.5	390.7	390.8	391.0	391.2	394.6
145°	406.8	406.6	406.4	406.2	406.0	405.9	405.9	405.9	405.9	405.9	407.7
147.5°	418.7	418.7	418.7	418.6	418.6	418.6	418.7	418.8	418.9	419.0	419.7
150°	427.3	427.2	427.0	426.8	426.7	426.7	426.8	427.0	427.2	427.3	427.5
152.5°	435.6	435.3	434.8	434.5	434.1	434.0	434.2	434.4	434.5	434.7	434.8
155°	446.3	445.8	445.2	444.7	444.3	444.1	444.3	444.4	444.6	444.7	445.0
157.5°	454.4	454.1	453.8	453.5	453.3	453.1	453.1	453.2	453.2	453.2	453.4
160°	460.1	459.7	459.2	458.7	458.3	458.1	458.1	458.2	458.3	458.4	458.7
162.5°	464.7	464.2	463.7	463.2	462.8	462.6	462.7	462.7	462.8	462.9	463.3
165°	470.8	470.4	469.9	469.4	469.0	468.8	468.8	468.9	469.0	469.1	469.5
167.5°	475.4	474.9	474.4	473.9	473.4	473.2	473.3	473.4	473.5	473.5	474.1
170°	478.0	477.5	476.9	476.4	475.7	475.5	475.6	475.6	475.7	475.8	476.5
172.5°	479.7	479.2	478.6	478.1	477.5	477.3	477.4	477.6	477.7	477.9	478.4
175°	481.5	481.1	480.6	480.1	479.7	479.5	479.5	479.6	479.7	479.8	480.4
177.5°	482.4	482.0	481.6	481.3	480.9	480.7	480.8	480.9	480.9	481.0	481.4
180°	481.5	481.5	481.5	481.5	481.5	481.5	481.5	481.5	481.5	481.5	481.5



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0
2.5°	1602.4	1604.3	1606.3	1607.1	1606.8	1606.6	1606.3	1606.0
5°	1597.4	1600.2	1603.1	1604.3	1603.9	1603.6	1603.2	1602.9
7.5°	1584.1	1586.6	1589.0	1590.0	1589.7	1589.3	1589.0	1588.6
10°	1571.6	1574.0	1576.4	1577.5	1577.1	1576.8	1576.4	1576.1
12.5°	1556.5	1558.4	1560.3	1560.8	1559.9	1559.0	1558.1	1557.2
15°	1528.3	1530.5	1532.5	1532.9	1531.5	1530.0	1528.6	1527.2
17.5°	1492.4	1494.0	1495.6	1496.0	1495.1	1494.3	1493.5	1492.6
20°	1464.8	1465.8	1466.9	1467.4	1467.4	1467.4	1467.4	1467.4
22.5°	1436.4	1437.7	1439.1	1439.3	1438.5	1437.6	1436.7	1435.9
25°	1391.5	1392.9	1394.3	1394.1	1392.4	1390.6	1388.9	1387.2
27.5°	1339.4	1340.3	1341.3	1341.5	1340.8	1340.2	1339.6	1339.0
30°	1303.5	1304.2	1304.9	1305.0	1304.7	1304.3	1304.0	1303.6
32.5°	1269.5	1270.2	1270.9	1271.1	1270.7	1270.4	1270.0	1269.7
35°	1214.5	1215.5	1216.6	1217.1	1217.1	1217.1	1217.1	1217.1
37.5°	1156.6	1158.0	1159.4	1160.0	1159.8	1159.7	1159.6	1159.4
40°	1117.5	1118.9	1120.3	1121.4	1122.1	1122.8	1123.5	1124.2
42.5°	1081.6	1083.3	1084.9	1085.8	1086.0	1086.1	1086.3	1086.4
45°	1023.6	1026.0	1028.4	1029.9	1030.3	1030.6	1031.0	1031.3
47.5°	963.8	967.3	971.0	973.1	973.9	974.6	975.4	976.2
50°	924.0	927.9	931.8	934.2	935.2	936.3	937.4	938.4
52.5°	884.3	888.5	892.5	895.0	895.8	896.6	897.4	898.1
55°	821.7	825.6	829.4	832.0	833.4	834.9	836.3	837.7
57.5°	759.8	764.3	768.7	771.4	772.4	773.5	774.6	775.6
60°	717.4	722.7	727.9	731.0	732.2	733.2	734.3	735.3
62.5°	674.5	680.2	686.1	689.6	690.9	692.4	693.7	695.0
65°	610.4	615.6	620.9	624.2	625.6	627.0	628.4	629.8
67.5°	544.6	551.0	557.3	561.4	563.2	565.0	566.9	568.8
70°	499.8	506.4	513.1	517.5	519.6	521.7	523.8	525.8
72.5°	458.1	465.3	472.5	476.9	478.5	480.0	481.5	483.0
75°	395.1	402.0	409.0	413.4	415.2	416.9	418.7	420.4
77.5°	331.8	339.5	347.3	351.8	353.3	354.6	356.0	357.4
80°	294.1	301.7	309.5	314.1	315.4	316.8	318.2	319.6
82.5°	258.2	265.7	273.1	278.0	280.5	283.1	285.6	288.1
85°	209.0	216.7	224.5	229.7	232.5	235.3	238.1	240.9
87.5°	170.5	178.5	186.7	192.0	194.5	197.0	199.4	202.0
90°	151.7	160.2	168.5	174.2	176.8	179.6	182.2	184.9
92.5°	146.1	154.3	162.5	167.8	170.4	172.9	175.5	178.0
95°	136.8	144.9	153.0	158.3	160.8	163.2	165.6	168.1
97.5°	134.8	140.0	145.1	148.9	151.2	153.6	155.9	158.3
100°	153.9	149.5	145.0	143.6	145.4	147.2	149.0	150.8
102.5°	184.6	189.5	194.3	195.1	191.8	188.4	185.2	181.9
105°	206.9	214.0	221.0	225.6	228.0	230.4	232.8	235.1
107.5°	227.6	234.5	241.5	245.9	247.8	249.7	251.7	253.6
110°	240.3	246.7	253.2	257.6	260.1	262.7	265.2	267.7





TEST NUMBER: P333298-840

CATALOG NUMBER: S125DIP-S1270D365U840-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	252.9	258.9	265.0	269.2	271.6	273.9	276.2	278.5
115°	272.6	278.5	284.5	288.3	289.9	291.5	293.2	294.8
117.5°	290.7	296.3	301.8	305.7	307.8	310.0	312.1	314.4
120°	302.8	308.5	314.4	318.1	319.8	321.5	323.2	324.9
122.5°	313.5	318.9	324.5	328.0	329.7	331.3	333.0	334.6
125°	329.5	334.8	340.0	343.5	345.0	346.5	348.0	349.5
127.5°	343.2	348.1	353.1	356.4	357.8	359.2	360.7	362.1
130°	352.9	357.6	362.2	365.3	366.6	368.0	369.3	370.6
132.5°	361.1	366.0	370.8	373.8	374.9	376.0	377.0	378.1
135°	372.2	376.7	381.0	383.8	385.2	386.5	387.7	389.0
137.5°	383.8	388.0	392.1	394.8	395.8	396.7	397.7	398.7
140°	390.6	394.7	398.6	401.1	402.0	402.9	403.8	404.8
142.5°	397.9	401.2	404.6	406.7	407.6	408.5	409.4	410.3
145°	409.5	411.3	413.2	414.5	415.5	416.4	417.4	418.3
147.5°	420.3	421.0	421.6	422.0	422.0	422.1	422.1	422.2
150°	427.6	427.8	427.9	427.9	427.6	427.3	427.0	426.8
152.5°	435.0	435.2	435.4	435.2	434.6	434.1	433.6	433.1
155°	445.2	445.5	445.8	445.6	444.9	444.2	443.6	443.0
157.5°	453.7	453.9	454.2	454.0	453.4	452.7	452.1	451.5
160°	459.0	459.3	459.6	459.5	458.8	458.2	457.6	457.0
162.5°	463.8	464.2	464.7	464.5	463.8	463.1	462.5	461.8
165°	470.0	470.5	471.0	470.9	470.3	469.6	469.0	468.4
167.5°	474.7	475.2	475.8	475.7	475.0	474.3	473.6	472.9
170°	477.1	477.8	478.4	478.4	477.7	477.0	476.2	475.4
172.5°	479.0	479.6	480.1	480.1	479.4	478.6	477.9	477.2
175°	481.0	481.7	482.3	482.3	481.5	480.8	480.1	479.4
177.5°	481.9	482.3	482.7	482.7	482.2	481.7	481.2	480.7
180°	481.5	481.5	481.5	481.5	481.5	481.5	481.5	481.5

(END OF REPORT)