

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: P333299-840

Luminaire Tested: **S125DIP-S1270D365U840-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333299-840
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: S125DIP-S1270D365U840-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6255.1 lumens
Efficiency: N/A
Efficacy: 125.6 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

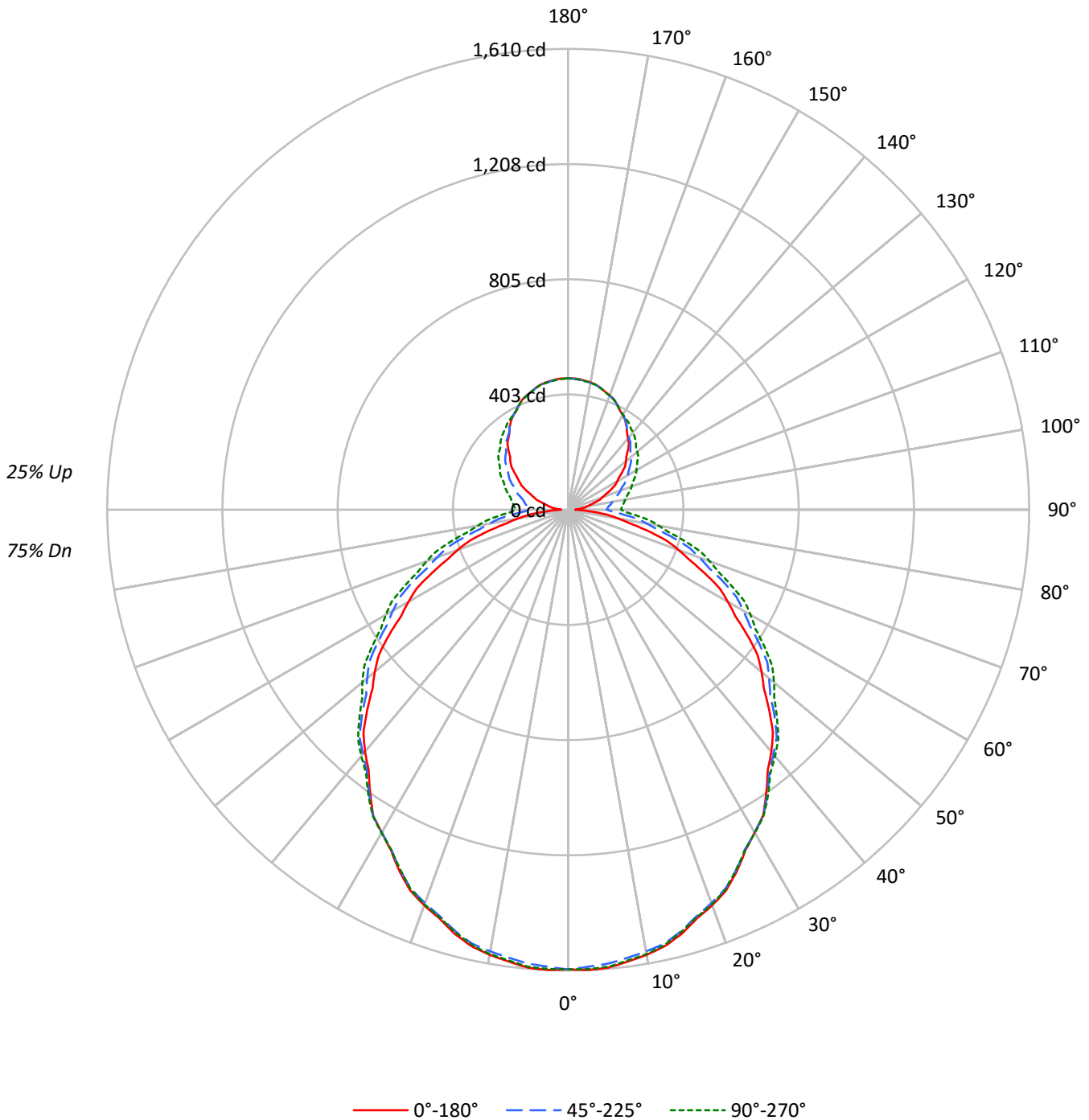
Input Watts (W): 49.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		88	88	88		79	79	79	75
1	102	97	93	89	97	92	89	85	84	81	78		75	73	71		68	66	64	61
2	93	84	77	72	88	80	74	69	73	68	63		66	62	58		59	56	53	50
3	84	74	66	59	80	70	63	57	64	58	53		58	53	49		52	48	45	42
4	77	65	57	50	73	62	54	48	57	50	45		51	46	42		46	42	38	36
5	71	58	49	43	67	56	47	41	51	44	39		46	40	36		42	37	33	31
6	65	52	43	37	62	50	42	36	46	39	34		42	36	32		38	33	29	27
7	60	47	39	33	57	45	37	32	41	35	30		38	32	28		34	30	26	24
8	56	43	35	29	53	41	33	28	38	31	27		35	29	25		32	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	47	35	28	23	32	26	22		30	24	20		27	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	6.9
20°-30°	641.1	10.2
30°-40°	759.4	12.1
40°-50°	785.2	12.6
50°-60°	723.3	11.6
60°-70°	584.7	9.3
70°-80°	391.6	6.3
80°-90°	204.1	3.3
90°-100°	144.7	2.3
100°-110°	174.7	2.8
110°-120°	209.9	3.4
120°-130°	234.2	3.7
130°-140°	240.6	3.8
140°-150°	224.9	3.6
150°-160°	186.5	3.0
160°-170°	124.0	2.0
170°-180°	43.4	0.7
0°-30°	1224.1	19.6
0°-40°	1983.5	31.7
0°-60°	3491.9	55.8
0°-90°	4672.2	74.7
90°-120°	529.3	8.5
90°-150°	1229.0	19.6
90°-180°	1583.0	25.3
0°-180°	6255.1	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°	44	86	142	178	191	41
105°	96	124	172	204	218	102
115°	163	177	217	244	254	161
125°	231	233	263	287	295	206
135°	295	296	307	327	334	227
145°	355	355	356	364	369	222
155°	405	405	405	406	405	186
165°	440	439	440	441	439	124
175°	458	456	456	458	456	43
180°	459	459	459	459	459	



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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°	31.3	42.1	52.9	63.7	74.5	86.3	99.2	112.1	124.9	137.7	146.0
95°	43.6	52.9	62.2	71.4	80.7	91.7	104.3	117.0	129.8	142.4	150.7
97.5°	57.2	65.3	73.6	81.9	90.2	100.6	113.1	125.7	138.3	150.9	158.6
100°	67.3	74.6	82.0	89.4	96.6	106.4	118.7	130.9	143.2	155.4	163.4
102.5°	78.3	85.4	92.5	99.7	106.7	116.0	127.4	138.9	150.4	161.8	169.6
105°	95.5	101.6	107.6	113.5	119.6	128.1	139.0	150.0	161.0	171.9	179.4
107.5°	114.8	120.0	125.1	130.3	135.4	143.2	153.7	164.1	174.5	185.0	192.2
110°	128.1	132.7	137.2	141.9	146.4	153.8	163.8	173.9	183.9	193.9	200.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	142.9	146.5	150.1	153.6	157.2	163.9	173.7	183.5	193.4	203.2	209.6
115°	163.3	166.0	168.8	171.6	174.3	180.4	189.7	198.8	208.1	217.4	223.6
117.5°	183.7	185.4	187.2	188.9	190.7	195.9	204.7	213.5	222.2	231.0	237.0
120°	197.4	198.8	200.3	201.8	203.2	207.9	216.1	224.2	232.4	240.4	246.4
122.5°	211.0	211.7	212.3	212.9	213.5	217.8	225.8	233.8	241.8	249.7	255.3
125°	230.9	231.0	231.1	231.2	231.4	234.9	242.0	249.0	256.1	263.2	268.6
127.5°	250.6	250.5	250.4	250.4	250.3	253.2	259.0	264.9	270.7	276.5	281.7
130°	263.5	263.6	263.6	263.7	263.7	266.2	271.2	276.3	281.4	286.5	291.2
132.5°	275.1	275.7	276.2	276.8	277.4	279.5	283.4	287.1	290.8	294.6	299.4
135°	295.1	295.3	295.4	295.5	295.6	296.9	299.5	302.1	304.6	307.1	311.6
137.5°	314.0	314.1	314.3	314.5	314.7	315.4	316.8	318.1	319.5	320.8	325.1
140°	325.0	325.4	325.8	326.2	326.5	327.0	327.6	328.2	328.8	329.4	333.4
142.5°	337.2	337.3	337.3	337.4	337.4	337.7	338.0	338.4	338.8	339.1	342.5
145°	355.3	355.3	355.3	355.2	355.2	355.3	355.5	355.8	356.0	356.2	358.0
147.5°	370.4	370.6	370.7	370.9	371.1	371.3	371.5	371.7	371.8	372.0	372.8
150°	381.5	381.5	381.4	381.3	381.2	381.3	381.6	382.0	382.3	382.6	382.6
152.5°	390.7	390.8	390.9	391.0	391.1	391.2	391.4	391.5	391.6	391.7	391.9
155°	404.8	404.8	404.8	404.8	404.8	404.8	404.9	405.0	405.1	405.2	405.5
157.5°	417.3	417.2	417.0	416.8	416.7	416.6	416.7	416.8	416.8	416.9	417.2
160°	424.7	424.5	424.2	424.0	423.8	423.7	423.8	423.8	423.9	424.0	424.3
162.5°	431.3	431.1	431.0	430.8	430.6	430.5	430.5	430.6	430.6	430.6	431.0
165°	440.1	439.9	439.8	439.6	439.5	439.4	439.5	439.6	439.7	439.7	440.1
167.5°	447.5	447.2	446.9	446.6	446.3	446.1	446.1	446.1	446.1	446.1	446.6
170°	451.5	451.2	450.9	450.6	450.2	450.1	450.1	450.1	450.1	450.1	450.6
172.5°	454.3	454.0	453.7	453.4	453.1	452.9	452.9	452.9	452.9	452.9	453.4
175°	457.6	457.3	457.0	456.7	456.4	456.2	456.2	456.2	456.2	456.2	456.7
177.5°	459.2	459.0	458.7	458.5	458.2	458.1	458.0	458.0	457.9	457.8	458.2
180°	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7



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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°	154.4	162.7	171.0	176.4	179.0	181.7	184.3	186.9
95°	159.0	167.1	175.4	180.9	183.5	186.1	188.6	191.3
97.5°	166.5	174.4	182.3	187.5	190.0	192.5	194.9	197.4
100°	171.5	179.6	187.6	192.8	195.0	197.3	199.5	201.8
102.5°	177.4	185.3	193.2	198.2	200.6	202.9	205.2	207.5
105°	186.8	194.3	201.8	206.9	209.5	212.3	214.9	217.6
107.5°	199.3	206.5	213.7	218.3	220.5	222.6	224.8	226.9
110°	207.7	214.6	221.5	226.1	228.4	230.9	233.2	235.6



TEST NUMBER: P333299-840

CATALOG NUMBER: S125DIP-S1270D365U840-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	216.1	222.6	229.0	233.5	235.8	238.1	240.3	242.7
115°	229.8	236.0	242.3	246.4	248.4	250.4	252.5	254.5
117.5°	243.0	249.0	255.0	259.0	261.2	263.2	265.2	267.3
120°	252.4	258.3	264.3	268.1	269.9	271.7	273.5	275.3
122.5°	260.9	266.5	272.2	275.9	277.7	279.5	281.4	283.3
125°	274.1	279.5	285.0	288.5	290.2	291.9	293.6	295.2
127.5°	286.7	291.9	296.9	300.4	302.3	304.2	306.0	307.9
130°	296.1	300.9	305.8	308.9	310.5	312.1	313.8	315.3
132.5°	304.2	309.0	313.9	316.9	318.1	319.3	320.6	321.8
135°	316.2	320.7	325.3	328.2	329.7	331.1	332.5	334.0
137.5°	329.3	333.6	337.8	340.4	341.4	342.4	343.4	344.4
140°	337.4	341.4	345.4	347.9	348.9	349.9	350.9	351.9
142.5°	345.9	349.3	352.6	354.9	355.9	356.9	357.9	358.9
145°	359.7	361.4	363.2	364.7	365.9	367.0	368.2	369.3
147.5°	373.5	374.4	375.1	375.5	375.6	375.7	375.8	375.9
150°	382.6	382.6	382.6	382.7	382.9	383.1	383.3	383.4
152.5°	392.1	392.3	392.5	392.5	392.3	392.1	391.8	391.6
155°	405.8	406.1	406.4	406.4	406.0	405.6	405.2	404.8
157.5°	417.5	417.9	418.2	418.1	417.6	417.0	416.5	416.0
160°	424.6	425.0	425.3	425.3	424.9	424.4	424.0	423.6
162.5°	431.3	431.7	432.1	432.1	431.6	431.1	430.7	430.2
165°	440.4	440.7	441.0	440.9	440.4	440.0	439.5	439.0
167.5°	447.1	447.5	448.0	448.0	447.5	447.0	446.5	446.1
170°	451.0	451.5	452.0	451.9	451.4	450.8	450.3	449.7
172.5°	453.9	454.3	454.8	454.8	454.3	453.8	453.3	452.8
175°	457.1	457.6	458.1	458.0	457.5	456.9	456.4	455.8
177.5°	458.6	459.0	459.3	459.3	458.9	458.4	458.0	457.5
180°	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7

(END OF REPORT)