

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: P333308-840

Luminaire Tested: **S125DIP-S1270D590U840-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333308-840
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-S1270D590U840-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7041.6 lumens
Efficiency: N/A
Efficacy: 127.8 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

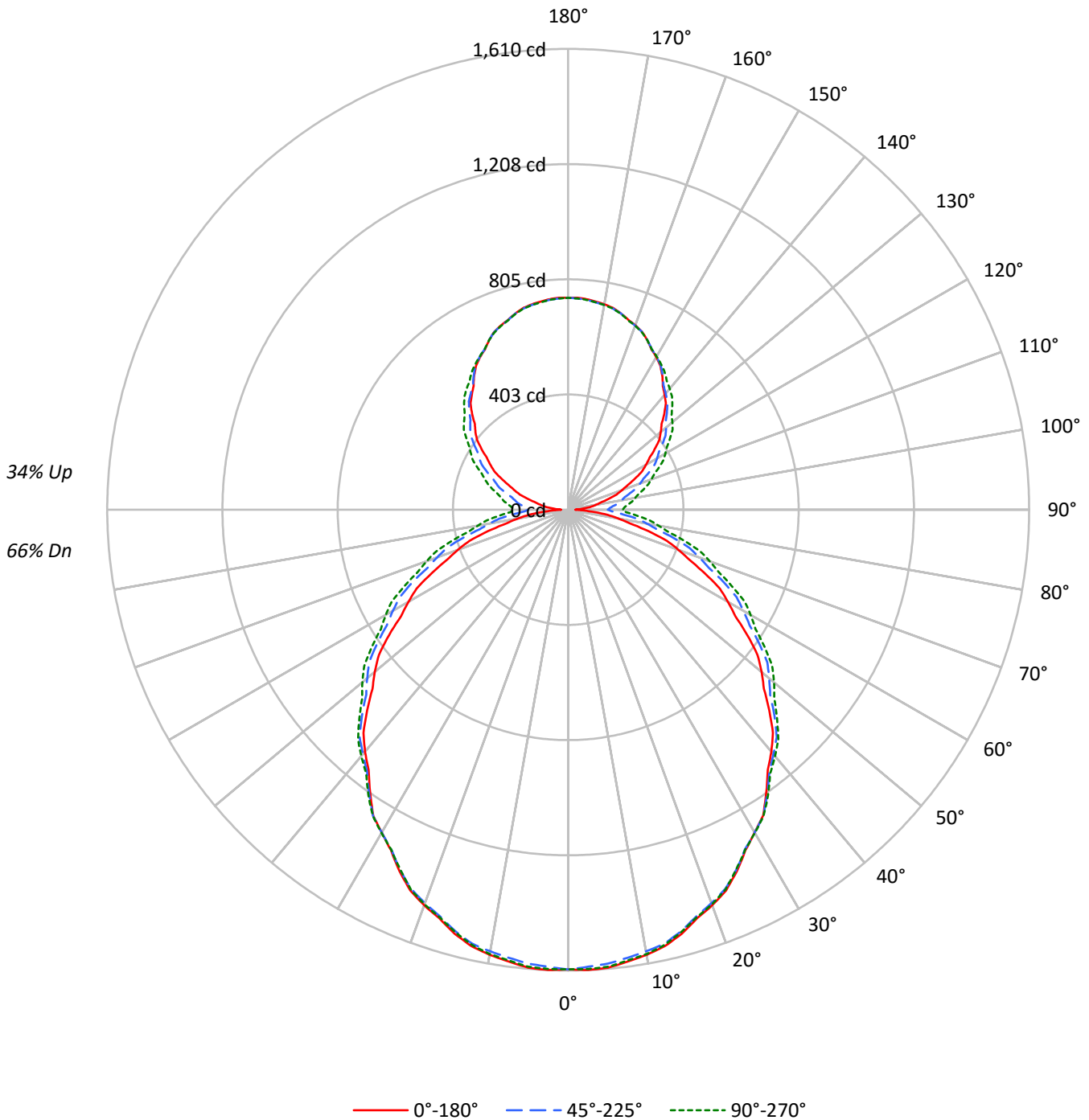
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71	66
1	100	96	91	87	94	90	86	83	80	77	74	70	68	66	61	60	58	54
2	91	83	76	71	85	78	72	67	69	65	61	61	57	54	53	51	48	44
3	83	73	65	58	78	69	61	56	61	55	50	54	49	45	47	44	41	37
4	76	64	56	49	71	61	53	47	54	48	43	48	43	39	42	38	35	32
5	70	57	48	42	65	54	46	40	48	42	37	43	38	33	38	33	30	27
6	64	51	43	37	60	49	41	35	43	37	32	39	33	29	34	30	26	24
7	59	46	38	32	56	44	36	31	39	33	28	35	30	26	31	27	23	21
8	55	42	34	28	52	40	32	27	36	30	25	32	27	23	29	24	21	19
9	51	38	31	25	48	37	29	24	33	27	23	30	24	21	26	22	19	17
10	48	35	28	23	45	34	27	22	30	24	20	27	22	19	24	20	17	15

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	2.2
10°-20°	431.1	6.1
20°-30°	641.1	9.1
30°-40°	759.4	10.8
40°-50°	785.2	11.2
50°-60°	723.3	10.3
60°-70°	584.7	8.3
70°-80°	391.6	5.6
80°-90°	204.7	2.9
90°-100°	163.5	2.3
100°-110°	230.4	3.3
110°-120°	304.3	4.3
120°-130°	358.3	5.1
130°-140°	379.7	5.4
140°-150°	361.3	5.1
150°-160°	301.1	4.3
160°-170°	200.1	2.8
170°-180°	70.0	1.0
0°-30°	1224.1	17.4
0°-40°	1983.5	28.2
0°-60°	3491.9	49.6
0°-90°	4672.9	66.4
90°-120°	698.2	9.9
90°-150°	1797.5	25.5
90°-180°	2369.0	33.6
0°-180°	7041.6	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	81	138	176	190	19
95°	58	101	159	196	210	56
105°	146	175	224	258	272	155
115°	258	273	313	340	350	255
125°	369	372	403	426	434	330
135°	474	477	488	508	514	366
145°	572	573	575	583	587	357
155°	653	653	654	656	653	301
165°	710	709	710	712	709	200
175°	738	736	736	739	736	70
180°	740	740	740	740	740	



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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°	49.3	60.6	72.0	83.4	94.8	106.5	118.7	130.8	142.8	154.9	163.1
90°	25.8	38.0	50.2	62.4	74.6	87.2	100.0	112.7	125.5	138.4	147.0
92.5°	36.7	47.7	58.8	69.9	80.9	93.1	106.3	119.7	132.9	146.2	154.8
95°	57.9	67.3	76.6	85.9	95.3	106.6	119.8	132.9	146.1	159.3	167.9
97.5°	80.8	89.1	97.4	105.6	113.9	124.7	137.9	151.2	164.4	177.7	185.9
100°	98.0	105.3	112.7	120.0	127.3	137.4	150.4	163.2	176.0	188.9	197.4
102.5°	116.5	123.8	131.2	138.5	145.7	155.2	167.0	178.7	190.6	202.3	210.7
105°	145.5	151.8	158.0	164.2	170.5	179.3	190.5	201.8	213.0	224.3	232.1
107.5°	177.7	183.1	188.5	193.9	199.3	207.3	218.0	228.7	239.3	250.0	257.3
110°	200.0	204.8	209.6	214.5	219.3	226.8	237.0	247.2	257.4	267.6	274.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	224.0	227.6	231.4	235.0	238.7	245.6	255.6	265.6	275.6	285.6	292.2
115°	257.7	260.7	263.7	266.6	269.6	275.8	285.1	294.5	303.8	313.2	319.3
117.5°	291.6	293.5	295.4	297.2	299.0	304.4	313.2	322.0	330.8	339.7	345.8
120°	313.8	315.5	317.2	318.8	320.5	325.5	333.7	341.8	350.0	358.2	364.2
122.5°	336.5	337.2	337.9	338.6	339.4	343.8	351.8	360.0	368.1	376.2	381.7
125°	368.7	369.1	369.5	369.9	370.3	374.2	381.2	388.4	395.5	402.6	408.0
127.5°	401.6	401.7	401.8	401.9	402.0	405.0	410.9	416.8	422.6	428.6	433.6
130°	422.4	422.7	422.9	423.2	423.5	426.3	431.4	436.6	441.7	446.9	451.7
132.5°	441.9	442.8	443.8	444.8	445.8	448.2	451.9	455.7	459.3	463.0	467.9
135°	474.4	474.8	475.2	475.6	476.1	477.6	480.2	482.7	485.3	487.9	492.4
137.5°	504.9	505.4	505.8	506.3	506.9	507.8	509.3	510.7	512.2	513.6	518.0
140°	523.5	524.1	524.8	525.4	526.0	526.7	527.5	528.3	529.0	529.7	533.8
142.5°	543.3	543.6	543.8	544.1	544.4	544.8	545.3	545.9	546.4	547.0	550.5
145°	572.5	572.7	572.8	573.0	573.1	573.4	573.8	574.2	574.6	574.9	576.7
147.5°	597.8	598.1	598.4	598.7	599.1	599.3	599.6	600.0	600.3	600.6	601.4
150°	615.8	615.7	615.6	615.5	615.3	615.5	616.0	616.5	617.0	617.5	617.5
152.5°	630.6	630.8	631.0	631.2	631.3	631.5	631.7	631.9	632.1	632.4	632.7
155°	653.3	653.3	653.3	653.3	653.3	653.4	653.5	653.6	653.8	653.9	654.4
157.5°	673.6	673.3	673.0	672.8	672.5	672.4	672.5	672.7	672.8	672.9	673.4
160°	685.6	685.2	684.8	684.4	684.0	683.9	684.0	684.2	684.3	684.4	684.9
162.5°	696.2	695.9	695.6	695.3	695.0	694.9	694.9	695.0	695.0	695.0	695.6
165°	710.3	710.0	709.8	709.5	709.3	709.2	709.3	709.5	709.6	709.7	710.2
167.5°	722.4	721.9	721.2	720.7	720.2	720.0	720.0	720.0	720.0	720.0	720.7
170°	728.7	728.2	727.7	727.2	726.7	726.5	726.5	726.5	726.5	726.5	727.2
172.5°	733.4	732.9	732.4	731.8	731.3	731.0	731.0	731.0	731.0	731.0	731.8
175°	738.5	738.0	737.5	737.0	736.5	736.3	736.3	736.3	736.3	736.3	737.0
177.5°	741.2	740.8	740.4	740.0	739.5	739.3	739.2	739.1	739.0	738.9	739.5
180°	740.3	740.3	740.3	740.3	740.3	740.3	740.3	740.3	740.3	740.3	740.3



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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°	171.3	179.5	187.6	193.0	195.5	198.0	200.6	203.1
90°	155.7	164.4	173.1	178.8	181.7	184.5	187.3	190.2
92.5°	163.4	172.0	180.7	186.3	189.0	191.8	194.5	197.2
95°	176.5	185.1	193.7	199.3	202.1	204.7	207.4	210.2
97.5°	194.1	202.3	210.5	215.8	218.3	220.9	223.4	226.0
100°	205.9	214.4	222.9	228.3	230.7	233.1	235.4	237.7
102.5°	218.9	227.3	235.6	241.0	243.5	245.9	248.3	250.9
105°	239.8	247.6	255.4	260.6	263.5	266.3	269.1	272.0
107.5°	264.7	272.0	279.2	284.0	286.2	288.3	290.4	292.6
110°	281.7	288.6	295.7	300.3	302.7	305.0	307.3	309.6



TEST NUMBER: P333308-840

CATALOG NUMBER: S125DIP-S1270D590U840-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	298.7	305.2	311.7	316.2	318.4	320.6	322.9	325.0
115°	325.5	331.6	337.8	341.9	343.9	345.9	347.8	349.8
117.5°	351.8	357.9	364.0	367.9	369.7	371.6	373.4	375.4
120°	370.1	376.0	381.9	385.8	387.3	388.9	390.5	392.1
122.5°	387.3	392.8	398.5	402.0	403.7	405.5	407.2	408.8
125°	413.3	418.7	423.9	427.5	429.1	430.7	432.3	433.9
127.5°	438.7	443.7	448.8	452.1	453.9	455.8	457.5	459.3
130°	456.5	461.2	466.0	469.1	470.6	472.1	473.6	475.0
132.5°	472.6	477.4	482.1	485.0	486.1	487.3	488.4	489.5
135°	497.0	501.5	506.0	509.0	510.2	511.4	512.7	513.9
137.5°	522.2	526.5	530.8	533.3	534.1	534.8	535.6	536.3
140°	538.0	542.0	546.1	548.6	549.3	550.1	550.9	551.6
142.5°	553.9	557.3	560.8	562.9	563.6	564.4	565.1	565.9
145°	578.5	580.2	582.0	583.3	584.3	585.3	586.3	587.4
147.5°	602.3	603.1	604.0	604.3	604.1	603.8	603.6	603.4
150°	617.5	617.5	617.5	617.6	617.7	617.8	617.9	618.0
152.5°	633.0	633.3	633.6	633.5	633.1	632.8	632.4	632.0
155°	654.9	655.4	655.9	655.9	655.2	654.6	653.9	653.3
157.5°	673.9	674.4	674.9	674.8	673.9	673.1	672.3	671.4
160°	685.4	685.9	686.4	686.4	685.8	685.1	684.5	683.9
162.5°	696.2	696.8	697.5	697.4	696.7	695.9	695.2	694.4
165°	710.7	711.2	711.9	711.7	710.9	710.1	709.3	708.6
167.5°	721.5	722.4	723.1	723.1	722.3	721.4	720.6	719.9
170°	728.0	728.7	729.5	729.4	728.6	727.7	726.8	725.9
172.5°	732.7	733.4	734.2	734.2	733.4	732.6	731.7	730.9
175°	737.8	738.5	739.3	739.2	738.4	737.5	736.6	735.7
177.5°	740.1	740.7	741.3	741.3	740.6	739.9	739.1	738.4
180°	740.3	740.3	740.3	740.3	740.3	740.3	740.3	740.3

(END OF REPORT)