

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: P333300-840

Luminaire Tested: **S125DIP-S1270D365U840-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333300-840
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-S1270D365U840-4F0-1E-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: 6302.8 lumens
Efficiency: N/A
Efficacy: 126.6 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

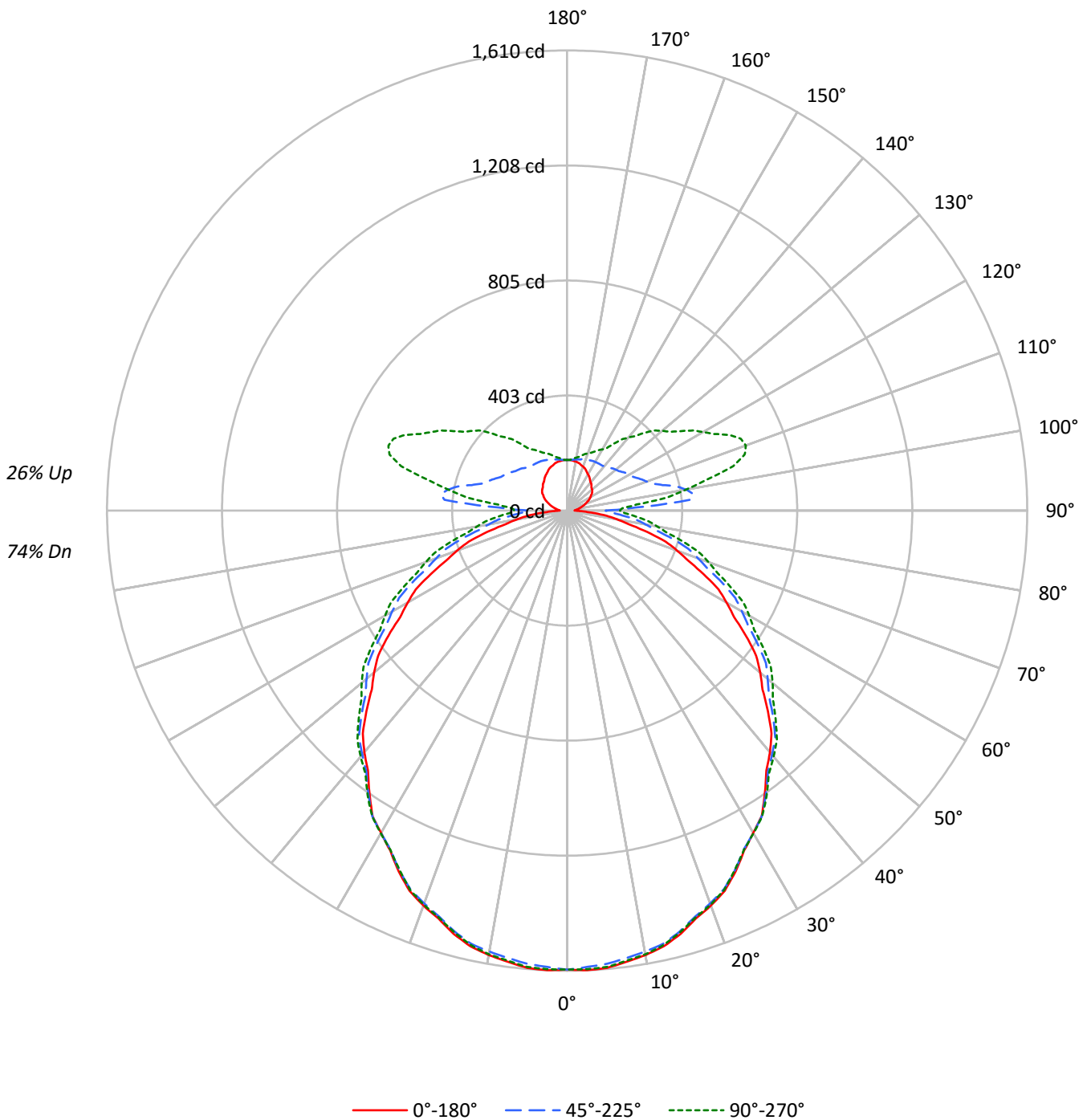
Input Watts (W): 49.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		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°	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	6.8
20°-30°	641.1	10.2
30°-40°	759.4	12.0
40°-50°	785.2	12.5
50°-60°	723.3	11.5
60°-70°	584.7	9.3
70°-80°	391.6	6.2
80°-90°	204.1	3.2
90°-100°	242.2	3.8
100°-110°	359.9	5.7
110°-120°	315.2	5.0
120°-130°	241.8	3.8
130°-140°	182.3	2.9
140°-150°	129.9	2.1
150°-160°	89.4	1.4
160°-170°	52.7	0.8
170°-180°	17.1	0.3
0°-30°	1224.1	19.4
0°-40°	1983.5	31.5
0°-60°	3491.9	55.4
0°-90°	4672.2	74.1
90°-120°	917.3	14.6
90°-150°	1471.2	23.3
90°-180°	1631.0	25.9
0°-180°	6302.8	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	184	17
95°	32	97	431	292	244	29
105°	54	97	345	626	602	58
115°	82	109	269	536	626	80
125°	106	124	235	417	484	94
135°	120	143	210	331	386	93
145°	138	156	198	255	286	86
155°	156	167	194	219	228	72
165°	170	175	186	197	200	48
175°	177	177	178	180	180	17
180°	177	177	177	177	177	



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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	83.1	94.5	106.1	118.2	130.2	142.2	154.2	162.3
90°	25.5	37.1	49.0	60.9	72.8	85.1	97.4	110.0	122.2	134.8	143.2
92.5°	27.1	38.3	51.7	66.4	82.9	104.6	136.3	181.2	228.8	239.1	225.0
95°	32.2	41.7	53.6	66.7	83.6	110.2	160.3	250.6	361.1	431.1	432.0
97.5°	38.2	46.8	57.0	69.1	84.3	105.7	142.5	211.5	326.0	444.7	505.9
100°	42.3	50.4	59.2	70.4	84.5	104.5	136.4	194.0	295.2	423.0	519.6
102.5°	47.1	54.2	62.2	73.2	86.1	105.4	134.8	184.7	271.6	390.9	502.3
105°	54.5	60.1	67.5	76.6	88.0	106.0	132.2	174.5	244.6	345.4	454.7
107.5°	61.7	67.3	73.7	81.4	92.1	108.5	133.7	171.1	229.7	312.8	408.0
110°	67.1	72.0	77.6	85.0	94.5	110.9	135.2	169.7	222.7	296.0	380.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	73.6	77.7	82.2	88.8	97.5	112.9	136.5	169.3	217.9	284.1	358.6
115°	81.5	84.7	88.3	93.9	101.7	116.3	138.7	168.4	211.9	269.1	332.9
117.5°	88.6	91.2	93.9	98.8	106.4	120.2	141.3	168.7	207.1	257.9	314.2
120°	94.2	96.3	98.9	103.1	110.2	123.7	144.2	169.5	204.9	251.2	303.2
122.5°	99.0	100.3	101.9	105.6	112.7	125.7	146.0	170.1	202.2	244.7	292.7
125°	106.2	106.6	108.1	110.9	117.3	130.0	148.7	171.1	198.7	235.4	278.1
127.5°	110.6	111.3	113.2	116.9	123.8	135.8	152.9	172.8	196.5	227.2	264.0
130°	114.3	115.0	117.5	121.8	129.0	140.5	156.4	174.9	195.9	222.9	255.7
132.5°	115.9	117.1	120.6	125.6	133.4	144.5	159.4	175.8	194.5	217.8	247.2
135°	120.2	121.3	125.2	130.6	137.7	148.5	161.9	176.1	191.8	210.4	235.2
137.5°	125.7	126.5	130.3	135.7	142.8	153.1	164.4	176.8	190.7	205.1	225.5
140°	127.9	129.0	133.3	139.0	145.7	155.6	166.2	177.3	189.1	201.6	219.7
142.5°	131.9	132.4	136.1	141.6	147.7	156.7	166.6	176.8	187.7	199.3	215.2
145°	137.9	138.3	141.5	146.1	152.2	160.3	169.6	178.4	188.0	198.4	210.9
147.5°	142.6	143.0	146.1	150.8	156.3	163.5	171.7	179.8	188.4	197.5	207.5
150°	146.3	147.0	149.6	154.2	159.2	165.2	173.1	180.6	188.4	196.6	205.2
152.5°	150.4	150.8	153.0	157.0	161.8	167.2	174.5	181.2	188.1	195.5	203.2
155°	155.6	155.6	157.7	161.3	164.9	169.9	175.9	181.7	187.3	193.5	199.9
157.5°	160.4	160.3	162.0	165.0	168.1	172.0	177.1	182.0	186.4	191.3	196.7
160°	163.5	163.1	164.5	167.0	169.9	173.1	177.7	182.0	185.6	189.9	194.2
162.5°	166.0	165.7	167.1	169.4	171.6	174.2	178.3	181.8	184.7	188.1	191.9
165°	169.9	169.2	170.3	172.0	173.5	175.6	178.4	181.3	183.5	185.6	188.4
167.5°	172.5	172.1	172.8	173.7	174.7	176.1	178.4	180.5	181.5	183.1	185.1
170°	174.2	173.8	174.2	174.9	175.6	176.6	178.4	179.9	180.6	181.7	183.1
172.5°	175.3	174.7	175.0	175.7	176.1	176.6	178.1	179.4	179.5	180.0	181.1
175°	176.6	175.9	176.3	176.6	176.6	176.6	177.7	178.4	178.1	178.1	178.4
177.5°	177.3	176.7	176.7	177.0	176.7	176.7	177.3	177.6	177.0	177.0	177.3
180°	177.0	177.0	177.0	177.0	177.0	177.0	177.0	177.0	177.0	177.0	177.0



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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	186.6	192.1	194.5	196.9	199.4	201.9
90°	151.6	160.1	168.4	174.4	176.8	179.3	182.1	184.5
92.5°	202.9	193.3	189.7	189.6	187.4	188.9	191.0	192.8
95°	387.0	340.4	304.2	279.3	256.4	248.1	247.7	244.5
97.5°	503.9	473.2	437.8	401.0	381.3	363.8	355.8	353.6
100°	554.4	544.3	514.9	482.5	460.0	436.4	425.3	421.6
102.5°	567.9	585.8	575.2	554.7	530.5	514.3	502.1	499.9
105°	547.4	603.3	626.0	626.8	617.8	608.5	603.8	602.0
107.5°	499.5	571.7	618.9	642.1	650.1	652.2	652.0	651.3
110°	464.1	538.7	595.6	630.5	649.0	658.2	663.2	665.6



TEST NUMBER: P333300-840

CATALOG NUMBER: S125DIP-S1270D365U840-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	435.2	505.9	563.2	603.4	629.2	643.4	652.1	657.0
115°	398.1	459.7	514.8	558.0	587.9	607.1	619.2	626.0
117.5°	370.8	424.4	472.5	512.4	542.6	562.7	575.0	580.2
120°	355.5	404.2	449.5	484.9	513.4	532.7	544.4	549.4
122.5°	342.2	387.6	428.2	461.5	487.2	504.9	516.6	521.4
125°	323.3	365.3	401.9	431.3	453.0	469.4	479.1	484.3
127.5°	303.8	343.0	377.1	404.8	425.0	439.9	449.3	452.9
130°	292.4	328.6	361.3	387.9	407.5	421.0	429.9	433.7
132.5°	280.1	314.5	344.6	370.1	389.4	402.7	410.7	414.7
135°	262.6	291.8	319.1	342.6	360.1	373.7	381.8	385.7
137.5°	248.2	272.3	295.4	315.5	330.9	343.1	350.3	354.1
140°	239.6	260.2	280.5	298.1	312.8	323.4	330.1	333.4
142.5°	232.3	249.7	267.2	282.6	295.1	304.4	310.8	313.8
145°	223.7	236.5	249.3	260.5	270.5	278.0	283.3	286.1
147.5°	216.7	226.3	235.4	243.3	250.6	256.1	259.0	260.3
150°	213.1	221.0	227.7	234.3	240.0	244.6	246.4	247.1
152.5°	210.3	217.2	223.4	228.4	233.0	236.5	238.0	238.4
155°	205.9	211.7	216.6	220.6	224.1	226.6	227.7	228.0
157.5°	201.7	206.3	210.3	213.3	216.1	218.1	219.1	219.0
160°	198.8	202.4	205.9	208.4	211.0	212.7	213.4	213.1
162.5°	195.6	198.9	202.0	204.2	206.1	207.5	207.7	207.6
165°	191.3	193.8	195.9	197.7	199.1	199.9	199.9	199.9
167.5°	187.1	188.8	190.5	191.8	192.5	193.1	192.8	192.7
170°	184.9	185.9	187.0	187.7	188.4	188.8	188.8	188.4
172.5°	182.3	183.4	184.2	184.6	184.7	185.4	184.8	184.4
175°	179.6	179.6	180.3	180.3	180.3	180.6	179.9	179.6
177.5°	177.6	177.8	177.8	177.8	177.6	177.8	177.0	177.0
180°	177.0	177.0	177.0	177.0	177.0	177.0	177.0	177.0

(END OF REPORT)