

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: P333299-830

Luminaire Tested: **S125DIP-S1270D365U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333299-830
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-S1270D365U830-4F0-1E-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: 5838.1 lumens
Efficiency: N/A
Efficacy: 117.2 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

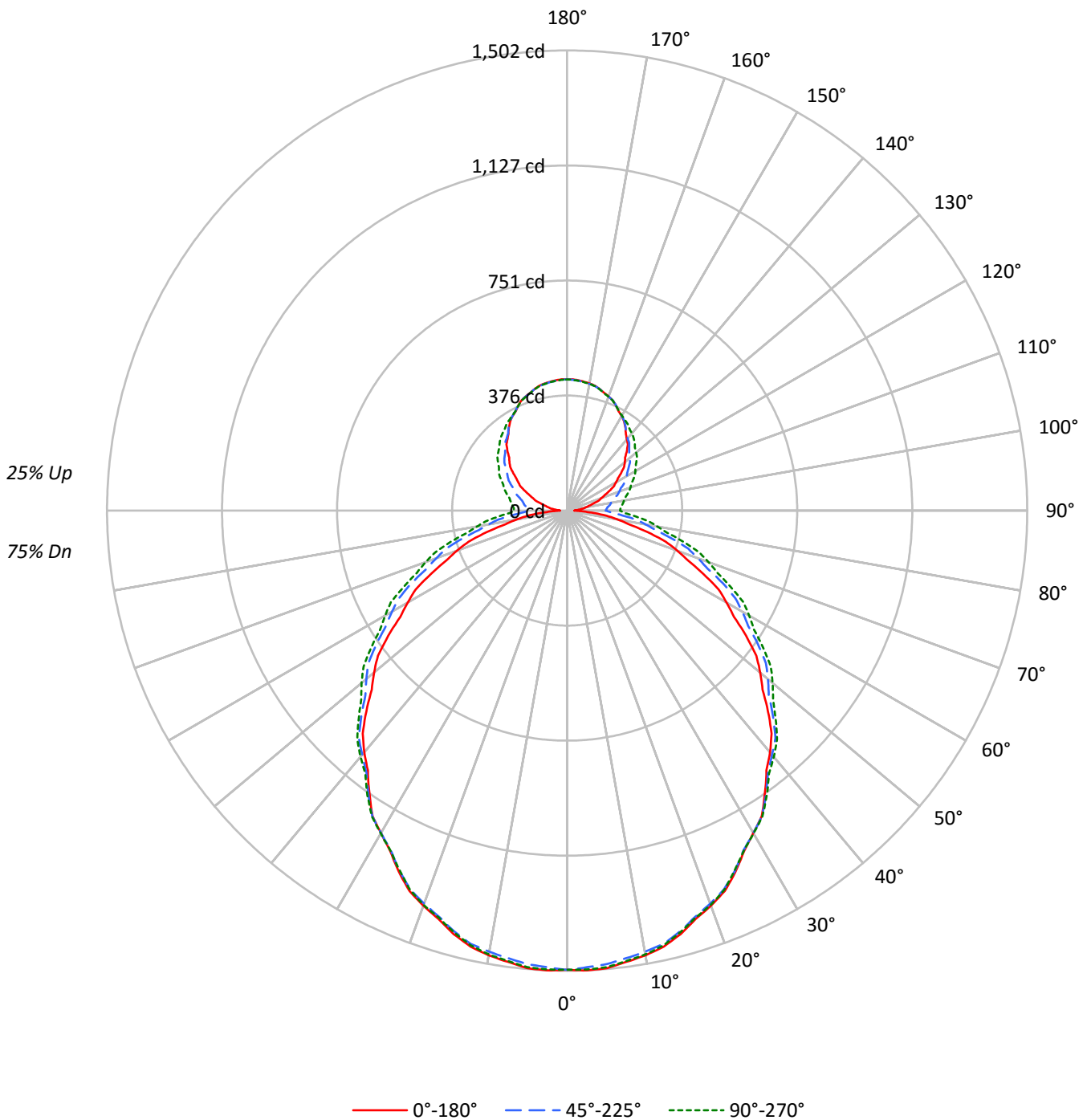
Input Watts (W): 49.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	113	113	113	113	107	107	107	107	97	97	97	88	88	88	79	79	79
1	102	97	93	89	97	92	89	85	84	81	78	75	73	71	68	66	64
2	93	84	77	72	88	80	74	69	73	68	63	66	62	58	59	56	53
3	84	74	66	59	80	70	63	57	64	58	53	58	53	49	52	48	45
4	77	65	57	50	73	62	54	48	57	50	45	51	46	42	46	42	38
5	71	58	49	43	67	56	47	41	51	44	39	46	40	36	42	37	33
6	65	52	43	37	62	50	42	36	46	39	34	42	36	32	38	33	29
7	60	47	39	33	57	45	37	32	41	35	30	38	32	28	34	30	26
8	56	43	35	29	53	41	33	28	38	31	27	35	29	25	32	27	23
9	52	39	31	26	50	38	30	25	35	28	24	32	26	22	29	24	21
10	49	36	28	23	47	35	28	23	32	26	22	30	24	20	27	22	19

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	6.9
20°-30°	598.4	10.2
30°-40°	708.8	12.1
40°-50°	732.8	12.6
50°-60°	675.1	11.6
60°-70°	545.7	9.3
70°-80°	365.5	6.3
80°-90°	190.5	3.3
90°-100°	135.0	2.3
100°-110°	163.1	2.8
110°-120°	196.0	3.4
120°-130°	218.6	3.7
130°-140°	224.5	3.8
140°-150°	209.9	3.6
150°-160°	174.1	3.0
160°-170°	115.7	2.0
170°-180°	40.5	0.7
0°-30°	1142.5	19.6
0°-40°	1851.2	31.7
0°-60°	3259.1	55.8
0°-90°	4360.8	74.7
90°-120°	494.1	8.5
90°-150°	1147.1	19.6
90°-180°	1477.0	25.3
0°-180°	5838.1	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	173	17
95°	41	80	133	166	178	38
105°	89	116	160	191	203	95
115°	152	166	203	228	238	151
125°	216	218	246	268	276	193
135°	275	276	287	305	312	212
145°	332	332	332	340	345	207
155°	378	378	378	379	378	174
165°	411	410	410	412	410	116
175°	427	426	426	427	425	41
180°	428	428	428	428	428	



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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	77.7	88.2	99.1	110.3	121.5	132.7	143.9	151.5
90°	23.8	34.9	45.9	56.9	68.1	79.4	91.0	102.5	114.2	125.8	133.7
92.5°	29.2	39.3	49.4	59.5	69.6	80.6	92.6	104.6	116.6	128.6	136.3
95°	40.7	49.4	58.1	66.6	75.3	85.6	97.4	109.2	121.1	132.9	140.6
97.5°	53.3	61.0	68.7	76.4	84.2	93.9	105.6	117.3	129.0	140.8	148.1
100°	62.8	69.7	76.5	83.4	90.2	99.3	110.7	122.2	133.7	145.1	152.5
102.5°	73.0	79.7	86.3	93.0	99.6	108.3	118.9	129.6	140.3	151.0	158.3
105°	89.2	94.8	100.4	105.9	111.6	119.5	129.7	140.0	150.2	160.4	167.4
107.5°	107.2	112.0	116.8	121.6	126.4	133.7	143.5	153.2	162.9	172.7	179.4
110°	119.5	123.9	128.1	132.4	136.7	143.5	152.9	162.3	171.6	181.0	187.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	133.4	136.8	140.1	143.4	146.8	153.0	162.1	171.3	180.5	189.6	195.7
115°	152.4	155.0	157.6	160.1	162.7	168.3	177.0	185.6	194.3	202.9	208.7
117.5°	171.4	173.1	174.7	176.3	178.0	182.9	191.1	199.3	207.4	215.6	221.2
120°	184.3	185.6	186.9	188.3	189.6	194.1	201.7	209.2	216.9	224.4	230.0
122.5°	196.9	197.6	198.1	198.7	199.3	203.3	210.8	218.2	225.6	233.1	238.3
125°	215.5	215.6	215.7	215.7	215.9	219.2	225.8	232.4	239.0	245.6	250.7
127.5°	233.9	233.8	233.8	233.8	233.7	236.3	241.8	247.2	252.7	258.1	262.9
130°	245.9	246.0	246.0	246.1	246.1	248.5	253.2	257.9	262.7	267.4	271.8
132.5°	256.7	257.3	257.8	258.4	258.9	260.9	264.5	268.0	271.5	274.9	279.5
135°	275.4	275.6	275.7	275.8	275.9	277.1	279.6	281.9	284.3	286.6	290.9
137.5°	293.0	293.1	293.3	293.5	293.7	294.4	295.7	296.9	298.2	299.4	303.4
140°	303.3	303.7	304.1	304.4	304.7	305.2	305.8	306.3	306.9	307.5	311.1
142.5°	314.7	314.8	314.8	314.9	314.9	315.2	315.5	315.8	316.2	316.5	319.7
145°	331.6	331.6	331.6	331.5	331.5	331.6	331.8	332.1	332.2	332.4	334.1
147.5°	345.7	345.9	346.0	346.2	346.4	346.6	346.8	346.9	347.0	347.2	348.0
150°	356.1	356.1	356.0	355.9	355.8	355.9	356.2	356.6	356.8	357.1	357.1
152.5°	364.7	364.8	364.9	365.0	365.0	365.1	365.3	365.4	365.5	365.6	365.8
155°	377.8	377.8	377.8	377.8	377.8	377.8	377.9	378.0	378.1	378.1	378.4
157.5°	389.5	389.4	389.2	389.0	388.9	388.8	388.9	389.0	389.0	389.1	389.4
160°	396.4	396.2	396.0	395.8	395.6	395.5	395.6	395.6	395.7	395.8	396.1
162.5°	402.6	402.4	402.3	402.1	401.9	401.8	401.8	401.9	401.9	401.9	402.3
165°	410.8	410.6	410.5	410.3	410.2	410.1	410.2	410.3	410.4	410.4	410.8
167.5°	417.6	417.4	417.1	416.8	416.5	416.3	416.3	416.3	416.3	416.3	416.8
170°	421.4	421.1	420.8	420.6	420.2	420.1	420.1	420.1	420.1	420.1	420.6
172.5°	424.0	423.8	423.5	423.2	422.9	422.7	422.7	422.7	422.7	422.7	423.2
175°	427.1	426.8	426.5	426.2	425.9	425.7	425.7	425.7	425.7	425.7	426.2
177.5°	428.6	428.4	428.1	427.9	427.6	427.5	427.4	427.4	427.3	427.3	427.6
180°	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1



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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	174.3	179.2	181.5	183.9	186.2	188.5
90°	141.6	149.5	157.3	162.6	165.0	167.6	170.0	172.6
92.5°	144.1	151.8	159.6	164.7	167.1	169.6	172.0	174.5
95°	148.4	156.0	163.7	168.8	171.3	173.7	176.1	178.5
97.5°	155.4	162.8	170.1	175.0	177.3	179.6	181.9	184.3
100°	160.0	167.6	175.1	179.9	182.0	184.2	186.2	188.3
102.5°	165.6	173.0	180.3	185.0	187.2	189.4	191.5	193.7
105°	174.4	181.3	188.3	193.1	195.6	198.1	200.6	203.1
107.5°	186.1	192.7	199.4	203.8	205.8	207.7	209.8	211.8
110°	193.9	200.3	206.7	211.0	213.2	215.5	217.6	219.9



TEST NUMBER: P333299-830

CATALOG NUMBER: S125DIP-S1270D365U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	201.7	207.7	213.8	217.9	220.1	222.3	224.3	226.5
115°	214.5	220.3	226.1	230.0	231.9	233.8	235.6	237.5
117.5°	226.8	232.4	238.0	241.8	243.7	245.6	247.5	249.5
120°	235.5	241.1	246.7	250.2	251.9	253.5	255.2	256.9
122.5°	243.6	248.7	254.0	257.5	259.2	260.9	262.7	264.4
125°	255.8	260.9	266.0	269.3	270.9	272.4	274.0	275.5
127.5°	267.6	272.4	277.1	280.4	282.1	283.9	285.6	287.4
130°	276.4	280.9	285.4	288.3	289.8	291.3	292.8	294.3
132.5°	283.9	288.4	292.9	295.8	296.9	298.0	299.3	300.4
135°	295.1	299.4	303.6	306.3	307.7	309.1	310.4	311.7
137.5°	307.4	311.3	315.3	317.7	318.7	319.6	320.5	321.4
140°	314.9	318.7	322.3	324.7	325.6	326.6	327.5	328.5
142.5°	322.8	326.0	329.1	331.2	332.2	333.1	334.0	335.0
145°	335.7	337.3	339.0	340.4	341.5	342.5	343.7	344.7
147.5°	348.6	349.4	350.1	350.4	350.5	350.6	350.7	350.8
150°	357.1	357.1	357.1	357.2	357.4	357.6	357.8	357.9
152.5°	366.0	366.2	366.4	366.4	366.2	366.0	365.7	365.5
155°	378.7	379.0	379.3	379.3	378.9	378.5	378.1	377.8
157.5°	389.6	390.0	390.3	390.2	389.7	389.2	388.7	388.2
160°	396.3	396.6	396.9	396.9	396.5	396.2	395.8	395.4
162.5°	402.6	402.9	403.3	403.3	402.8	402.4	402.0	401.5
165°	411.0	411.3	411.6	411.5	411.0	410.7	410.2	409.7
167.5°	417.3	417.6	418.1	418.1	417.6	417.2	416.7	416.3
170°	420.9	421.4	421.9	421.8	421.3	420.8	420.3	419.7
172.5°	423.7	424.0	424.5	424.5	424.0	423.6	423.1	422.6
175°	426.6	427.1	427.5	427.4	427.0	426.4	425.9	425.4
177.5°	428.0	428.4	428.7	428.7	428.3	427.8	427.4	427.0
180°	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1

(END OF REPORT)