

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: P333210

Luminaire Tested: **S125DIP-S850D365U835-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333210
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-S850D365U835-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 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: 4596.6 lumens
Efficiency: N/A
Efficacy: 131.3 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

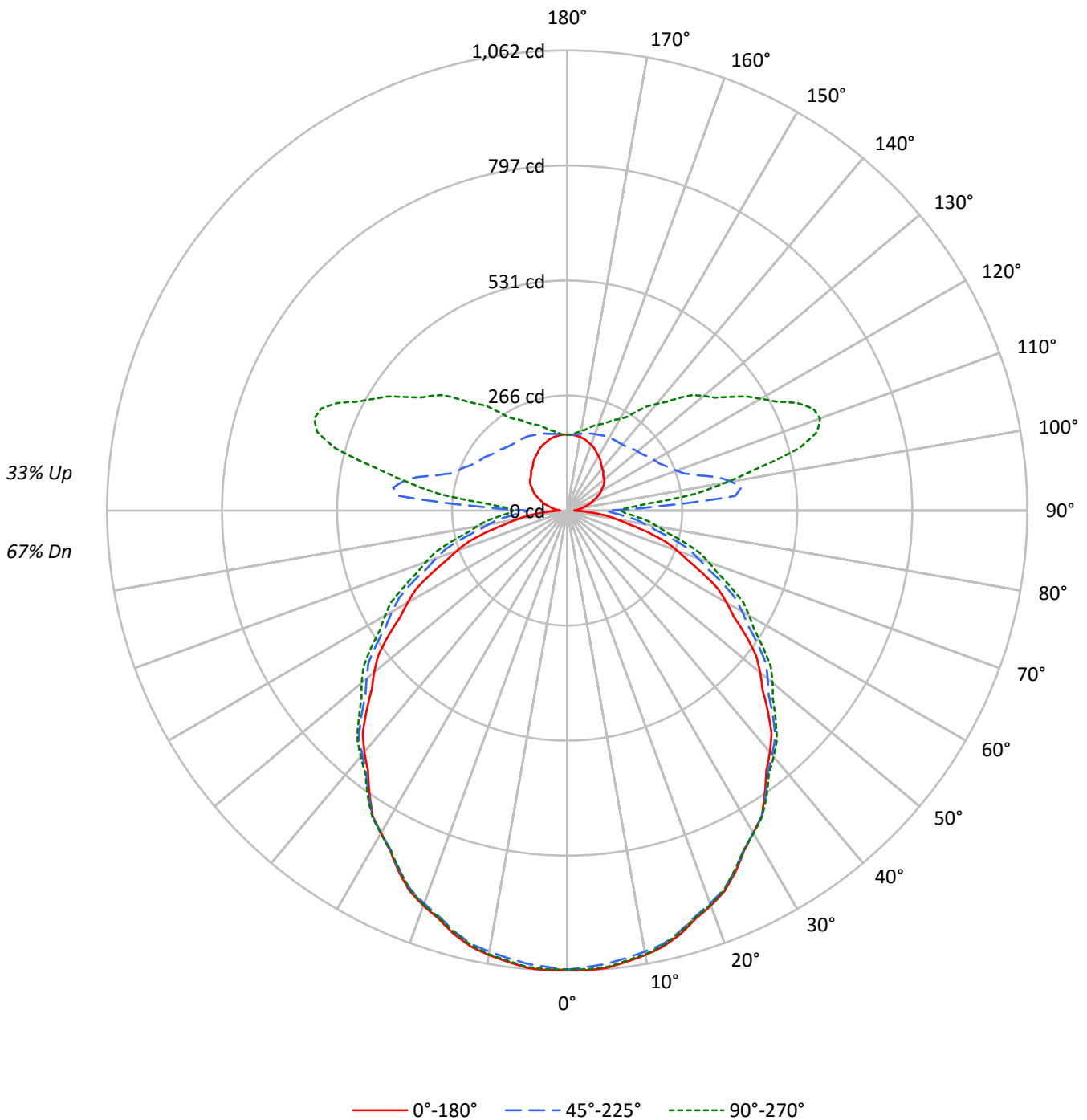
Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333210

CATALOG NUMBER: S125DIP-S850D365U835-4F0-1E-UDD-D4

Luminous Intensity Polar Plot





TEST NUMBER: P333210

CATALOG NUMBER: S125DIP-S850D365U835-4F0-1E-UDD-D4

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	50	30	10	50	30	10	0		
RCR																										
0	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67								
1	101	96	91	87	95	90	86	83	80	77	74	71	68	66	62	60	59	54								
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45								
3	83	73	65	58	78	69	62	56	61	55	51	54	50	46	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	49	42	65	54	46	40	48	42	37	43	38	34	38	34	30	28								
6	64	51	43	37	60	49	41	35	44	37	32	39	34	29	34	30	27	24								
7	59	46	38	32	56	44	36	31	40	33	28	35	30	26	31	27	24	21								
8	55	42	34	28	52	40	33	27	36	30	25	32	27	23	29	24	21	19								
9	51	39	31	25	48	37	29	24	33	27	23	30	25	21	27	22	19	17								
10	48	35	28	23	45	34	27	22	31	25	20	28	22	19	25	20	17	15								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6841	6841	6841
5°	6855	6715	6737
10°	6806	6595	6585
15°	6726	6452	6393
20°	6616	6274	6201
25°	6486	6084	5964
30°	6329	5876	5749
35°	6182	5684	5552
40°	6032	5481	5353
45°	5863	5308	5178
50°	5702	5120	5022
55°	5508	4943	4839
60°	5296	4741	4653
65°	5075	4530	4443
70°	4822	4240	4228
75°	4425	3962	3962
80°	3905	3625	3673
85°	3417	3398	3583



TEST NUMBER: P333210

CATALOG NUMBER: S125DIP-S850D365U835-4F0-1E-UDD-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.2	2.2
10°-20°	284.4	6.2
20°-30°	422.9	9.2
30°-40°	500.9	10.9
40°-50°	517.9	11.3
50°-60°	477.1	10.4
60°-70°	385.7	8.4
70°-80°	258.3	5.6
80°-90°	134.9	2.9
90°-100°	202.2	4.4
100°-110°	328.6	7.1
110°-120°	293.5	6.4
120°-130°	228.8	5.0
130°-140°	175.9	3.8
140°-150°	127.7	2.8
150°-160°	88.6	1.9
160°-170°	52.2	1.1
170°-180°	17.0	0.4
0°-30°	807.4	17.6
0°-40°	1308.3	28.5
0°-60°	2303.3	50.1
0°-90°	3082.2	67.1
90°-120°	824.2	17.9
90°-150°	1356.7	29.5
90°-180°	1514.0	32.9
0°-180°	4596.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1059	1059	1059	1059	1059	
5°	1059	1057	1050	1058	1057	100
15°	1012	1012	1005	1011	1007	285
25°	919	922	916	920	915	423
35°	796	802	800	803	803	498
45°	655	666	672	679	680	506
55°	504	520	537	548	552	450
65°	347	371	396	411	415	344
75°	191	218	251	271	277	203
85°	57	92	128	150	159	61
90°	17	53	91	116	124	12
95°	25	75	389	240	189	23
105°	49	83	313	582	553	52
115°	78	101	246	502	587	76
125°	103	120	221	393	457	91
135°	118	141	204	317	368	92
145°	136	155	196	250	279	85
155°	154	166	192	216	226	71
165°	168	173	184	195	198	47
175°	175	175	176	178	178	17
180°	175	175	175	175	175	



TEST NUMBER: P333210

CATALOG NUMBER: S125DIP-S850D365U835-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3
2.5°	1061.8	1061.5	1061.1	1060.7	1060.3	1059.5	1058.2	1056.9	1055.6	1054.3	1055.6
5°	1059.3	1058.9	1058.4	1057.9	1057.5	1056.4	1054.8	1053.2	1051.6	1050.0	1051.8
7.5°	1050.0	1049.8	1049.6	1049.4	1049.2	1048.3	1046.7	1045.0	1043.3	1041.7	1043.3
10°	1041.7	1041.7	1041.7	1041.7	1041.7	1040.8	1038.9	1037.1	1035.2	1033.4	1035.0
12.5°	1030.0	1030.2	1030.4	1030.6	1030.8	1030.1	1028.7	1027.2	1025.7	1024.2	1025.5
15°	1011.6	1011.8	1012.0	1012.2	1012.5	1011.8	1010.2	1008.6	1006.9	1005.3	1006.7
17.5°	987.5	987.9	988.4	988.8	989.3	988.7	987.1	985.5	983.9	982.3	983.3
20°	970.0	970.5	970.9	971.4	971.9	971.3	969.7	968.1	966.4	964.8	965.5
22.5°	950.1	950.9	951.7	952.6	953.4	952.9	951.1	949.3	947.5	945.7	946.6
25°	919.1	919.8	920.5	921.2	921.9	921.5	920.2	918.8	917.4	916.0	916.9
27.5°	884.6	885.7	886.7	887.7	888.7	888.4	886.9	885.3	883.7	882.2	882.8
30°	858.9	860.3	861.7	863.0	864.4	864.4	863.0	861.7	860.3	858.9	859.4
32.5°	835.6	836.8	838.0	839.2	840.4	840.5	839.5	838.5	837.5	836.5	836.9
35°	795.5	797.2	798.8	800.4	802.0	802.5	801.8	801.1	800.4	799.7	800.4
37.5°	755.4	756.9	758.4	759.9	761.4	762.0	761.7	761.5	761.3	761.1	762.0
40°	728.0	729.9	731.7	733.6	735.4	736.2	736.0	735.8	735.5	735.3	736.2
42.5°	698.1	700.5	702.9	705.3	707.7	709.2	709.7	710.2	710.7	711.2	712.3
45°	655.3	657.9	660.4	662.9	665.5	667.3	668.5	669.6	670.8	671.9	673.6
47.5°	611.5	613.9	616.2	618.6	620.9	623.1	625.1	627.1	629.0	631.0	633.4
50°	581.6	584.1	586.7	589.2	591.7	594.3	596.8	599.4	601.9	604.4	607.0
52.5°	550.0	553.1	556.2	559.3	562.4	565.5	568.6	571.7	574.8	577.9	580.6
55°	503.7	507.4	511.1	514.8	518.5	522.2	525.9	529.6	533.2	536.9	539.5
57.5°	456.3	460.8	465.2	469.6	474.1	478.4	482.7	486.9	491.1	495.4	498.3
60°	424.8	429.4	434.0	438.6	443.2	447.9	452.5	457.1	461.7	466.3	469.8
62.5°	394.0	398.6	403.3	407.9	412.5	417.3	422.3	427.3	432.2	437.2	441.1
65°	346.9	352.2	357.5	362.8	368.1	373.5	379.1	384.6	390.2	395.7	399.2
67.5°	302.4	307.6	312.7	317.8	322.9	328.3	333.9	339.6	345.2	350.8	355.0
70°	270.0	275.3	280.6	286.0	291.3	296.9	302.9	308.9	314.9	320.9	325.3
72.5°	238.5	243.9	249.4	254.9	260.4	266.4	273.0	279.6	286.1	292.7	297.4
75°	191.1	197.1	203.1	209.1	215.1	221.8	229.2	236.6	243.9	251.3	255.9
77.5°	145.6	152.5	159.5	166.4	173.3	180.3	187.4	194.5	201.6	208.8	213.8
80°	117.4	124.3	131.2	138.1	145.1	152.4	160.3	168.1	176.0	183.8	188.9
82.5°	91.6	98.9	106.2	113.5	120.8	128.4	136.5	144.5	152.5	160.6	165.5
85°	57.1	64.7	72.4	80.0	87.6	95.4	103.5	111.6	119.7	127.7	132.8
87.5°	32.5	39.9	47.5	55.0	62.5	70.3	78.2	86.2	94.1	102.1	107.5
90°	17.0	24.7	32.8	40.9	49.0	57.3	65.5	74.1	82.3	90.8	96.5
92.5°	19.3	27.0	36.8	48.0	60.9	78.7	106.0	146.4	189.6	195.8	179.2
95°	25.2	31.5	40.3	50.2	64.0	86.8	132.5	218.1	323.5	388.9	387.3
97.5°	31.6	37.4	44.8	54.1	66.5	84.4	117.0	181.6	291.2	405.0	463.2
100°	36.2	41.7	48.0	56.7	68.3	85.0	112.9	166.2	262.6	385.6	478.8
102.5°	41.3	46.2	51.8	60.4	71.1	87.2	112.6	158.4	240.9	355.4	463.4
105°	49.3	53.0	58.4	65.7	75.0	90.2	112.7	151.1	217.0	313.3	419.4
107.5°	57.1	60.9	65.8	71.8	80.8	94.6	116.3	149.9	204.7	283.6	375.6
110°	62.8	66.2	70.4	76.4	84.4	98.2	119.2	150.0	199.3	268.6	350.1



TEST NUMBER: P333210

CATALOG NUMBER: S125DIP-S850D365U835-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	69.3	72.2	75.5	80.9	88.4	101.6	121.8	151.0	196.1	258.5	330.2
115°	77.6	79.9	82.6	87.4	94.3	107.0	126.1	152.6	192.5	246.2	307.2
117.5°	85.1	87.2	89.4	93.6	100.7	112.6	130.7	155.0	190.1	237.6	291.4
120°	90.7	92.5	94.6	98.5	105.2	117.0	134.7	156.9	189.5	232.6	282.1
122.5°	95.8	96.9	98.4	101.9	108.8	120.3	137.8	159.1	188.3	227.8	273.5
125°	103.1	103.6	105.1	108.1	114.6	125.9	142.2	162.0	187.1	221.1	261.5
127.5°	107.9	108.8	110.8	114.6	121.5	132.5	147.5	165.3	186.9	215.5	250.1
130°	111.6	112.4	115.0	119.4	126.6	137.3	151.5	168.1	187.3	212.4	243.2
132.5°	113.6	114.9	118.3	123.4	131.0	141.4	154.9	170.0	187.2	209.1	236.5
135°	118.0	119.2	123.2	128.6	135.8	146.0	158.6	171.9	186.6	204.1	227.2
137.5°	123.6	124.5	128.2	133.7	140.8	150.9	161.7	173.6	186.9	200.8	219.6
140°	126.1	127.2	131.4	137.1	143.8	153.5	164.0	174.8	186.3	198.6	215.3
142.5°	130.1	130.7	134.5	139.9	146.2	155.1	164.8	174.9	185.7	197.2	211.8
145°	136.0	136.5	139.8	144.5	150.7	158.7	167.9	176.7	186.2	196.5	208.3
147.5°	141.2	141.6	144.7	149.3	154.8	161.9	170.0	178.0	186.6	195.6	205.3
150°	144.9	145.6	148.1	152.7	157.6	163.6	171.4	178.8	186.6	194.7	203.2
152.5°	148.9	149.3	151.5	155.5	160.2	165.6	172.8	179.4	186.3	193.6	201.2
155°	154.1	154.1	156.2	159.7	163.3	168.2	174.2	179.9	185.5	191.6	197.9
157.5°	158.8	158.7	160.4	163.4	166.5	170.3	175.4	180.2	184.6	189.4	194.8
160°	161.9	161.5	162.9	165.4	168.2	171.4	176.0	180.2	183.8	188.0	192.3
162.5°	164.4	164.1	165.5	167.7	169.9	172.5	176.6	180.0	182.9	186.3	190.0
165°	168.2	167.5	168.6	170.3	171.8	173.9	176.7	179.5	181.7	183.8	186.6
167.5°	170.8	170.4	171.1	172.0	173.0	174.4	176.7	178.7	179.7	181.3	183.3
170°	172.5	172.1	172.5	173.2	173.9	174.9	176.7	178.1	178.8	179.9	181.3
172.5°	173.6	173.0	173.3	174.0	174.4	174.9	176.4	177.6	177.7	178.2	179.3
175°	174.9	174.2	174.6	174.9	174.9	174.9	176.0	176.7	176.4	176.4	176.7
177.5°	175.6	175.0	175.0	175.3	175.0	175.0	175.6	175.9	175.3	175.3	175.6
180°	175.3	175.3	175.3	175.3	175.3	175.3	175.3	175.3	175.3	175.3	175.3



TEST NUMBER: P333210

CATALOG NUMBER: S125DIP-S850D365U835-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3
2.5°	1056.9	1058.2	1059.5	1060.1	1059.9	1059.7	1059.5	1059.3
5°	1053.7	1055.5	1057.4	1058.2	1057.9	1057.7	1057.5	1057.3
7.5°	1044.9	1046.5	1048.1	1048.8	1048.6	1048.4	1048.1	1047.9
10°	1036.6	1038.2	1039.8	1040.5	1040.3	1040.1	1039.8	1039.6
12.5°	1026.7	1028.0	1029.2	1029.5	1028.9	1028.3	1027.7	1027.1
15°	1008.1	1009.5	1010.9	1011.1	1010.2	1009.2	1008.3	1007.4
17.5°	984.4	985.5	986.5	986.8	986.2	985.7	985.1	984.6
20°	966.2	966.9	967.6	967.9	967.9	967.9	967.9	967.9
22.5°	947.5	948.3	949.2	949.4	948.8	948.3	947.7	947.2
25°	917.9	918.8	919.7	919.6	918.4	917.3	916.1	915.0
27.5°	883.4	884.1	884.7	884.9	884.4	884.0	883.6	883.2
30°	859.8	860.3	860.7	860.9	860.6	860.4	860.2	859.9
32.5°	837.4	837.8	838.3	838.4	838.2	838.0	837.7	837.5
35°	801.1	801.8	802.5	802.8	802.8	802.8	802.8	802.8
37.5°	762.9	763.8	764.7	765.2	765.1	765.0	764.9	764.8
40°	737.1	738.1	739.0	739.7	740.1	740.6	741.1	741.5
42.5°	713.4	714.5	715.6	716.2	716.3	716.4	716.5	716.6
45°	675.2	676.8	678.4	679.3	679.6	679.8	680.0	680.3
47.5°	635.7	638.1	640.4	641.9	642.4	642.9	643.4	643.9
50°	609.5	612.1	614.6	616.2	616.9	617.6	618.3	619.0
52.5°	583.3	586.0	588.7	590.4	590.9	591.4	591.9	592.4
55°	542.0	544.6	547.1	548.8	549.7	550.7	551.6	552.5
57.5°	501.2	504.1	507.0	508.8	509.5	510.2	510.9	511.6
60°	473.2	476.7	480.2	482.2	482.9	483.6	484.3	485.0
62.5°	444.9	448.7	452.6	454.9	455.8	456.7	457.5	458.4
65°	402.6	406.1	409.5	411.7	412.7	413.6	414.5	415.4
67.5°	359.2	363.4	367.6	370.3	371.5	372.7	373.9	375.1
70°	329.7	334.1	338.5	341.3	342.7	344.1	345.5	346.9
72.5°	302.2	306.9	311.7	314.6	315.6	316.6	317.6	318.6
75°	260.6	265.2	269.8	272.7	273.8	275.0	276.1	277.3
77.5°	218.9	224.0	229.1	232.1	233.0	233.9	234.8	235.8
80°	194.0	199.1	204.1	207.1	208.1	209.0	209.9	210.8
82.5°	170.3	175.2	180.1	183.4	185.1	186.7	188.4	190.1
85°	137.9	143.0	148.1	151.5	153.4	155.2	157.1	158.9
87.5°	112.8	118.2	123.6	127.2	128.8	130.4	132.1	133.7
90°	102.1	107.8	113.5	117.6	119.2	120.9	122.8	124.4
92.5°	154.7	142.7	136.5	134.7	131.8	132.5	133.7	134.7
95°	340.1	291.4	253.0	226.7	203.2	194.2	193.0	189.0
97.5°	458.8	425.9	388.4	350.4	330.1	311.9	303.2	300.2
100°	510.9	498.4	466.8	433.2	410.2	386.1	374.4	370.2
102.5°	526.1	541.4	528.6	506.8	482.1	465.4	452.6	449.7
105°	508.8	561.9	582.0	581.3	571.6	561.5	556.1	553.4
107.5°	463.9	533.1	577.6	599.0	606.2	607.5	606.6	605.2
110°	430.8	502.3	556.5	589.6	607.1	615.4	619.5	621.1



TEST NUMBER: P333210

CATALOG NUMBER: S125DIP-S850D365U835-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	403.9	471.9	526.5	564.8	589.7	602.8	610.6	614.7
115°	369.7	428.6	481.2	522.5	551.5	569.8	581.1	587.1
117.5°	345.5	396.6	442.2	480.3	509.5	528.6	539.9	544.3
120°	332.0	378.3	421.1	454.8	482.4	500.7	511.7	515.9
122.5°	320.6	363.7	402.0	433.7	458.4	475.4	486.3	490.2
125°	304.5	344.2	378.6	406.5	427.5	443.1	452.0	456.7
127.5°	287.8	324.9	357.0	383.2	402.5	416.6	425.3	428.2
130°	277.9	312.2	343.0	368.2	387.0	399.8	408.0	411.3
132.5°	267.5	299.9	328.1	352.3	371.0	383.6	391.1	394.4
135°	252.9	280.2	305.9	328.1	344.8	357.6	365.1	368.4
137.5°	240.8	263.2	284.8	303.7	318.5	330.1	336.9	340.1
140°	233.7	252.8	271.6	288.2	302.2	312.3	318.5	321.2
142.5°	227.6	243.9	260.0	274.4	286.4	295.1	301.1	303.5
145°	220.4	232.5	244.6	255.2	264.6	271.5	276.3	278.6
147.5°	214.3	223.5	232.3	239.9	247.1	252.3	255.0	256.0
150°	211.0	218.8	225.5	232.0	237.5	242.0	243.6	244.2
152.5°	208.2	215.1	221.2	226.2	230.7	234.1	235.6	236.0
155°	203.9	209.6	214.5	218.4	221.9	224.4	225.5	225.8
157.5°	199.7	204.3	208.2	211.2	214.0	216.0	217.0	216.9
160°	196.9	200.4	203.9	206.4	208.9	210.6	211.3	211.0
162.5°	193.7	197.0	200.0	202.2	204.1	205.5	205.7	205.6
165°	189.4	191.9	194.0	195.8	197.2	197.9	197.9	197.9
167.5°	185.3	187.0	188.6	189.9	190.6	191.2	190.9	190.8
170°	183.1	184.1	185.2	185.9	186.6	187.0	187.0	186.6
172.5°	180.5	181.6	182.4	182.8	182.9	183.6	183.0	182.6
175°	177.8	177.8	178.5	178.5	178.5	178.8	178.1	177.8
177.5°	175.9	176.1	176.1	176.1	175.9	176.1	175.3	175.3
180°	175.3	175.3	175.3	175.3	175.3	175.3	175.3	175.3

(END OF REPORT)