

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: P332538

Luminaire Tested: **S124DIP-S575D365U835-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332538
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DIP-S575D365U835-4F0-1E-UDD-D
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 575 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3831.8 lumens
Efficiency: N/A
Efficacy: 139.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')
CIE Type: General Diffuse

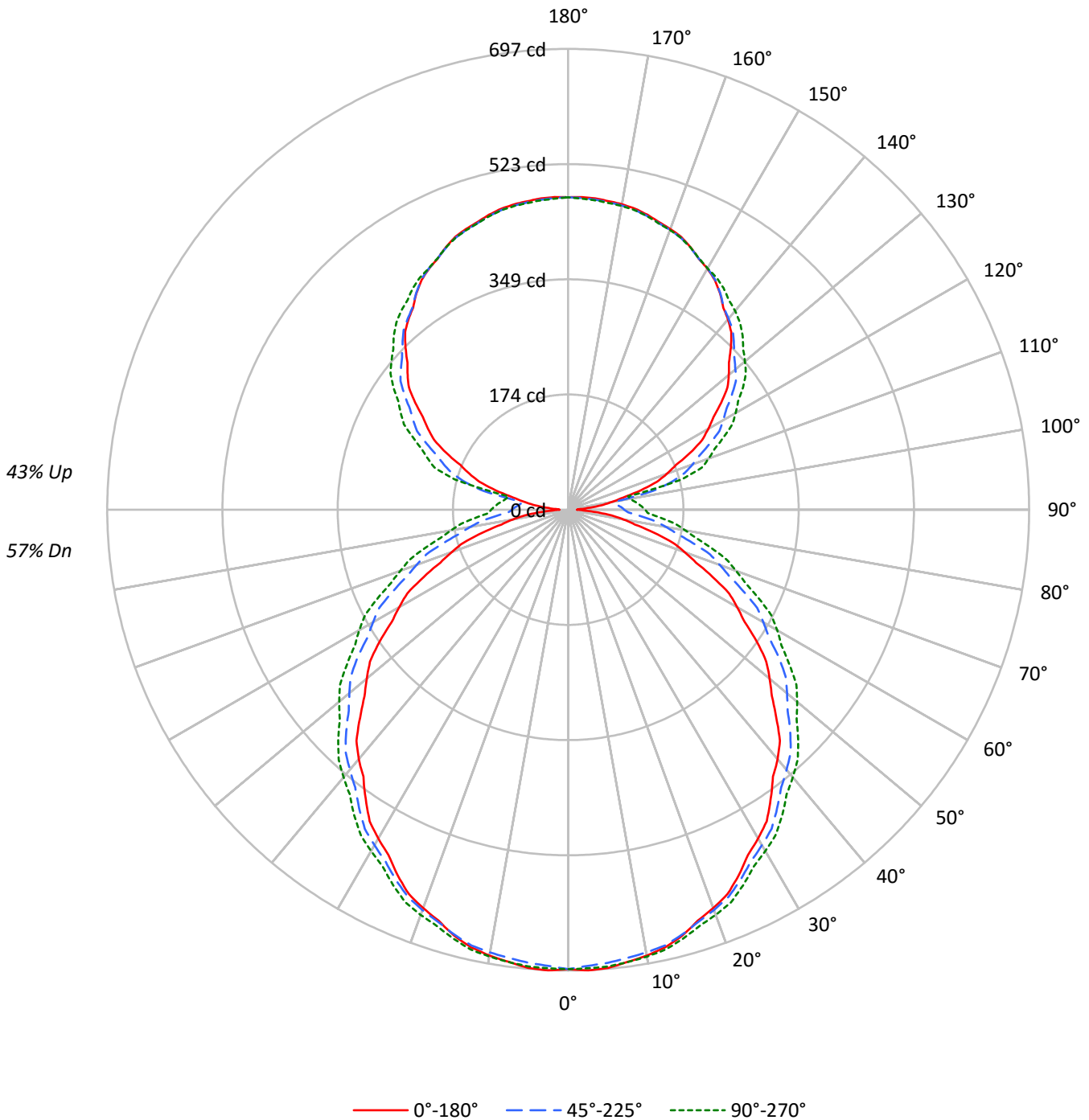
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332538

CATALOG NUMBER: S124DIP-S575D365U835-4F0-1E-UDD-D

Luminous Intensity Polar Plot





TEST NUMBER: P332538

CATALOG NUMBER: S124DIP-S575D365U835-4F0-1E-UDD-D

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	0	
RCR																						
0	109	109	109	109	101	101	101	101	87	87	87	75	75	75	63	63	63	57				
1	98	93	89	85	91	87	83	80	75	72	69	64	62	60	54	52	51	46				
2	89	81	74	68	82	75	69	64	65	60	56	55	52	49	46	44	42	37				
3	81	71	63	56	75	66	59	53	57	51	47	49	44	41	41	38	35	31				
4	74	62	54	47	68	58	51	45	50	44	40	43	38	35	36	33	30	26				
5	68	55	47	40	63	52	44	38	45	39	34	38	34	30	32	29	26	23				
6	62	50	41	35	58	46	39	33	40	34	30	35	30	26	29	26	23	20				
7	58	45	36	31	53	42	34	29	37	30	26	31	27	23	27	23	20	17				
8	53	41	32	27	49	38	31	26	33	27	23	29	24	20	25	21	18	15				
9	50	37	29	24	46	35	28	23	30	25	21	26	22	18	23	19	16	14				
10	46	34	26	21	43	32	25	20	28	22	18	24	20	16	21	17	14	13				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5610	5610	5610
5°	5628	5483	5498
10°	5593	5393	5388
15°	5543	5289	5260
20°	5467	5175	5135
25°	5382	5046	4997
30°	5290	4919	4856
35°	5185	4787	4732
40°	5102	4663	4603
45°	4978	4549	4492
50°	4873	4416	4375
55°	4765	4291	4237
60°	4596	4132	4112
65°	4410	3962	3958
70°	4186	3768	3778
75°	3872	3553	3616
80°	3526	3347	3457
85°	3082	3163	3364



TEST NUMBER: P332538

CATALOG NUMBER: S124DIP-S575D365U835-4F0-1E-UDD-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.8	1.7
10°-20°	188.5	4.9
20°-30°	285.1	7.4
30°-40°	344.9	9.0
40°-50°	364.7	9.5
50°-60°	343.2	9.0
60°-70°	284.7	7.4
70°-80°	200.0	5.2
80°-90°	114.4	3.0
90°-100°	83.3	2.2
100°-110°	152.7	4.0
110°-120°	230.5	6.0
120°-130°	269.0	7.0
130°-140°	275.9	7.2
140°-150°	252.0	6.6
150°-160°	201.9	5.3
160°-170°	130.2	3.4
170°-180°	44.9	1.2
0°-30°	539.4	14.1
0°-40°	884.4	23.1
0°-60°	1592.2	41.6
0°-90°	2191.4	57.2
90°-120°	466.5	12.2
90°-150°	1263.4	33.0
90°-180°	1640.0	42.8
0°-180°	3831.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	695	695	695	695	695	
5°	696	693	688	694	693	66
15°	667	668	665	672	672	188
25°	610	615	617	625	626	281
35°	534	543	551	561	564	334
45°	445	460	475	487	492	344
55°	349	365	388	403	408	311
65°	241	266	293	311	318	239
75°	134	163	195	216	224	142
85°	41	74	109	131	140	44
90°	14	49	85	109	116	9
95°	30	44	76	98	106	33
105°	113	132	162	183	178	119
115°	203	212	236	253	259	200
125°	282	284	302	317	323	252
135°	348	348	354	367	373	268
145°	400	400	400	405	409	250
155°	438	438	437	438	438	202
165°	462	460	460	463	460	130
175°	472	470	471	474	470	45
180°	472	472	472	472	472	



TEST NUMBER: P332538

CATALOG NUMBER: S124DIP-S575D365U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9
2.5°	697.4	697.0	696.6	696.1	695.7	695.0	693.9	692.8	691.6	690.5	691.5
5°	695.7	695.2	694.6	694.1	693.6	692.7	691.5	690.3	689.1	687.9	689.3
7.5°	689.8	689.4	689.1	688.8	688.5	687.9	686.9	685.9	684.8	683.8	685.4
10°	684.8	684.6	684.4	684.3	684.1	683.6	682.7	681.8	681.0	680.1	681.7
12.5°	677.9	677.9	677.9	677.8	677.8	677.5	676.9	676.3	675.7	675.1	676.5
15°	666.9	667.1	667.2	667.4	667.6	667.4	666.9	666.4	665.8	665.3	666.9
17.5°	651.8	652.3	652.8	653.3	653.9	654.1	654.0	653.9	653.8	653.7	655.2
20°	641.2	641.7	642.2	642.8	643.3	643.6	643.8	644.0	644.1	644.3	646.0
22.5°	629.4	630.0	630.7	631.3	632.0	632.5	632.8	633.1	633.4	633.7	635.5
25°	610.1	611.1	612.2	613.2	614.2	615.0	615.5	616.0	616.6	617.1	619.0
27.5°	588.6	590.1	591.6	593.2	594.7	595.8	596.6	597.4	598.2	599.0	600.8
30°	574.3	575.7	577.0	578.4	579.8	581.1	582.3	583.5	584.7	586.0	587.9
32.5°	558.7	560.4	562.0	563.7	565.4	566.9	568.2	569.6	570.9	572.3	574.4
35°	533.8	535.9	538.0	540.0	542.1	544.0	545.7	547.5	549.2	550.9	553.4
37.5°	508.8	511.1	513.5	515.9	518.3	520.6	522.7	524.9	527.0	529.1	531.6
40°	492.6	494.8	497.1	499.3	501.6	503.9	506.3	508.7	511.2	513.6	516.2
42.5°	473.9	476.4	478.9	481.5	484.0	486.7	489.5	492.3	495.2	498.0	500.9
45°	445.1	448.4	451.7	455.0	458.2	461.5	464.8	468.1	471.4	474.7	477.6
47.5°	417.6	420.9	424.3	427.7	431.1	434.7	438.5	442.3	446.1	449.9	453.0
50°	397.6	401.4	405.2	409.1	412.9	416.7	420.5	424.3	428.1	431.9	435.3
52.5°	377.7	381.5	385.3	389.1	392.9	397.0	401.4	405.7	410.1	414.4	417.9
55°	348.6	352.2	355.9	359.5	363.1	367.5	372.7	377.9	383.1	388.3	391.8
57.5°	316.1	320.6	325.1	329.6	334.1	338.9	344.0	349.2	354.4	359.5	363.6
60°	294.9	299.4	303.9	308.4	312.9	318.0	323.7	329.4	335.1	340.8	344.8
62.5°	274.4	279.3	284.2	289.1	294.0	299.3	305.0	310.7	316.5	322.2	326.1
65°	241.2	246.8	252.3	257.8	263.4	269.1	274.9	280.8	286.7	292.6	296.9
67.5°	209.3	215.2	221.1	227.0	232.8	238.9	245.2	251.5	257.8	264.1	268.5
70°	187.5	193.4	199.3	205.2	211.1	217.3	223.8	230.4	237.0	243.6	248.2
72.5°	166.4	172.4	178.4	184.4	190.4	196.9	203.9	210.9	217.9	224.9	229.4
75°	133.8	140.2	146.6	153.0	159.4	166.3	173.5	180.8	188.1	195.3	200.2
77.5°	103.5	110.3	117.1	123.8	130.6	137.8	145.4	153.0	160.6	168.2	173.1
80°	84.8	91.7	98.7	105.6	112.5	119.7	127.4	135.0	142.6	150.2	155.4
82.5°	66.1	73.3	80.5	87.7	94.9	102.3	109.9	117.5	125.1	132.8	138.1
85°	41.2	48.5	55.8	63.0	70.3	77.8	85.6	93.4	101.2	108.9	114.1
87.5°	23.2	30.5	37.7	44.9	52.2	59.6	67.3	75.0	82.7	90.4	95.5
90°	13.5	21.3	29.1	36.9	44.6	52.6	60.6	68.7	76.7	84.8	90.3
92.5°	16.3	22.6	28.8	35.1	41.4	48.5	56.6	64.7	72.7	80.8	86.1
95°	29.6	32.6	35.6	38.7	41.7	46.8	54.0	61.1	68.3	75.5	80.6
97.5°	50.5	57.0	63.6	70.2	76.8	79.2	77.4	75.7	73.9	72.2	76.8
100°	66.5	72.4	78.3	84.2	90.2	91.1	87.0	82.9	78.8	74.7	78.0
102.5°	85.2	90.2	95.1	100.1	105.1	110.2	115.4	120.6	125.8	131.0	121.1
105°	113.4	117.3	121.2	125.2	129.1	134.5	141.3	148.0	154.8	161.6	166.7
107.5°	140.9	143.9	147.0	150.1	153.1	158.0	164.6	171.1	177.7	184.3	188.9
110°	158.9	161.6	164.2	166.9	169.5	174.1	180.6	187.2	193.7	200.2	204.3



TEST NUMBER: P332538

CATALOG NUMBER: S124DIP-S575D365U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	176.4	178.9	181.5	184.1	186.6	190.9	196.9	202.9	208.9	214.9	218.7
115°	203.3	205.1	206.9	208.7	210.5	214.1	219.5	225.0	230.4	235.9	239.9
117.5°	228.2	229.5	230.7	232.0	233.2	236.5	241.8	247.2	252.5	257.8	261.4
120°	244.6	245.4	246.2	247.1	247.9	250.8	255.7	260.7	265.6	270.5	274.1
122.5°	260.4	260.7	261.0	261.3	261.6	264.1	269.0	273.8	278.7	283.5	287.1
125°	282.3	282.5	282.6	282.7	282.9	285.0	289.2	293.4	297.5	301.7	305.2
127.5°	303.6	303.5	303.5	303.4	303.3	305.1	308.7	312.4	316.1	319.8	322.8
130°	316.9	316.8	316.7	316.6	316.5	317.9	321.0	324.0	327.0	330.0	333.1
132.5°	329.6	329.6	329.5	329.5	329.5	330.7	333.2	335.7	338.2	340.8	343.8
135°	347.9	347.8	347.7	347.7	347.6	348.3	349.8	351.4	352.9	354.4	357.3
137.5°	364.8	364.7	364.5	364.4	364.2	364.6	365.6	366.5	367.4	368.4	371.1
140°	375.8	375.8	375.8	375.8	375.8	375.9	376.2	376.6	376.9	377.2	379.7
142.5°	385.1	385.3	385.6	385.8	386.1	386.2	386.2	386.2	386.2	386.2	388.3
145°	400.1	400.2	400.3	400.3	400.4	400.4	400.4	400.4	400.4	400.4	401.5
147.5°	412.2	412.5	412.8	413.0	413.3	413.4	413.3	413.2	413.1	413.1	413.3
150°	421.0	421.1	421.3	421.4	421.6	421.6	421.5	421.4	421.3	421.3	421.3
152.5°	427.7	427.9	428.1	428.4	428.6	428.6	428.5	428.3	428.2	428.1	428.2
155°	437.9	438.0	438.0	438.1	438.2	438.1	437.9	437.6	437.4	437.2	437.5
157.5°	446.6	446.5	446.5	446.4	446.4	446.2	446.0	445.7	445.4	445.2	445.6
160°	451.7	451.4	451.2	451.0	450.7	450.6	450.5	450.4	450.3	450.2	450.7
162.5°	456.2	455.9	455.6	455.3	455.0	454.8	454.7	454.6	454.6	454.5	455.0
165°	461.9	461.5	461.1	460.7	460.3	460.1	460.1	460.1	460.1	460.1	460.8
167.5°	466.4	466.0	465.6	465.2	464.8	464.6	464.5	464.5	464.4	464.4	465.1
170°	469.0	468.5	468.0	467.6	467.1	466.9	467.0	467.1	467.1	467.2	467.8
172.5°	470.7	470.2	469.7	469.3	468.8	468.6	468.7	468.8	468.8	468.9	469.5
175°	472.5	472.0	471.6	471.1	470.6	470.4	470.5	470.6	470.7	470.7	471.5
177.5°	473.4	472.9	472.5	472.0	471.6	471.4	471.6	471.7	471.8	471.9	472.5
180°	472.5	472.5	472.5	472.5	472.5	472.5	472.5	472.5	472.5	472.5	472.5



TEST NUMBER: P332538

CATALOG NUMBER: S124DIP-S575D365U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	694.9	694.9	694.9	694.9	694.9	694.9	694.9	694.9
2.5°	692.5	693.4	694.4	694.8	694.7	694.5	694.4	694.3
5°	690.7	692.0	693.4	694.0	693.9	693.7	693.5	693.3
7.5°	687.0	688.5	690.1	690.8	690.6	690.4	690.2	690.1
10°	683.2	684.8	686.3	687.0	686.9	686.7	686.5	686.3
12.5°	678.0	679.4	680.8	681.5	681.5	681.4	681.4	681.4
15°	668.4	670.0	671.5	672.2	672.1	671.9	671.7	671.5
17.5°	656.8	658.4	660.0	660.7	660.6	660.5	660.3	660.2
20°	647.8	649.5	651.2	652.1	652.1	652.1	652.1	652.1
22.5°	637.2	638.9	640.6	641.7	641.9	642.2	642.5	642.8
25°	620.9	622.8	624.7	625.7	625.9	626.1	626.2	626.4
27.5°	602.6	604.3	606.1	607.1	607.3	607.5	607.7	607.9
30°	589.8	591.7	593.6	594.7	595.0	595.4	595.7	596.1
32.5°	576.6	578.8	581.0	582.2	582.6	582.9	583.3	583.6
35°	555.8	558.2	560.6	562.1	562.6	563.1	563.6	564.2
37.5°	534.1	536.5	539.0	540.5	541.0	541.6	542.1	542.7
40°	518.8	521.4	524.0	525.6	526.3	527.0	527.7	528.4
42.5°	503.8	506.6	509.5	511.2	511.8	512.3	512.9	513.4
45°	480.6	483.5	486.4	488.3	489.2	490.1	490.9	491.8
47.5°	456.0	459.1	462.1	464.1	465.2	466.2	467.3	468.3
50°	438.8	442.3	445.7	448.0	449.0	450.0	451.1	452.1
52.5°	421.4	424.8	428.3	430.5	431.6	432.6	433.6	434.7
55°	395.2	398.7	402.1	404.4	405.4	406.5	407.5	408.5
57.5°	367.7	371.9	376.0	378.5	379.5	380.4	381.4	382.4
60°	348.8	352.8	356.7	359.4	360.8	362.2	363.6	365.0
62.5°	330.1	334.1	338.1	340.7	342.1	343.5	344.9	346.3
65°	301.2	305.6	309.9	312.7	314.1	315.5	316.9	318.3
67.5°	272.9	277.3	281.7	284.5	285.9	287.2	288.6	289.9
70°	252.9	257.6	262.2	265.2	266.4	267.6	268.8	270.0
72.5°	233.9	238.5	243.0	245.9	247.3	248.6	250.0	251.3
75°	205.0	209.8	214.7	217.9	219.4	221.0	222.6	224.1
77.5°	178.1	183.0	187.9	191.2	192.8	194.5	196.1	197.8
80°	160.6	165.7	170.9	174.2	175.6	177.0	178.4	179.8
82.5°	143.4	148.7	154.1	157.5	159.0	160.5	162.0	163.6
85°	119.3	124.5	129.7	133.2	134.9	136.6	138.3	140.1
87.5°	100.6	105.7	110.9	114.2	115.7	117.3	118.8	120.4
90°	95.8	101.3	106.8	110.3	111.8	113.4	114.9	116.4
92.5°	91.5	96.8	102.2	105.6	107.0	108.4	109.8	111.2
95°	85.8	90.9	96.0	99.4	101.1	102.7	104.3	106.0
97.5°	81.4	85.9	90.5	93.6	95.2	96.7	98.3	99.9
100°	81.4	84.7	88.0	90.3	91.6	92.9	94.2	95.5
102.5°	111.2	101.3	91.5	87.2	88.6	89.9	91.3	92.7
105°	171.7	176.7	181.7	183.5	182.1	180.6	179.2	177.8
107.5°	193.5	198.1	202.7	205.8	207.3	208.9	210.4	212.0
110°	208.5	212.6	216.7	219.6	221.2	222.9	224.5	226.1



TEST NUMBER: P332538

CATALOG NUMBER: S124DIP-S575D365U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	222.5	226.3	230.1	232.9	234.6	236.2	237.9	239.6
115°	243.8	247.8	251.7	254.3	255.5	256.8	258.0	259.2
117.5°	264.9	268.5	272.1	274.5	275.9	277.2	278.6	279.9
120°	277.8	281.4	285.0	287.4	288.6	289.9	291.1	292.3
122.5°	290.6	294.2	297.7	300.1	301.1	302.2	303.3	304.4
125°	308.7	312.3	315.8	318.1	319.2	320.3	321.4	322.6
127.5°	325.9	329.0	332.0	334.1	335.2	336.4	337.5	338.6
130°	336.3	339.5	342.7	344.8	345.9	346.9	347.9	349.0
132.5°	346.9	349.9	353.0	355.0	356.0	356.9	357.9	358.9
135°	360.3	363.2	366.1	368.2	369.4	370.6	371.7	372.9
137.5°	373.8	376.5	379.1	380.9	381.7	382.5	383.4	384.2
140°	382.2	384.7	387.2	388.9	389.8	390.8	391.7	392.7
142.5°	390.5	392.6	394.7	396.2	396.9	397.7	398.4	399.2
145°	402.6	403.8	404.9	405.9	406.7	407.6	408.4	409.3
147.5°	413.5	413.7	413.9	414.3	414.9	415.6	416.2	416.8
150°	421.3	421.3	421.3	421.3	421.4	421.5	421.5	421.6
152.5°	428.3	428.4	428.6	428.6	428.5	428.5	428.5	428.4
155°	437.8	438.1	438.4	438.5	438.2	438.0	437.8	437.5
157.5°	446.0	446.4	446.8	446.8	446.4	446.0	445.6	445.2
160°	451.2	451.7	452.1	452.1	451.7	451.2	450.7	450.2
162.5°	455.4	455.9	456.4	456.3	455.8	455.3	454.7	454.2
165°	461.4	462.0	462.7	462.6	461.9	461.2	460.5	459.8
167.5°	465.8	466.5	467.1	467.1	466.3	465.5	464.7	464.0
170°	468.5	469.1	469.7	469.6	468.9	468.1	467.3	466.5
172.5°	470.2	470.8	471.4	471.3	470.5	469.6	468.8	467.9
175°	472.2	472.9	473.6	473.5	472.5	471.6	470.6	469.7
177.5°	473.0	473.5	474.0	473.8	473.1	472.3	471.6	470.8
180°	472.5	472.5	472.5	472.5	472.5	472.5	472.5	472.5

(END OF REPORT)