

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: P333342-935

Luminaire Tested: **S125DIW-S375D470U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333342-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIW-S375D470U935-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2871.8 lumens
Efficiency: N/A
Efficacy: 124.9 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: General Diffuse

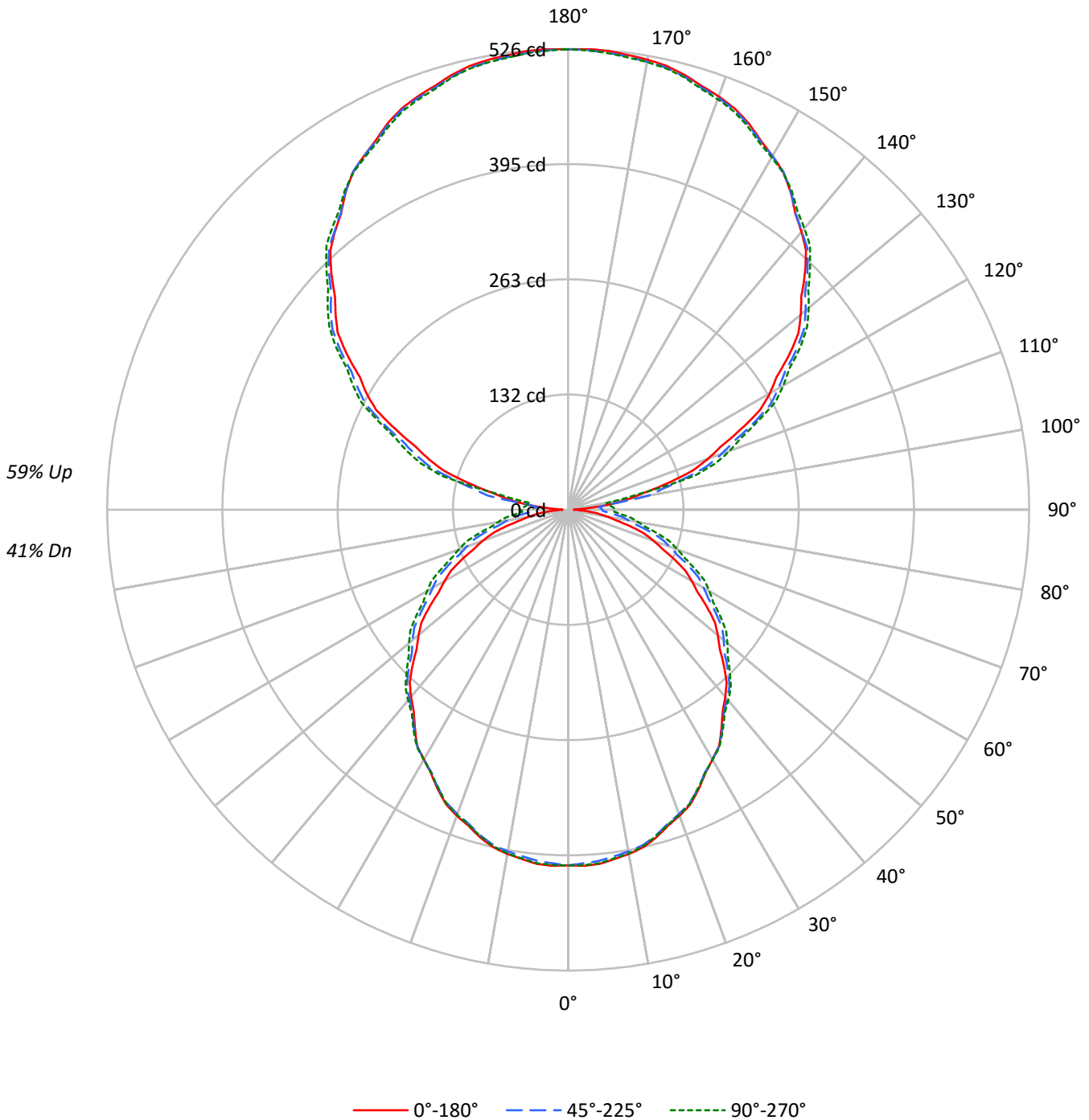
Input Watts (W): 23
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333342-935

CATALOG NUMBER: S125DIW-S375D470U935-4F0-1E-UDD-D

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	105	105	105	105	96	96	96	96	78	78	78	63	63	63	48	48	48	41
1	95	91	87	83	87	83	79	76	68	65	63	54	52	51	41	40	39	33
2	86	79	72	67	78	72	66	62	59	55	52	47	44	42	36	34	33	27
3	79	69	62	56	71	63	57	51	52	47	43	41	38	35	32	29	27	23
4	72	61	53	47	65	56	49	43	46	41	37	37	33	30	28	26	23	20
5	66	54	46	40	60	50	42	37	41	35	31	33	29	26	25	23	20	17
6	61	48	40	34	55	44	37	32	37	31	27	30	26	22	23	20	18	15
7	56	44	36	30	51	40	33	28	33	28	24	27	23	20	21	18	16	13
8	52	39	32	26	47	36	29	25	30	25	21	25	21	18	19	16	14	12
9	48	36	29	23	44	33	26	22	28	22	19	23	19	16	18	15	13	10
10	45	33	26	21	41	30	24	20	25	20	17	21	17	14	16	14	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2621	2621	2621
5°	2627	2573	2581
10°	2608	2527	2523
15°	2577	2472	2450
20°	2535	2404	2376
25°	2485	2331	2285
30°	2425	2251	2203
35°	2369	2178	2127
40°	2312	2100	2051
45°	2247	2033	1983
50°	2184	1962	1924
55°	2110	1894	1854
60°	2028	1817	1782
65°	1944	1736	1703
70°	1849	1625	1620
75°	1695	1518	1517
80°	1493	1389	1408
85°	1311	1301	1373



TEST NUMBER: P333342-935

CATALOG NUMBER: S125DIW-S375D470U935-4F0-1E-UDD-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.4	1.3
10°-20°	108.9	3.8
20°-30°	162.0	5.6
30°-40°	191.9	6.7
40°-50°	198.4	6.9
50°-60°	182.8	6.4
60°-70°	147.8	5.1
70°-80°	99.0	3.4
80°-90°	52.4	1.8
90°-100°	47.9	1.7
100°-110°	138.9	4.8
110°-120°	227.7	7.9
120°-130°	282.0	9.8
130°-140°	298.1	10.4
140°-150°	277.3	9.7
150°-160°	223.7	7.8
160°-170°	144.7	5.0
170°-180°	49.9	1.7
0°-30°	309.4	10.8
0°-40°	501.3	17.5
0°-60°	882.5	30.7
0°-90°	1181.6	41.1
90°-120°	414.5	14.4
90°-150°	1271.9	44.3
90°-180°	1690.0	58.8
0°-180°	2871.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	406	406	406	406	406	
5°	406	405	402	405	405	38
15°	388	388	385	387	386	109
25°	352	353	351	352	351	162
35°	305	307	306	308	308	191
45°	251	255	257	260	261	194
55°	193	199	206	210	212	172
65°	133	142	152	157	159	132
75°	73	84	96	104	106	78
85°	22	35	49	57	61	23
90°	7	23	39	50	54	5
95°	27	36	35	46	49	32
105°	118	126	138	146	148	125
115°	217	222	233	238	238	215
125°	307	310	318	322	323	274
135°	382	384	386	390	390	294
145°	442	443	443	445	444	277
155°	487	485	485	486	483	224
165°	514	512	512	514	511	145
175°	526	523	524	526	523	50
180°	526	526	526	526	526	



TEST NUMBER: P333342-935

CATALOG NUMBER: S125DIW-S375D470U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9
2.5°	406.8	406.7	406.6	406.4	406.3	406.0	405.4	404.9	404.5	404.0	404.5
5°	405.9	405.7	405.5	405.4	405.2	404.8	404.2	403.6	402.9	402.3	403.0
7.5°	402.3	402.3	402.2	402.1	402.0	401.7	401.1	400.4	399.8	399.1	399.8
10°	399.1	399.1	399.1	399.1	399.1	398.7	398.0	397.4	396.7	395.9	396.6
12.5°	394.7	394.8	394.8	394.9	394.9	394.7	394.2	393.6	393.0	392.4	392.9
15°	387.5	387.6	387.7	387.9	388.0	387.6	387.0	386.4	385.8	385.2	385.7
17.5°	378.3	378.5	378.7	378.8	379.0	378.8	378.2	377.5	376.9	376.3	376.8
20°	371.7	371.9	372.0	372.2	372.4	372.1	371.5	370.9	370.3	369.6	370.0
22.5°	364.0	364.4	364.6	365.0	365.3	365.1	364.4	363.7	363.0	362.3	362.7
25°	352.1	352.4	352.7	352.9	353.2	353.1	352.6	352.1	351.5	350.9	351.3
27.5°	339.0	339.3	339.8	340.1	340.5	340.4	339.8	339.2	338.6	338.0	338.2
30°	329.1	329.6	330.1	330.7	331.2	331.2	330.7	330.1	329.6	329.1	329.2
32.5°	320.2	320.6	321.1	321.6	322.0	322.0	321.7	321.2	320.9	320.5	320.6
35°	304.8	305.4	306.1	306.7	307.3	307.5	307.2	306.9	306.7	306.4	306.7
37.5°	289.5	290.0	290.6	291.1	291.7	292.0	291.9	291.8	291.7	291.6	292.0
40°	279.0	279.7	280.3	281.0	281.8	282.1	282.0	281.9	281.8	281.7	282.1
42.5°	267.5	268.4	269.3	270.3	271.1	271.7	271.9	272.1	272.3	272.5	272.9
45°	251.1	252.1	253.0	254.0	254.9	255.7	256.1	256.6	257.0	257.4	258.0
47.5°	234.3	235.2	236.1	237.0	237.9	238.8	239.5	240.2	241.0	241.8	242.7
50°	222.8	223.8	224.8	225.8	226.7	227.7	228.7	229.6	230.6	231.6	232.6
52.5°	210.8	211.9	213.1	214.3	215.5	216.6	217.8	219.0	220.2	221.4	222.5
55°	193.0	194.4	195.8	197.3	198.6	200.1	201.5	202.9	204.3	205.7	206.7
57.5°	174.9	176.5	178.2	179.9	181.7	183.3	184.9	186.6	188.2	189.8	190.9
60°	162.7	164.5	166.3	168.1	169.8	171.6	173.3	175.1	176.9	178.7	179.9
62.5°	150.9	152.7	154.5	156.3	158.1	159.9	161.8	163.7	165.7	167.6	169.0
65°	132.9	134.9	137.0	139.0	141.0	143.1	145.3	147.4	149.5	151.6	152.9
67.5°	115.9	117.9	119.8	121.7	123.7	125.8	127.9	130.1	132.2	134.4	136.0
70°	103.5	105.5	107.5	109.5	111.6	113.7	116.1	118.4	120.6	123.0	124.7
72.5°	91.4	93.5	95.6	97.6	99.8	102.1	104.6	107.1	109.6	112.1	114.0
75°	73.2	75.5	77.8	80.1	82.4	85.0	87.8	90.7	93.5	96.3	98.1
77.5°	55.8	58.5	61.1	63.7	66.4	69.1	71.8	74.6	77.2	80.0	82.0
80°	44.9	47.6	50.3	53.0	55.5	58.4	61.4	64.4	67.4	70.4	72.4
82.5°	35.1	37.9	40.7	43.5	46.2	49.2	52.3	55.4	58.5	61.5	63.4
85°	21.9	24.8	27.7	30.7	33.6	36.6	39.7	42.8	45.9	48.9	50.9
87.5°	12.5	15.5	18.4	21.4	24.4	27.4	30.6	33.7	36.8	40.0	42.0
90°	6.7	10.2	13.8	17.3	20.8	24.5	28.0	31.6	35.2	38.8	41.3
92.5°	11.7	13.9	16.0	18.2	20.2	23.2	26.8	30.4	34.0	37.6	40.0
95°	27.4	29.4	31.4	33.5	35.6	36.4	36.2	35.8	35.6	35.3	37.6
97.5°	51.1	53.6	56.1	58.6	61.2	60.7	57.1	53.5	49.9	46.2	45.6
100°	69.4	71.5	73.7	75.8	77.9	80.5	83.7	86.9	90.1	93.2	82.2
102.5°	88.1	90.1	92.2	94.3	96.3	98.8	101.8	104.7	107.7	110.6	110.0
105°	118.1	119.9	121.7	123.4	125.1	127.3	130.0	132.7	135.3	137.9	139.7
107.5°	149.2	150.4	151.6	152.8	154.0	156.0	158.8	161.4	164.2	166.9	168.7
110°	169.5	170.6	171.6	172.7	173.7	175.6	178.2	180.9	183.6	186.2	187.6



TEST NUMBER: P333342-935

CATALOG NUMBER: S125DIW-S375D470U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	188.8	189.9	191.0	192.0	193.0	194.8	197.3	199.8	202.3	204.8	206.1
115°	217.4	218.4	219.5	220.6	221.6	223.3	225.7	228.1	230.5	232.9	234.1
117.5°	247.0	247.4	247.8	248.1	248.6	250.0	252.5	255.0	257.5	260.0	261.1
120°	265.7	265.9	266.0	266.2	266.4	267.6	269.9	272.2	274.5	276.8	278.1
122.5°	281.9	282.3	282.8	283.3	283.7	285.0	287.1	289.1	291.2	293.3	294.5
125°	307.4	307.9	308.4	308.9	309.4	310.6	312.4	314.1	315.9	317.6	318.7
127.5°	331.3	331.7	332.0	332.3	332.7	333.6	335.0	336.4	337.8	339.1	340.3
130°	346.3	346.6	347.0	347.3	347.7	348.5	349.8	351.2	352.5	353.8	354.8
132.5°	360.9	361.4	361.9	362.4	362.9	363.5	364.3	365.1	365.8	366.5	367.7
135°	382.1	382.5	383.0	383.4	383.8	384.3	384.7	385.2	385.6	386.1	387.0
137.5°	401.6	402.0	402.3	402.8	403.1	403.4	403.6	403.6	403.8	404.0	405.0
140°	414.1	414.2	414.4	414.6	414.7	414.8	414.8	414.8	414.8	414.8	415.9
142.5°	425.6	425.6	425.7	425.7	425.7	425.8	425.9	426.1	426.2	426.4	427.2
145°	442.5	442.6	442.6	442.7	442.8	442.9	442.9	442.9	442.9	442.9	443.4
147.5°	456.9	456.8	456.8	456.8	456.8	456.8	456.9	457.0	457.1	457.2	457.4
150°	466.2	466.1	465.9	465.7	465.5	465.5	465.7	465.9	466.1	466.2	466.4
152.5°	475.3	474.9	474.5	474.2	473.7	473.6	473.8	474.0	474.2	474.3	474.5
155°	486.9	486.4	485.9	485.3	484.8	484.7	484.8	485.0	485.2	485.3	485.6
157.5°	495.8	495.5	495.2	494.9	494.6	494.5	494.5	494.5	494.5	494.6	494.8
160°	502.0	501.5	501.0	500.5	500.0	499.8	499.9	500.0	500.1	500.2	500.5
162.5°	507.0	506.5	506.0	505.5	505.0	504.8	504.9	505.0	505.1	505.1	505.6
165°	513.8	513.2	512.7	512.2	511.7	511.4	511.5	511.6	511.7	511.8	512.3
167.5°	518.8	518.2	517.7	517.1	516.6	516.3	516.4	516.5	516.6	516.7	517.4
170°	521.6	521.0	520.3	519.7	519.1	518.8	518.9	519.0	519.1	519.2	519.9
172.5°	523.4	522.8	522.2	521.6	521.0	520.8	520.9	521.1	521.2	521.4	522.0
175°	525.5	525.0	524.4	523.9	523.4	523.1	523.2	523.3	523.4	523.5	524.2
177.5°	526.4	526.0	525.6	525.1	524.7	524.5	524.6	524.7	524.8	524.9	525.3
180°	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5



TEST NUMBER: P333342-935

CATALOG NUMBER: S125DIW-S375D470U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9
2.5°	404.9	405.4	406.0	406.1	406.0	406.0	406.0	405.9
5°	403.7	404.4	405.1	405.4	405.4	405.3	405.2	405.1
7.5°	400.4	401.0	401.6	401.8	401.7	401.7	401.6	401.5
10°	397.2	397.8	398.4	398.6	398.6	398.5	398.4	398.3
12.5°	393.4	393.8	394.3	394.4	394.3	394.0	393.7	393.6
15°	386.2	386.8	387.3	387.4	387.0	386.7	386.3	386.0
17.5°	377.2	377.5	378.0	378.1	377.9	377.6	377.5	377.2
20°	370.2	370.5	370.7	370.8	370.8	370.8	370.8	370.8
22.5°	363.0	363.3	363.7	363.8	363.5	363.3	363.1	362.9
25°	351.6	352.1	352.4	352.3	351.9	351.5	351.0	350.6
27.5°	338.5	338.7	339.0	339.1	338.9	338.7	338.5	338.4
30°	329.4	329.6	329.8	329.8	329.8	329.7	329.6	329.5
32.5°	320.8	321.0	321.2	321.2	321.2	321.1	321.0	320.9
35°	306.9	307.2	307.5	307.5	307.5	307.5	307.5	307.5
37.5°	292.3	292.7	293.0	293.2	293.2	293.1	293.1	293.0
40°	282.4	282.8	283.2	283.4	283.6	283.8	284.0	284.1
42.5°	273.4	273.8	274.2	274.4	274.5	274.5	274.5	274.6
45°	258.7	259.3	259.9	260.3	260.4	260.5	260.5	260.6
47.5°	243.6	244.5	245.4	245.9	246.2	246.3	246.5	246.7
50°	233.5	234.5	235.5	236.1	236.3	236.6	236.9	237.1
52.5°	223.5	224.5	225.6	226.2	226.4	226.6	226.8	227.0
55°	207.7	208.6	209.7	210.3	210.6	210.9	211.4	211.7
57.5°	192.0	193.1	194.2	194.9	195.2	195.4	195.8	196.0
60°	181.3	182.6	184.0	184.8	185.0	185.3	185.5	185.8
62.5°	170.5	171.9	173.4	174.3	174.6	175.0	175.3	175.6
65°	154.3	155.6	156.9	157.7	158.1	158.4	158.9	159.2
67.5°	137.7	139.2	140.9	141.9	142.3	142.8	143.3	143.7
70°	126.3	128.0	129.7	130.8	131.3	131.8	132.3	132.9
72.5°	115.8	117.6	119.4	120.5	120.9	121.3	121.7	122.1
75°	99.9	101.6	103.4	104.4	105.0	105.4	105.8	106.2
77.5°	83.9	85.8	87.7	88.9	89.3	89.6	90.0	90.3
80°	74.3	76.3	78.2	79.4	79.7	80.1	80.4	80.8
82.5°	65.3	67.2	69.1	70.3	70.9	71.5	72.2	72.8
85°	52.9	54.8	56.7	58.0	58.7	59.5	60.2	60.9
87.5°	44.2	46.3	48.4	49.8	50.5	51.1	51.8	52.5
90°	43.8	46.2	48.7	50.4	51.3	52.2	53.0	53.9
92.5°	42.4	44.8	47.2	48.7	49.5	50.2	51.0	51.7
95°	40.0	42.4	44.8	46.3	46.9	47.5	48.1	48.7
97.5°	45.0	44.4	43.9	43.9	44.5	45.1	45.7	46.3
100°	71.1	60.1	49.1	43.7	43.8	44.0	44.2	44.4
102.5°	109.3	108.7	108.1	105.0	99.7	94.4	88.9	83.6
105°	141.5	143.3	145.0	146.2	146.7	147.2	147.7	148.4
107.5°	170.5	172.2	174.0	175.0	175.3	175.6	175.9	176.2
110°	189.1	190.5	191.8	193.0	193.6	194.3	195.0	195.8



TEST NUMBER: P333342-935

CATALOG NUMBER: S125DIW-S375D470U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	207.4	208.7	210.0	210.9	211.4	211.9	212.4	212.8
115°	235.4	236.6	237.8	238.5	238.5	238.5	238.5	238.5
117.5°	262.1	263.2	264.2	264.9	265.4	265.7	266.0	266.5
120°	279.5	280.8	282.1	282.8	282.9	283.0	283.2	283.3
122.5°	295.8	297.0	298.3	299.0	299.0	299.0	299.1	299.1
125°	319.8	320.8	321.9	322.5	322.7	322.9	323.1	323.3
127.5°	341.4	342.5	343.6	344.1	344.1	343.9	343.8	343.6
130°	355.8	356.7	357.7	358.2	358.3	358.3	358.3	358.3
132.5°	368.9	370.1	371.3	371.9	371.8	371.8	371.7	371.6
135°	388.1	389.0	389.9	390.5	390.4	390.3	390.2	390.1
137.5°	406.1	407.2	408.3	408.8	408.6	408.5	408.5	408.4
140°	417.2	418.3	419.4	419.9	419.7	419.6	419.4	419.2
142.5°	428.1	429.0	429.8	430.2	430.0	429.8	429.6	429.6
145°	443.9	444.4	445.0	445.1	445.0	444.9	444.7	444.5
147.5°	457.7	458.0	458.2	458.1	457.6	457.2	456.7	456.2
150°	466.6	466.7	466.9	466.7	466.1	465.5	464.9	464.3
152.5°	474.7	474.8	475.0	474.8	474.2	473.6	473.0	472.4
155°	485.9	486.1	486.4	486.1	485.4	484.7	484.1	483.4
157.5°	495.1	495.3	495.6	495.4	494.7	494.0	493.4	492.7
160°	500.8	501.2	501.5	501.4	500.7	500.0	499.3	498.6
162.5°	506.1	506.6	507.0	507.0	506.2	505.4	504.6	503.9
165°	512.9	513.4	513.9	513.8	513.2	512.4	511.7	511.0
167.5°	518.0	518.6	519.2	519.2	518.3	517.5	516.8	516.0
170°	520.6	521.3	522.0	521.9	521.2	520.4	519.6	518.8
172.5°	522.6	523.2	523.9	523.8	523.1	522.3	521.5	520.7
175°	524.9	525.6	526.2	526.2	525.5	524.7	523.9	523.1
177.5°	525.8	526.2	526.8	526.8	526.2	525.6	525.0	524.5
180°	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5

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