

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: P333643-935

Luminaire Tested: **S125RDIW-S375D470U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333643-935
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: S125RDIW-S375D470U935-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2645.1 lumens
Efficiency: N/A
Efficacy: 115.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

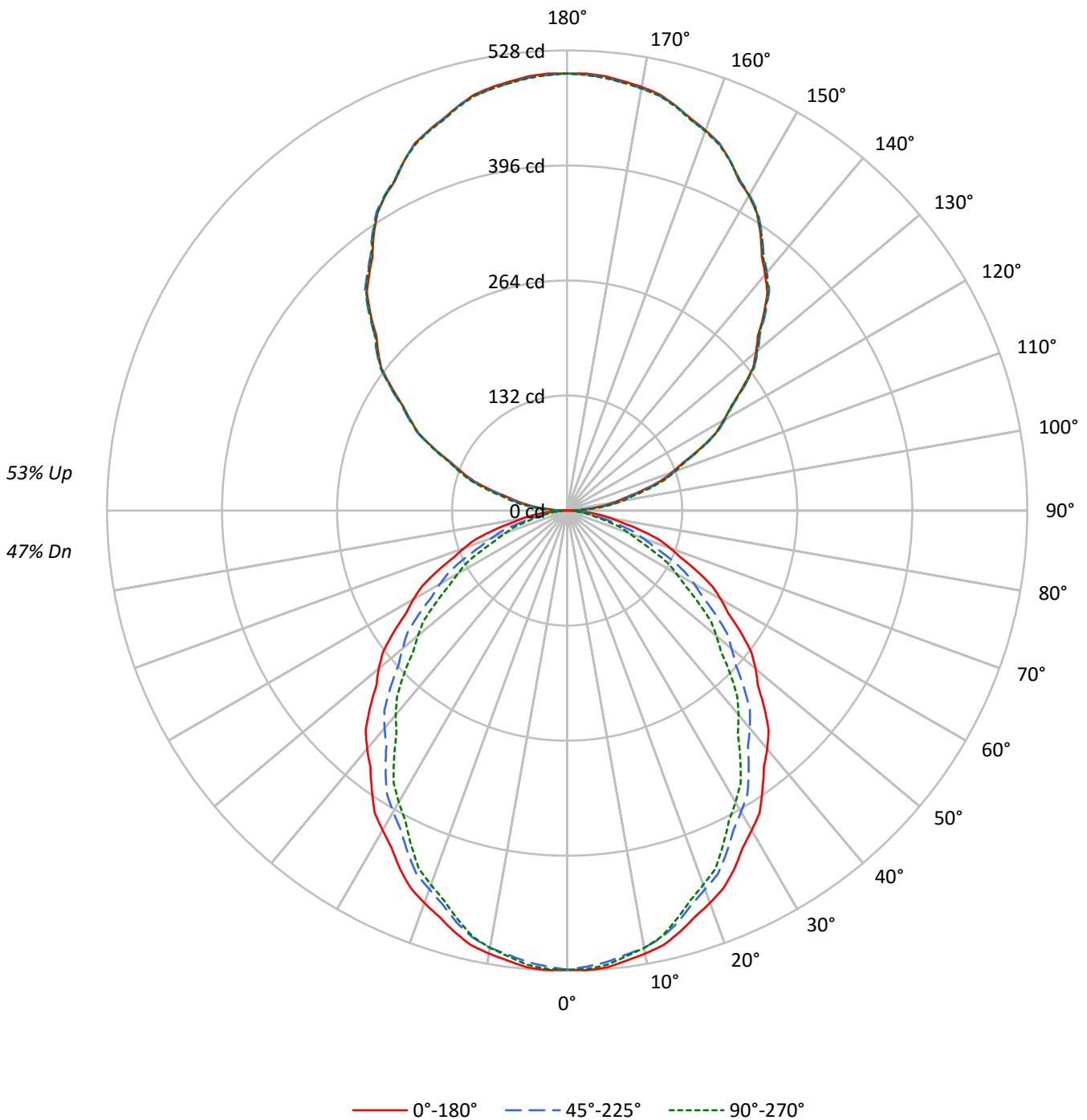
Input Watts (W): 23
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333643-935

CATALOG NUMBER: S125RDIW-S375D470U935-4F0-1E-UDD-F1

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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53
1	97	93	89	86	89	86	83	80	72	70	68	59	58	56	48	47	46
2	89	82	76	70	81	75	70	66	63	59	56	52	50	47	42	40	39
3	81	72	65	59	74	66	60	55	56	51	47	46	43	40	37	35	33
4	74	64	56	50	68	59	52	47	50	45	41	41	38	35	34	31	29
5	68	57	49	43	62	53	46	40	45	39	35	37	33	30	30	27	25
6	63	51	43	37	58	47	40	35	40	35	31	34	30	26	28	25	22
7	58	46	38	33	53	43	36	31	37	31	27	31	26	23	25	22	20
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	23	20	18
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	21	18	16
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3402	3402	3402
5°	3411	3371	3392
10°	3385	3341	3341
15°	3344	3273	3245
20°	3293	3178	3140
25°	3233	3085	3017
30°	3157	2976	2882
35°	3080	2864	2730
40°	3010	2748	2580
45°	2922	2617	2417
50°	2834	2475	2247
55°	2733	2339	2066
60°	2631	2174	1870
65°	2512	1984	1647
70°	2374	1743	1420
75°	2186	1470	1183
80°	1923	1153	993
85°	1623	941	889



TEST NUMBER: P333643-935

CATALOG NUMBER: S125RDIW-S375D470U935-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.5	1.9
10°-20°	138.4	5.2
20°-30°	200.8	7.6
30°-40°	228.8	8.7
40°-50°	223.0	8.4
50°-60°	187.7	7.1
60°-70°	131.6	5.0
70°-80°	67.6	2.6
80°-90°	18.2	0.7
90°-100°	33.6	1.3
100°-110°	99.2	3.7
110°-120°	168.0	6.4
120°-130°	221.1	8.4
130°-140°	247.7	9.4
140°-150°	242.8	9.2
150°-160°	203.9	7.7
160°-170°	135.6	5.1
170°-180°	47.4	1.8
0°-30°	388.7	14.7
0°-40°	617.6	23.3
0°-60°	1028.3	38.9
0°-90°	1245.7	47.1
90°-120°	300.8	11.4
90°-150°	1012.4	38.3
90°-180°	1399.0	52.9
0°-180°	2645.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	527	527	527	527	527	
5°	526	524	520	524	523	50
15°	500	498	490	489	485	141
25°	454	447	433	428	423	209
35°	391	381	363	352	346	245
45°	320	308	286	271	265	247
55°	243	230	208	190	184	217
65°	164	150	130	114	108	163
75°	88	75	59	50	47	93
85°	22	15	13	12	12	25
90°	0	4	6	8	9	2
95°	25	26	30	33	34	27
105°	89	91	93	96	97	95
115°	168	170	171	170	170	166
125°	246	248	248	247	247	220
135°	319	321	322	322	320	246
145°	387	388	389	389	388	242
155°	443	443	443	444	443	204
165°	481	480	481	482	480	136
175°	500	499	499	501	498	48
180°	501	501	501	501	501	



TEST NUMBER: P333643-935

CATALOG NUMBER: S125RDIW-S375D470U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8
2.5°	527.8	527.6	527.4	527.2	526.9	526.5	525.8	525.0	524.3	523.7	524.3
5°	526.1	525.7	525.4	525.0	524.6	524.0	523.0	522.0	521.1	520.0	521.0
7.5°	520.9	520.6	520.2	519.9	519.5	518.8	517.6	516.4	515.3	514.1	514.7
10°	516.1	515.8	515.6	515.3	515.1	514.3	513.1	511.8	510.6	509.4	509.6
12.5°	510.7	510.3	510.1	509.7	509.4	508.3	506.7	505.1	503.3	501.7	501.9
15°	500.2	499.6	499.1	498.6	498.1	496.9	495.0	493.2	491.3	489.5	489.4
17.5°	488.4	487.5	486.7	485.9	485.1	483.5	481.1	478.8	476.5	474.2	473.7
20°	479.1	478.2	477.3	476.5	475.5	473.7	470.9	468.0	465.2	462.4	461.9
22.5°	468.9	468.0	467.2	466.2	465.4	463.5	460.5	457.5	454.5	451.6	450.7
25°	453.7	452.3	451.0	449.6	448.3	446.0	442.7	439.5	436.2	432.9	431.8
27.5°	436.1	434.5	432.9	431.3	429.6	427.1	423.6	420.1	416.6	413.1	411.5
30°	423.4	421.7	420.0	418.4	416.6	414.0	410.3	406.6	402.9	399.1	397.1
32.5°	411.0	409.0	407.1	405.1	403.1	400.3	396.5	392.7	388.9	385.1	382.9
35°	390.7	388.7	386.5	384.4	382.3	379.2	375.2	371.3	367.3	363.3	360.8
37.5°	370.9	368.3	365.8	363.2	360.6	357.2	353.2	349.0	345.0	340.9	337.8
40°	357.0	354.3	351.6	349.0	346.3	342.9	338.6	334.4	330.1	325.9	322.5
42.5°	342.2	339.6	336.8	334.2	331.4	327.9	323.5	319.1	314.7	310.3	307.1
45°	319.9	317.4	314.8	312.2	309.7	305.9	301.1	296.3	291.4	286.5	282.9
47.5°	296.8	294.0	291.4	288.6	285.9	282.1	277.2	272.3	267.4	262.5	258.9
50°	282.1	279.2	276.3	273.4	270.4	266.5	261.4	256.4	251.3	246.3	242.6
52.5°	266.2	263.2	260.2	257.3	254.3	250.4	245.6	240.8	236.1	231.4	227.4
55°	242.7	239.9	237.0	234.3	231.4	227.6	222.6	217.6	212.7	207.7	203.7
57.5°	219.0	216.0	212.9	209.9	206.9	203.0	198.2	193.5	188.7	183.9	180.0
60°	203.7	200.6	197.5	194.4	191.3	187.4	182.6	177.9	173.1	168.3	164.5
62.5°	187.5	184.5	181.6	178.7	175.6	171.8	166.9	162.1	157.2	152.4	148.8
65°	164.4	161.4	158.3	155.3	152.3	148.4	143.8	139.1	134.4	129.8	126.2
67.5°	141.4	138.4	135.3	132.3	129.3	125.5	121.1	116.6	112.1	107.6	104.4
70°	125.7	122.8	119.8	116.8	113.7	110.0	105.6	101.2	96.8	92.3	89.5
72.5°	110.5	107.5	104.6	101.7	98.8	95.1	91.0	86.9	82.7	78.6	76.1
75°	87.6	84.9	82.2	79.6	77.0	73.8	70.0	66.3	62.6	58.9	56.9
77.5°	64.7	62.7	60.5	58.4	56.3	53.7	50.8	47.8	44.9	41.8	40.5
80°	51.7	49.6	47.5	45.4	43.2	41.0	38.5	36.0	33.5	31.0	30.2
82.5°	39.0	37.1	35.2	33.2	31.3	29.5	27.9	26.2	24.5	22.7	22.4
85°	21.9	20.3	18.7	17.1	15.5	14.5	14.0	13.6	13.2	12.7	12.7
87.5°	7.4	7.1	6.7	6.4	5.9	5.9	5.9	5.9	5.9	6.0	6.1
90°	0.4	1.1	1.8	2.5	3.2	3.8	4.4	5.0	5.6	6.3	6.7
92.5°	9.5	9.9	10.4	10.9	11.4	12.0	12.7	13.5	14.2	15.0	15.6
95°	25.4	25.6	25.7	25.9	26.1	26.6	27.5	28.3	29.2	30.0	30.7
97.5°	42.1	42.2	42.3	42.4	42.4	43.0	44.3	45.5	46.7	47.9	48.4
100°	54.7	54.7	54.7	54.7	54.7	55.2	56.3	57.4	58.5	59.7	60.5
102.5°	68.0	68.4	68.8	69.1	69.5	69.9	70.5	71.0	71.6	72.2	73.0
105°	88.9	89.4	89.8	90.2	90.7	91.2	91.7	92.2	92.7	93.2	93.8
107.5°	112.1	112.5	113.0	113.4	113.8	114.3	114.6	115.0	115.5	115.8	116.1
110°	128.0	128.5	128.9	129.3	129.8	130.1	130.4	130.6	130.9	131.1	131.4



TEST NUMBER: P333643-935

CATALOG NUMBER: S125RDIW-S375D470U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	144.2	144.5	144.6	144.9	145.2	145.4	145.8	146.1	146.4	146.7	146.9
115°	168.2	168.5	168.9	169.3	169.6	169.9	170.0	170.2	170.4	170.6	170.5
117.5°	192.3	192.3	192.5	192.7	192.9	193.0	193.2	193.3	193.5	193.6	193.7
120°	207.2	207.7	208.1	208.5	209.0	209.2	209.3	209.4	209.5	209.6	209.6
122.5°	223.4	223.6	223.8	223.9	224.0	224.3	224.5	224.7	225.0	225.2	225.1
125°	245.5	246.0	246.5	247.0	247.5	247.9	248.0	248.1	248.1	248.2	248.1
127.5°	268.9	269.1	269.5	269.8	270.1	270.3	270.4	270.4	270.5	270.7	270.6
130°	282.9	283.4	283.8	284.2	284.6	285.0	285.2	285.3	285.5	285.7	285.6
132.5°	297.0	297.6	298.4	299.1	299.8	300.1	300.1	300.1	300.1	300.0	299.9
135°	319.2	319.8	320.3	320.8	321.3	321.6	321.7	321.8	321.8	321.9	321.9
137.5°	340.1	340.6	341.1	341.6	342.2	342.5	342.7	342.9	343.0	343.3	343.4
140°	353.5	354.0	354.4	354.8	355.2	355.7	355.9	356.2	356.5	356.7	356.9
142.5°	367.0	367.3	367.7	368.1	368.4	368.8	369.1	369.5	369.8	370.1	370.2
145°	386.8	387.1	387.4	387.8	388.1	388.4	388.7	388.9	389.2	389.4	389.4
147.5°	405.0	405.2	405.4	405.5	405.8	406.0	406.1	406.4	406.6	406.8	407.0
150°	417.2	417.1	417.0	416.9	416.8	417.0	417.3	417.7	418.0	418.4	418.4
152.5°	427.1	427.3	427.4	427.5	427.7	427.7	427.9	428.1	428.2	428.3	428.5
155°	442.6	442.6	442.6	442.6	442.6	442.6	442.6	442.7	442.8	442.9	443.2
157.5°	456.2	456.1	455.9	455.7	455.5	455.5	455.6	455.6	455.7	455.8	456.2
160°	464.4	464.2	463.8	463.6	463.3	463.2	463.3	463.4	463.5	463.6	464.0
162.5°	471.6	471.4	471.2	471.0	470.8	470.7	470.7	470.7	470.8	470.8	471.2
165°	481.1	481.0	480.8	480.6	480.4	480.4	480.5	480.6	480.7	480.8	481.1
167.5°	489.3	489.0	488.6	488.3	487.9	487.8	487.8	487.8	487.8	487.8	488.3
170°	493.6	493.3	492.9	492.6	492.2	492.1	492.1	492.1	492.1	492.1	492.6
172.5°	496.8	496.5	496.1	495.8	495.4	495.2	495.2	495.2	495.2	495.2	495.8
175°	500.3	499.9	499.6	499.2	498.9	498.7	498.7	498.7	498.7	498.7	499.2
177.5°	502.0	501.8	501.5	501.3	500.9	500.8	500.8	500.7	500.6	500.5	500.9
180°	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4



TEST NUMBER: P333643-935

CATALOG NUMBER: S125RDIW-S375D470U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8
2.5°	525.0	525.8	526.5	526.8	526.8	526.7	526.6	526.5
5°	521.9	522.7	523.6	524.0	523.8	523.6	523.4	523.2
7.5°	515.3	516.0	516.6	516.8	516.6	516.4	516.3	516.0
10°	509.9	510.1	510.4	510.4	510.1	509.9	509.6	509.4
12.5°	502.0	502.3	502.5	502.4	502.0	501.5	501.2	500.8
15°	489.2	489.1	489.0	488.6	487.8	487.1	486.3	485.4
17.5°	473.3	472.9	472.4	471.8	471.2	470.5	469.8	469.2
20°	461.5	461.1	460.6	460.0	459.2	458.4	457.6	456.8
22.5°	449.8	448.9	448.1	447.3	446.7	446.0	445.4	444.7
25°	430.7	429.5	428.3	427.3	426.3	425.3	424.4	423.4
27.5°	409.9	408.3	406.7	405.4	404.5	403.6	402.6	401.7
30°	395.0	393.0	391.0	389.6	388.7	388.0	387.2	386.4
32.5°	380.6	378.4	376.1	374.5	373.5	372.5	371.4	370.5
35°	358.2	355.6	353.0	351.1	349.9	348.7	347.4	346.2
37.5°	334.7	331.7	328.6	326.4	325.2	324.0	322.8	321.6
40°	319.2	315.8	312.5	310.2	309.2	308.2	307.0	306.0
42.5°	303.8	300.7	297.4	295.1	293.5	291.9	290.3	288.8
45°	279.4	275.9	272.3	269.9	268.6	267.3	266.0	264.6
47.5°	255.3	251.6	248.0	245.4	243.9	242.5	241.0	239.5
50°	238.8	235.1	231.4	228.9	227.6	226.3	225.0	223.6
52.5°	223.3	219.4	215.3	212.7	211.4	210.1	208.7	207.4
55°	199.8	195.8	191.8	189.1	187.7	186.2	184.9	183.5
57.5°	176.2	172.3	168.3	165.7	164.5	163.2	162.0	160.7
60°	160.6	156.6	152.7	150.2	148.8	147.5	146.2	144.8
62.5°	145.2	141.5	137.9	135.5	134.1	132.9	131.6	130.2
65°	122.6	119.1	115.5	113.1	111.8	110.5	109.2	107.8
67.5°	101.1	97.9	94.6	92.5	91.4	90.4	89.3	88.3
70°	86.9	84.1	81.4	79.5	78.4	77.3	76.3	75.2
72.5°	73.5	71.0	68.5	66.9	66.2	65.5	64.7	64.1
75°	55.0	53.0	51.1	49.9	49.2	48.6	48.0	47.4
77.5°	39.2	37.8	36.4	35.5	35.0	34.6	34.1	33.7
80°	29.4	28.7	27.9	27.4	27.2	27.0	26.9	26.7
82.5°	22.0	21.6	21.3	21.0	20.9	20.8	20.8	20.6
85°	12.6	12.5	12.4	12.3	12.2	12.1	12.1	12.0
87.5°	6.2	6.3	6.4	6.4	6.4	6.4	6.4	6.4
90°	7.1	7.6	8.0	8.4	8.6	8.9	9.1	9.4
92.5°	16.1	16.7	17.3	17.7	17.8	18.0	18.3	18.4
95°	31.3	31.9	32.5	32.9	33.1	33.2	33.4	33.6
97.5°	49.0	49.6	50.1	50.5	50.5	50.7	50.8	50.9
100°	61.3	62.1	62.9	63.3	63.5	63.6	63.8	64.0
102.5°	73.9	74.7	75.6	76.1	76.4	76.6	76.9	77.1
105°	94.3	94.8	95.3	95.7	96.0	96.3	96.5	96.8
107.5°	116.3	116.6	116.8	117.0	117.0	116.9	116.9	116.9
110°	131.6	131.9	132.2	132.2	132.2	132.1	132.0	131.9



TEST NUMBER: P333643-935

CATALOG NUMBER: S125RDIW-S375D470U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	147.0	147.1	147.2	147.2	147.1	146.9	146.7	146.5
115°	170.4	170.3	170.2	170.1	170.0	170.0	169.9	169.8
117.5°	193.8	193.8	193.9	193.8	193.5	193.1	192.7	192.3
120°	209.6	209.6	209.6	209.4	209.1	208.7	208.4	208.0
122.5°	225.1	225.0	224.9	224.7	224.5	224.2	223.9	223.6
125°	247.9	247.7	247.5	247.4	247.3	247.2	247.1	247.0
127.5°	270.5	270.4	270.4	270.2	270.0	269.8	269.7	269.5
130°	285.5	285.4	285.3	285.2	285.0	284.8	284.6	284.5
132.5°	299.8	299.7	299.6	299.5	299.3	299.0	298.8	298.5
135°	321.9	321.9	321.9	321.8	321.4	321.1	320.7	320.4
137.5°	343.5	343.5	343.7	343.5	343.1	342.7	342.2	341.7
140°	357.1	357.2	357.4	357.2	356.8	356.4	355.9	355.5
142.5°	370.3	370.4	370.5	370.3	369.9	369.5	369.0	368.6
145°	389.4	389.4	389.4	389.3	389.1	388.8	388.6	388.3
147.5°	407.2	407.4	407.6	407.4	406.8	406.2	405.6	405.1
150°	418.4	418.4	418.4	418.3	418.1	417.9	417.8	417.6
152.5°	428.8	429.0	429.1	429.1	428.8	428.5	428.2	427.8
155°	443.6	443.9	444.3	444.3	443.8	443.4	443.0	442.6
157.5°	456.5	456.8	457.2	457.1	456.5	455.9	455.4	454.8
160°	464.3	464.7	465.0	464.9	464.5	464.1	463.6	463.2
162.5°	471.7	472.0	472.4	472.4	471.9	471.4	470.9	470.4
165°	481.5	481.8	482.2	482.1	481.6	481.0	480.5	480.0
167.5°	488.8	489.3	489.8	489.8	489.2	488.7	488.2	487.7
170°	493.1	493.6	494.2	494.1	493.5	492.9	492.3	491.7
172.5°	496.3	496.8	497.3	497.3	496.7	496.2	495.7	495.2
175°	499.7	500.3	500.8	500.8	500.2	499.6	498.9	498.3
177.5°	501.4	501.8	502.2	502.1	501.7	501.2	500.7	500.2
180°	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4

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