

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: P333662-940

Luminaire Tested: **S125RDIW-S610D470U940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333662-940
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: S125RDIW-S610D470U940-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 470 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3791.4 lumens
Efficiency: N/A
Efficacy: 125.5 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

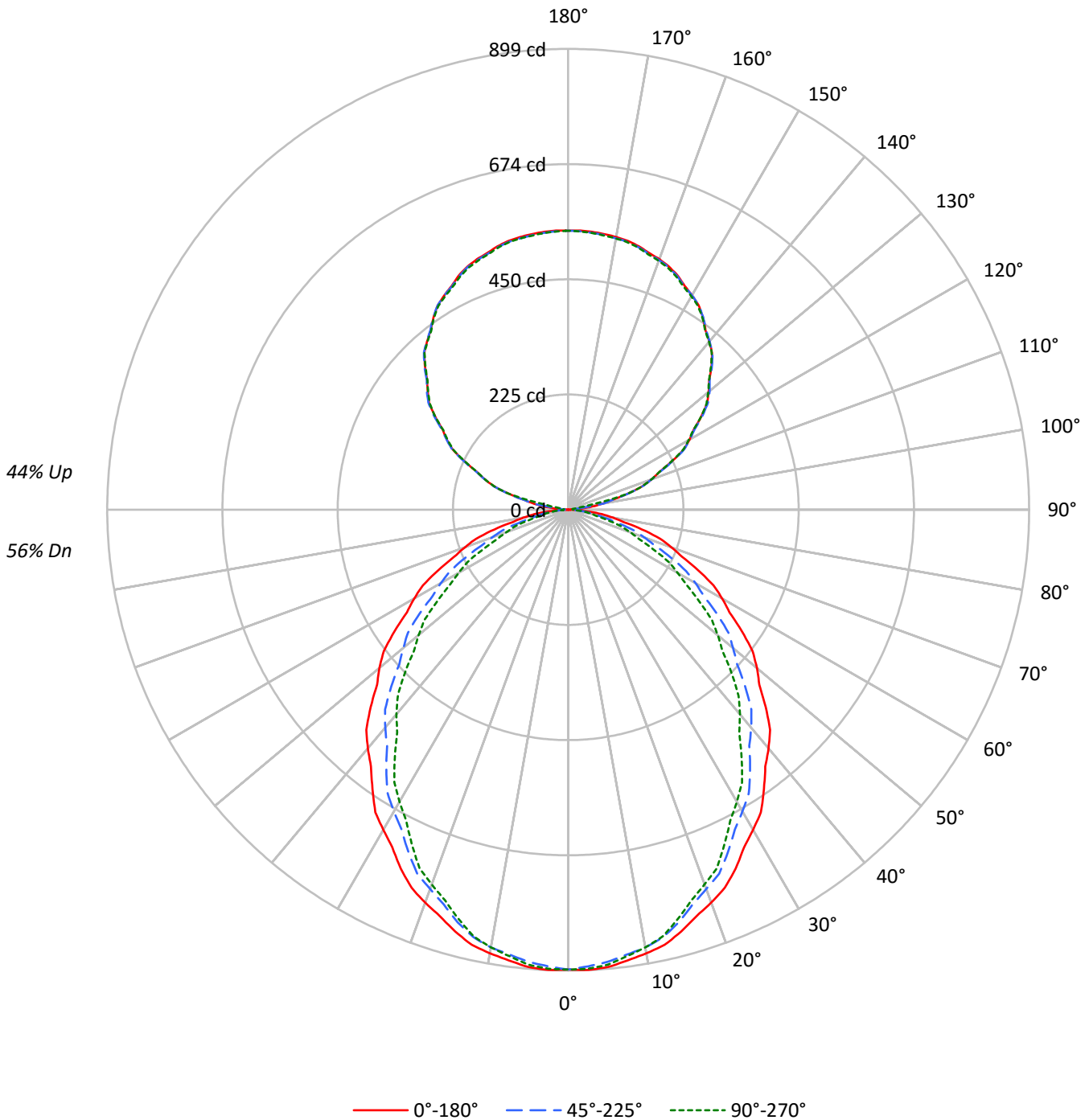
Input Watts (W): 30.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RW	70	50	30	10	70	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	74	74	74	62	62	62	56
1	99	95	91	88	92	89	85	82	76	74	72	65	63	62	55	54	53	48
2	91	83	77	72	84	78	72	68	67	63	60	57	55	52	49	46	45	40
3	83	73	66	60	77	69	62	57	59	55	51	51	47	44	43	40	38	34
4	76	65	57	51	70	61	54	49	53	48	43	46	41	38	39	36	33	30
5	70	58	50	44	65	55	47	42	48	42	37	41	37	33	35	32	29	26
6	64	52	44	38	60	49	42	37	43	37	33	37	33	29	32	28	26	23
7	60	47	39	34	55	44	37	32	39	33	29	34	29	26	29	26	23	20
8	55	43	35	30	51	40	33	29	36	30	26	31	27	23	27	23	21	18
9	52	39	32	27	48	37	30	26	33	27	23	29	24	21	25	21	19	16
10	48	36	29	24	45	34	28	23	30	25	21	26	22	19	23	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5794	5794	5794
5°	5806	5741	5776
10°	5762	5687	5687
15°	5695	5572	5526
20°	5606	5411	5346
25°	5504	5253	5137
30°	5376	5068	4906
35°	5245	4877	4647
40°	5123	4678	4392
45°	4975	4455	4116
50°	4827	4214	3826
55°	4654	3983	3518
60°	4481	3702	3185
65°	4276	3376	2806
70°	4043	2968	2417
75°	3721	2500	2011
80°	3277	1967	1689
85°	2764	1608	1504



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.3	2.2
10°-20°	235.7	6.2
20°-30°	341.8	9.0
30°-40°	389.6	10.3
40°-50°	379.7	10.0
50°-60°	319.6	8.4
60°-70°	224.1	5.9
70°-80°	115.2	3.0
80°-90°	30.2	0.8
90°-100°	19.8	0.5
100°-110°	121.9	3.2
110°-120°	221.0	5.8
120°-130°	283.7	7.5
130°-140°	305.1	8.0
140°-150°	286.4	7.6
150°-160°	231.7	6.1
160°-170°	149.8	4.0
170°-180°	51.7	1.4
0°-30°	661.9	17.5
0°-40°	1051.5	27.7
0°-60°	1750.9	46.2
0°-90°	2120.3	55.9
90°-120°	362.7	9.6
90°-150°	1237.9	32.7
90°-180°	1671.0	44.1
0°-180°	3791.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	897	897	897	897	897	
5°	896	893	886	892	891	85
15°	852	847	833	832	826	240
25°	772	761	737	728	721	355
35°	665	648	619	600	589	416
45°	545	524	488	462	451	420
55°	413	391	354	324	312	370
65°	280	256	221	195	184	277
75°	149	128	100	86	81	158
85°	37	26	22	21	20	42
90°	0	4	6	8	10	3
95°	23	21	6	8	8	29
105°	119	120	120	120	120	126
115°	223	225	225	223	221	221
125°	317	319	320	318	317	283
135°	395	397	396	396	393	304
145°	458	459	459	459	457	286
155°	504	502	503	504	501	232
165°	532	530	530	532	529	150
175°	544	542	542	545	542	52
180°	544	544	544	544	544	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1
2.5°	898.7	898.3	898.0	897.6	897.2	896.4	895.2	894.0	892.8	891.6	892.8
5°	895.6	895.1	894.5	893.9	893.2	892.2	890.5	888.9	887.2	885.5	887.0
7.5°	886.9	886.3	885.7	885.1	884.6	883.3	881.3	879.3	877.4	875.3	876.4
10°	878.7	878.2	877.8	877.4	876.9	875.7	873.5	871.5	869.3	867.2	867.6
12.5°	869.5	869.0	868.3	867.8	867.2	865.5	862.7	859.9	857.0	854.2	854.5
15°	851.7	850.7	849.8	848.9	848.0	846.0	842.8	839.6	836.5	833.3	833.2
17.5°	831.4	830.1	828.7	827.3	825.9	823.2	819.2	815.3	811.3	807.4	806.6
20°	815.7	814.2	812.7	811.2	809.7	806.6	801.7	796.9	792.1	787.3	786.5
22.5°	798.3	796.8	795.4	793.9	792.4	789.1	784.0	779.0	773.9	768.8	767.4
25°	772.4	770.1	767.9	765.6	763.3	759.4	753.9	748.2	742.7	737.1	735.2
27.5°	742.5	739.9	737.1	734.3	731.6	727.3	721.3	715.3	709.4	703.4	700.6
30°	720.9	718.0	715.2	712.3	709.4	704.8	698.5	692.2	685.9	679.6	676.1
32.5°	699.7	696.4	693.0	689.7	686.3	681.4	675.0	668.6	662.1	655.7	651.8
35°	665.3	661.7	658.1	654.5	650.9	645.7	638.9	632.1	625.4	618.6	614.2
37.5°	631.6	627.1	622.8	618.4	614.0	608.3	601.3	594.3	587.4	580.3	575.2
40°	607.7	603.2	598.7	594.1	589.7	583.8	576.6	569.4	562.1	554.9	549.2
42.5°	582.8	578.2	573.5	568.9	564.3	558.2	550.7	543.2	535.8	528.3	522.8
45°	544.7	540.4	536.0	531.6	527.3	520.9	512.6	504.4	496.1	487.8	481.8
47.5°	505.3	500.7	496.1	491.5	486.9	480.4	472.1	463.7	455.4	447.0	440.9
50°	480.4	475.4	470.4	465.5	460.5	453.7	445.1	436.6	427.9	419.4	413.0
52.5°	453.3	448.2	443.1	438.0	432.9	426.3	418.2	410.1	402.0	393.9	387.1
55°	413.3	408.5	403.7	398.9	394.0	387.4	379.0	370.5	362.1	353.7	346.9
57.5°	372.9	367.7	362.6	357.5	352.3	345.6	337.5	329.4	321.3	313.2	306.5
60°	346.9	341.6	336.4	331.1	325.8	319.1	310.9	302.8	294.7	286.6	280.0
62.5°	319.2	314.2	309.2	304.2	299.2	292.5	284.3	276.0	267.8	259.5	253.3
65°	279.8	274.7	269.6	264.5	259.3	252.8	244.8	236.8	228.8	220.9	214.8
67.5°	240.7	235.5	230.4	225.3	220.2	213.8	206.2	198.5	190.8	183.2	177.7
70°	214.1	209.0	203.8	198.8	193.6	187.3	179.8	172.3	164.7	157.2	152.5
72.5°	188.1	183.1	178.1	173.1	168.1	162.0	155.0	147.9	140.9	133.8	129.6
75°	149.1	144.5	140.0	135.5	131.0	125.6	119.2	112.9	106.6	100.2	96.9
77.5°	110.3	106.6	103.1	99.4	95.9	91.5	86.4	81.4	76.3	71.2	68.9
80°	88.1	84.4	80.9	77.2	73.7	69.7	65.5	61.3	57.1	52.9	51.5
82.5°	66.4	63.1	59.9	56.6	53.4	50.3	47.4	44.5	41.6	38.8	38.2
85°	37.3	34.5	31.8	29.2	26.4	24.7	23.9	23.2	22.5	21.7	21.5
87.5°	12.6	11.9	11.1	10.4	9.7	9.4	9.4	9.5	9.5	9.5	9.5
90°	0.4	1.2	1.9	2.6	3.3	3.9	4.5	5.2	5.8	6.4	6.9
92.5°	6.2	5.7	5.2	4.7	4.2	4.2	4.8	5.4	5.9	6.4	6.9
95°	23.0	22.7	22.5	22.2	21.9	20.1	16.7	13.3	9.9	6.4	6.9
97.5°	48.0	48.5	49.0	49.5	49.9	46.8	40.0	33.3	26.6	19.9	17.3
100°	67.3	67.7	67.9	68.2	68.5	68.8	69.1	69.5	69.8	70.2	56.8
102.5°	87.0	87.4	87.7	88.1	88.5	88.7	88.9	89.1	89.3	89.5	87.0
105°	118.6	119.0	119.3	119.7	120.0	120.2	120.2	120.2	120.2	120.2	120.2
107.5°	151.3	151.3	151.3	151.3	151.3	151.4	151.6	151.8	151.9	152.1	152.2
110°	172.6	172.6	172.6	172.6	172.6	172.7	172.9	173.1	173.3	173.4	173.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	192.7	192.9	193.1	193.3	193.5	193.7	193.8	193.9	194.0	194.1	193.8
115°	222.7	223.1	223.6	224.0	224.4	224.7	224.8	224.9	225.0	225.1	224.7
117.5°	253.8	253.7	253.7	253.7	253.7	253.9	254.1	254.5	254.9	255.2	254.8
120°	273.1	273.0	273.0	272.9	272.8	272.9	273.1	273.4	273.7	273.9	273.8
122.5°	290.3	290.5	290.9	291.2	291.6	291.8	291.9	292.0	292.2	292.3	292.1
125°	316.6	317.3	317.9	318.5	319.1	319.5	319.5	319.5	319.5	319.5	319.1
127.5°	341.9	342.4	342.9	343.3	343.8	343.9	343.8	343.8	343.8	343.7	343.5
130°	357.4	357.8	358.3	358.7	359.2	359.4	359.5	359.6	359.7	359.8	359.5
132.5°	372.9	373.4	374.0	374.4	375.0	375.1	375.0	374.8	374.5	374.3	374.3
135°	394.9	395.5	396.0	396.5	397.1	397.3	397.1	396.9	396.7	396.5	396.4
137.5°	415.2	415.6	416.1	416.6	417.1	417.2	417.1	416.9	416.7	416.5	416.6
140°	428.4	428.6	428.7	428.9	429.1	429.2	429.1	429.0	428.9	428.8	429.0
142.5°	440.3	440.5	440.6	440.7	440.8	440.9	441.0	441.1	441.3	441.4	441.4
145°	457.9	458.1	458.3	458.4	458.6	458.7	458.7	458.7	458.7	458.7	458.8
147.5°	473.2	473.1	473.1	473.1	473.1	473.1	473.2	473.3	473.4	473.5	473.6
150°	482.9	482.7	482.5	482.3	482.1	482.1	482.3	482.5	482.7	482.9	483.0
152.5°	492.2	491.9	491.4	491.1	490.6	490.5	490.7	490.9	491.1	491.2	491.4
155°	504.3	503.7	503.2	502.7	502.1	501.9	502.1	502.3	502.5	502.7	502.9
157.5°	513.5	513.2	512.9	512.6	512.2	512.1	512.1	512.1	512.1	512.2	512.5
160°	520.0	519.4	518.9	518.4	517.8	517.6	517.7	517.8	517.9	518.0	518.4
162.5°	525.1	524.6	524.1	523.5	523.0	522.8	522.9	523.0	523.1	523.2	523.6
165°	532.1	531.5	531.0	530.5	529.9	529.7	529.8	529.9	529.9	530.0	530.6
167.5°	537.3	536.7	536.2	535.6	535.0	534.8	534.8	534.9	535.0	535.1	535.8
170°	540.2	539.6	538.9	538.2	537.6	537.3	537.4	537.5	537.6	537.7	538.4
172.5°	542.1	541.4	540.8	540.2	539.6	539.4	539.5	539.7	539.8	540.0	540.6
175°	544.2	543.7	543.1	542.6	542.1	541.8	541.9	542.0	542.1	542.2	542.9
177.5°	545.2	544.7	544.3	543.9	543.4	543.2	543.3	543.4	543.5	543.6	544.0
180°	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2



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CATALOG NUMBER: S125RDIW-S610D470U940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	897.1	897.1	897.1	897.1	897.1	897.1	897.1	897.1
2.5°	894.0	895.2	896.4	897.0	896.9	896.7	896.6	896.5
5°	888.5	890.0	891.5	892.2	891.8	891.5	891.3	890.9
7.5°	877.4	878.5	879.6	879.9	879.6	879.2	879.0	878.6
10°	868.1	868.5	869.1	869.1	868.5	868.1	867.6	867.2
12.5°	854.9	855.2	855.5	855.3	854.6	854.0	853.3	852.6
15°	833.0	832.9	832.8	832.0	830.6	829.3	828.0	826.5
17.5°	805.8	805.0	804.3	803.3	802.3	801.1	800.0	798.9
20°	785.8	785.0	784.3	783.2	781.9	780.5	779.2	777.8
22.5°	765.9	764.4	762.9	761.6	760.5	759.4	758.3	757.2
25°	733.3	731.3	729.3	727.5	725.9	724.2	722.6	720.9
27.5°	697.9	695.2	692.4	690.3	688.7	687.1	685.5	683.9
30°	672.6	669.1	665.7	663.3	661.9	660.6	659.2	657.9
32.5°	648.0	644.3	640.4	637.7	635.9	634.2	632.5	630.8
35°	609.8	605.5	601.1	597.9	595.8	593.6	591.6	589.4
37.5°	569.9	564.6	559.4	555.7	553.7	551.7	549.7	547.6
40°	543.4	537.7	532.0	528.2	526.5	524.6	522.8	521.0
42.5°	517.4	511.8	506.4	502.3	499.7	497.0	494.4	491.8
45°	475.7	469.8	463.7	459.6	457.4	455.0	452.8	450.6
47.5°	434.6	428.4	422.2	417.9	415.4	412.9	410.4	407.9
50°	406.7	400.4	394.0	389.8	387.5	385.3	383.0	380.8
52.5°	380.3	373.4	366.7	362.1	359.9	357.7	355.3	353.1
55°	340.1	333.3	326.5	322.0	319.6	317.2	314.8	312.4
57.5°	299.9	293.3	286.7	282.2	280.1	277.9	275.9	273.8
60°	273.3	266.7	260.1	255.7	253.4	251.1	248.9	246.6
62.5°	247.2	241.0	234.9	230.7	228.5	226.2	223.9	221.7
65°	208.8	202.8	196.8	192.6	190.4	188.2	185.8	183.6
67.5°	172.2	166.7	161.1	157.5	155.7	153.9	152.0	150.3
70°	147.8	143.2	138.5	135.3	133.5	131.7	129.8	128.0
72.5°	125.3	120.9	116.6	113.9	112.7	111.5	110.3	109.1
75°	93.6	90.3	87.0	84.8	83.8	82.8	81.7	80.6
77.5°	66.6	64.3	62.0	60.5	59.7	58.9	58.1	57.3
80°	50.1	48.8	47.4	46.6	46.3	46.0	45.7	45.4
82.5°	37.5	36.8	36.2	35.8	35.7	35.5	35.3	35.1
85°	21.4	21.2	21.0	21.0	20.8	20.6	20.5	20.3
87.5°	9.6	9.7	9.8	9.8	9.7	9.6	9.6	9.5
90°	7.3	7.8	8.2	8.6	8.9	9.2	9.5	9.7
92.5°	7.3	7.8	8.2	8.6	8.6	8.8	8.9	9.0
95°	7.3	7.8	8.2	8.5	8.5	8.5	8.5	8.5
97.5°	14.8	12.3	9.7	8.5	8.5	8.5	8.5	8.5
100°	43.5	30.1	16.8	9.9	9.5	9.2	8.8	8.5
102.5°	84.5	81.9	79.5	75.2	69.0	63.0	56.8	50.7
105°	120.2	120.2	120.2	120.2	120.1	120.0	119.9	119.8
107.5°	152.2	152.2	152.2	152.1	151.9	151.6	151.3	151.1
110°	172.9	172.6	172.4	172.3	172.4	172.5	172.5	172.6



TEST NUMBER: P333662-940

CATALOG NUMBER: S125RDIW-S610D470U940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	193.4	193.1	192.8	192.5	192.4	192.3	192.2	192.0
115°	224.4	224.0	223.6	223.2	222.7	222.1	221.6	221.1
117.5°	254.2	253.8	253.3	253.0	252.7	252.5	252.3	252.1
120°	273.6	273.4	273.2	272.9	272.4	272.0	271.5	271.1
122.5°	291.9	291.8	291.6	291.2	290.7	290.2	289.7	289.2
125°	318.8	318.4	318.1	317.7	317.4	317.2	316.9	316.6
127.5°	343.3	343.1	343.0	342.5	341.8	341.2	340.5	339.8
130°	359.3	359.0	358.7	358.4	357.9	357.5	357.0	356.6
132.5°	374.3	374.2	374.2	373.9	373.4	373.0	372.6	372.1
135°	396.2	396.0	395.8	395.5	394.9	394.4	393.9	393.3
137.5°	416.6	416.7	416.7	416.5	416.0	415.5	415.1	414.6
140°	429.2	429.4	429.5	429.4	428.8	428.3	427.8	427.2
142.5°	441.5	441.5	441.6	441.3	440.8	440.2	439.7	439.2
145°	458.9	459.0	459.1	458.8	458.3	457.7	457.2	456.6
147.5°	473.8	473.9	473.9	473.7	473.1	472.4	471.7	471.1
150°	483.2	483.4	483.6	483.3	482.6	481.9	481.2	480.5
152.5°	491.6	491.8	492.0	491.8	491.1	490.4	489.8	489.2
155°	503.2	503.5	503.7	503.5	502.7	502.0	501.3	500.6
157.5°	512.7	513.0	513.3	513.1	512.4	511.7	511.0	510.2
160°	518.7	519.1	519.4	519.2	518.5	517.8	517.1	516.4
162.5°	524.1	524.7	525.1	525.0	524.2	523.4	522.6	521.8
165°	531.2	531.7	532.3	532.2	531.5	530.7	529.9	529.2
167.5°	536.5	537.1	537.7	537.7	536.8	536.0	535.2	534.4
170°	539.1	539.9	540.6	540.6	539.8	539.0	538.1	537.3
172.5°	541.3	541.9	542.6	542.5	541.7	540.9	540.1	539.3
175°	543.6	544.3	545.0	545.0	544.2	543.4	542.6	541.8
177.5°	544.6	545.0	545.5	545.5	544.9	544.4	543.8	543.2
180°	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2

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