

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: P333662-830

Luminaire Tested: **S125RDIW-S610D470U830-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333662-830
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-S610D470U830-4F0-1E-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: 4007.6 lumens
Efficiency: N/A
Efficacy: 132.7 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

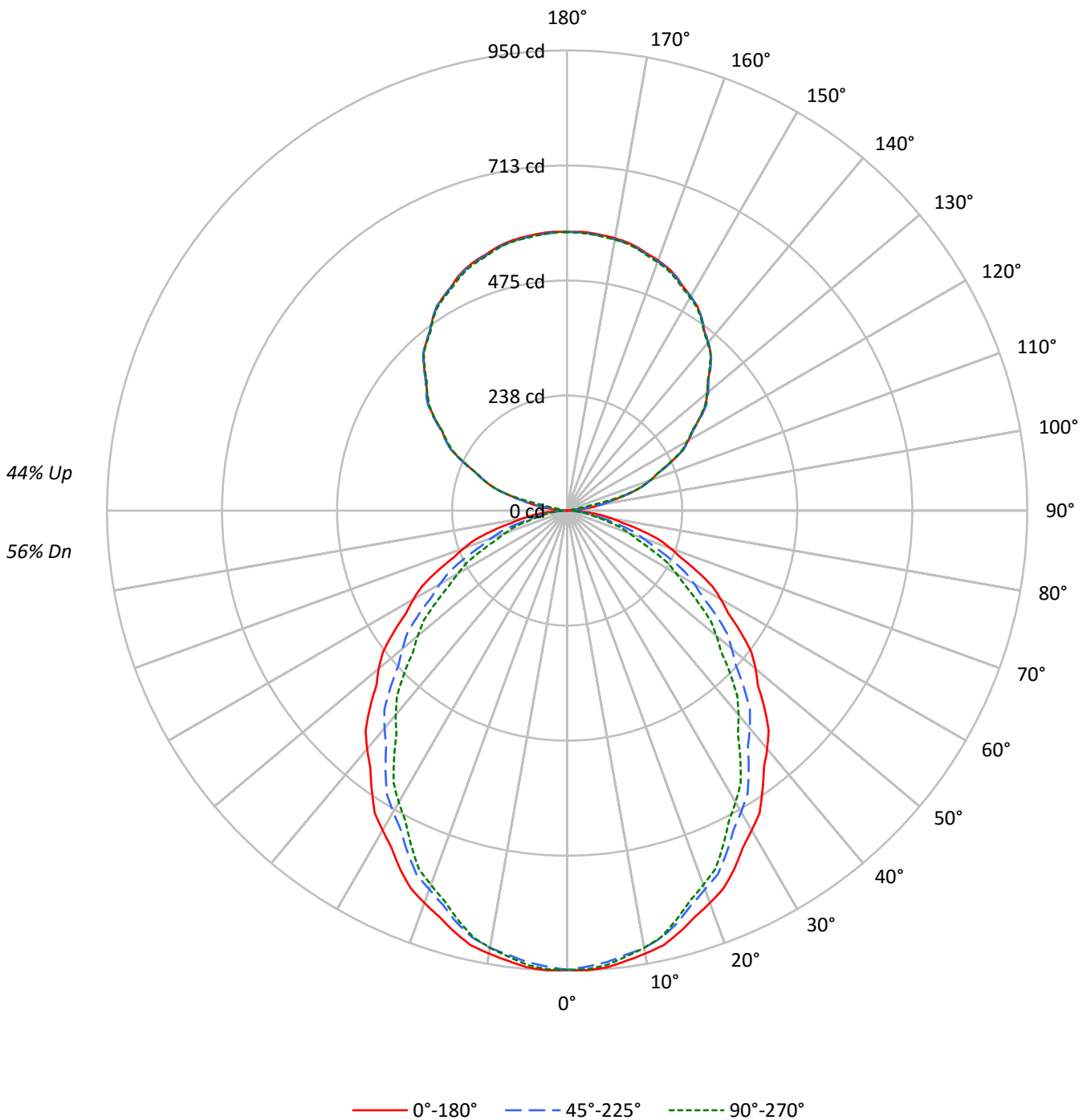
Input Watts (W): 30.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6124	6124	6124
5°	6137	6067	6105
10°	6091	6011	6011
15°	6019	5889	5841
20°	5926	5720	5650
25°	5818	5552	5430
30°	5683	5357	5186
35°	5544	5155	4912
40°	5415	4945	4643
45°	5259	4709	4350
50°	5101	4454	4044
55°	4919	4209	3718
60°	4735	3912	3367
65°	4520	3568	2966
70°	4273	3138	2555
75°	3933	2643	2126
80°	3463	2079	1785
85°	2920	1697	1593



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.2	2.2
10°-20°	249.2	6.2
20°-30°	361.3	9.0
30°-40°	411.8	10.3
40°-50°	401.4	10.0
50°-60°	337.9	8.4
60°-70°	236.8	5.9
70°-80°	121.7	3.0
80°-90°	31.9	0.8
90°-100°	20.9	0.5
100°-110°	128.8	3.2
110°-120°	233.6	5.8
120°-130°	299.9	7.5
130°-140°	322.5	8.0
140°-150°	302.7	7.6
150°-160°	244.9	6.1
160°-170°	158.4	4.0
170°-180°	54.6	1.4
0°-30°	699.6	17.5
0°-40°	1111.4	27.7
0°-60°	1850.7	46.2
0°-90°	2241.2	55.9
90°-120°	383.4	9.6
90°-150°	1308.5	32.7
90°-180°	1766.0	44.1
0°-180°	4007.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	948	948	948	948	948	
5°	947	944	936	943	942	90
15°	900	895	881	880	874	254
25°	816	805	779	770	762	375
35°	703	685	654	634	623	440
45°	576	554	516	488	476	444
55°	437	413	374	343	330	391
65°	296	271	234	206	194	293
75°	158	136	106	91	85	167
85°	39	27	23	22	22	44
90°	0	4	7	9	10	3
95°	24	22	7	9	9	31
105°	125	127	127	127	127	133
115°	235	237	238	236	234	233
125°	335	338	338	336	335	299
135°	418	420	419	418	416	322
145°	484	485	485	485	483	303
155°	533	531	531	532	529	245
165°	562	560	560	563	559	159
175°	575	573	573	576	573	55
180°	575	575	575	575	575	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2
2.5°	949.9	949.5	949.1	948.8	948.4	947.5	946.2	945.0	943.7	942.4	943.7
5°	946.7	946.1	945.5	944.8	944.1	943.0	941.2	939.5	937.7	935.9	937.5
7.5°	937.5	936.8	936.2	935.6	935.0	933.7	931.5	929.4	927.4	925.2	926.3
10°	928.8	928.3	927.8	927.4	926.9	925.6	923.3	921.1	918.9	916.6	917.1
12.5°	919.1	918.5	917.8	917.3	916.6	914.8	911.9	908.9	905.9	902.9	903.2
15°	900.2	899.2	898.2	897.3	896.4	894.2	890.9	887.5	884.2	880.8	880.7
17.5°	878.8	877.4	875.9	874.5	873.0	870.2	865.9	861.8	857.5	853.4	852.5
20°	862.2	860.6	859.0	857.4	855.8	852.5	847.4	842.4	837.3	832.2	831.3
22.5°	843.9	842.3	840.7	839.1	837.5	834.1	828.7	823.4	818.0	812.7	811.2
25°	816.4	814.0	811.6	809.3	806.8	802.7	796.8	790.9	785.0	779.1	777.1
27.5°	784.9	782.0	779.1	776.2	773.3	768.7	762.4	756.1	749.8	743.5	740.6
30°	762.0	758.9	755.9	752.9	749.9	745.0	738.3	731.7	725.0	718.3	714.6
32.5°	739.6	736.1	732.5	729.1	725.5	720.3	713.5	706.7	699.8	693.1	689.0
35°	703.2	699.5	695.6	691.8	688.0	682.5	675.3	668.2	661.0	653.8	649.2
37.5°	667.6	662.9	658.3	653.7	649.0	643.0	635.6	628.2	620.9	613.4	607.9
40°	642.3	637.6	632.8	628.0	623.3	617.1	609.4	601.8	594.2	586.5	580.5
42.5°	616.0	611.1	606.2	601.3	596.4	590.0	582.1	574.2	566.4	558.5	552.6
45°	575.8	571.2	566.6	561.9	557.3	550.6	541.9	533.1	524.3	515.6	509.3
47.5°	534.1	529.2	524.3	519.5	514.6	507.7	499.0	490.1	481.4	472.5	466.0
50°	507.7	502.5	497.2	492.0	486.7	479.6	470.5	461.5	452.3	443.3	436.6
52.5°	479.1	473.7	468.3	463.0	457.6	450.6	442.1	433.5	424.9	416.3	409.2
55°	436.9	431.8	426.7	421.6	416.5	409.4	400.6	391.6	382.8	373.8	366.6
57.5°	394.2	388.7	383.2	377.9	372.4	365.3	356.8	348.2	339.6	331.0	324.0
60°	366.6	361.1	355.5	350.0	344.4	337.3	328.7	320.1	311.5	302.9	296.0
62.5°	337.4	332.2	326.8	321.5	316.2	309.2	300.5	291.7	283.0	274.3	267.8
65°	295.8	290.4	284.9	279.6	274.1	267.2	258.7	250.3	241.9	233.5	227.1
67.5°	254.4	248.9	243.6	238.2	232.7	226.0	217.9	209.8	201.7	193.6	187.8
70°	226.3	220.9	215.5	210.1	204.6	197.9	190.0	182.1	174.1	166.2	161.2
72.5°	198.8	193.5	188.2	182.9	177.7	171.3	163.8	156.4	148.9	141.5	137.0
75°	157.6	152.8	148.0	143.3	138.5	132.7	126.0	119.3	112.6	105.9	102.5
77.5°	116.6	112.7	109.0	105.1	101.3	96.7	91.3	86.1	80.7	75.3	72.9
80°	93.1	89.3	85.5	81.6	77.9	73.7	69.2	64.8	60.3	55.9	54.4
82.5°	70.2	66.7	63.3	59.9	56.5	53.2	50.1	47.0	44.0	41.0	40.3
85°	39.4	36.5	33.6	30.8	27.9	26.1	25.3	24.5	23.8	22.9	22.7
87.5°	13.3	12.5	11.8	11.0	10.3	9.9	9.9	10.0	10.0	10.0	10.1
90°	0.5	1.2	2.0	2.7	3.5	4.1	4.8	5.5	6.1	6.8	7.3
92.5°	6.6	6.0	5.5	5.0	4.4	4.4	5.1	5.7	6.2	6.8	7.3
95°	24.3	24.0	23.8	23.5	23.2	21.2	17.6	14.0	10.5	6.8	7.3
97.5°	50.7	51.3	51.7	52.3	52.8	49.5	42.3	35.3	28.1	21.0	18.3
100°	71.2	71.5	71.8	72.1	72.4	72.7	73.0	73.4	73.8	74.2	60.0
102.5°	92.0	92.4	92.7	93.1	93.5	93.8	94.0	94.2	94.4	94.6	92.0
105°	125.4	125.7	126.1	126.5	126.9	127.1	127.1	127.1	127.1	127.1	127.1
107.5°	159.9	159.9	159.9	159.9	159.9	160.0	160.2	160.4	160.6	160.8	160.9
110°	182.5	182.5	182.5	182.5	182.5	182.6	182.8	182.9	183.1	183.3	183.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	203.7	203.9	204.1	204.3	204.5	204.7	204.8	205.0	205.1	205.2	204.8
115°	235.4	235.8	236.3	236.8	237.2	237.5	237.6	237.7	237.8	237.9	237.5
117.5°	268.2	268.2	268.2	268.2	268.2	268.3	268.6	269.0	269.4	269.8	269.3
120°	288.7	288.6	288.5	288.4	288.3	288.4	288.7	289.0	289.3	289.5	289.4
122.5°	306.8	307.1	307.5	307.8	308.2	308.4	308.6	308.7	308.9	309.0	308.8
125°	334.7	335.4	336.0	336.7	337.3	337.7	337.7	337.7	337.7	337.7	337.3
127.5°	361.4	361.9	362.4	362.9	363.4	363.5	363.4	363.4	363.4	363.3	363.1
130°	377.8	378.2	378.7	379.2	379.7	379.9	380.0	380.1	380.2	380.3	380.0
132.5°	394.2	394.7	395.3	395.8	396.3	396.5	396.3	396.2	395.9	395.7	395.7
135°	417.5	418.0	418.6	419.1	419.7	419.9	419.7	419.5	419.3	419.1	419.0
137.5°	438.8	439.3	439.8	440.4	440.8	441.0	440.8	440.6	440.5	440.3	440.4
140°	452.8	453.0	453.2	453.4	453.6	453.6	453.6	453.5	453.4	453.3	453.5
142.5°	465.4	465.6	465.7	465.8	465.9	466.0	466.2	466.3	466.5	466.6	466.6
145°	484.0	484.2	484.4	484.6	484.7	484.8	484.8	484.8	484.8	484.8	484.9
147.5°	500.2	500.1	500.1	500.0	500.0	500.0	500.2	500.3	500.4	500.5	500.6
150°	510.4	510.2	510.0	509.8	509.6	509.6	509.8	510.0	510.2	510.4	510.6
152.5°	520.3	519.9	519.4	519.1	518.6	518.5	518.7	518.9	519.1	519.2	519.4
155°	533.0	532.4	531.9	531.3	530.7	530.6	530.7	530.9	531.1	531.3	531.6
157.5°	542.8	542.4	542.2	541.8	541.4	541.3	541.3	541.3	541.3	541.4	541.7
160°	549.6	549.0	548.5	547.9	547.3	547.1	547.2	547.3	547.4	547.5	547.9
162.5°	555.1	554.5	553.9	553.4	552.8	552.6	552.7	552.8	552.9	553.0	553.5
165°	562.4	561.8	561.3	560.7	560.2	559.9	560.0	560.1	560.2	560.2	560.8
167.5°	567.9	567.3	566.8	566.1	565.5	565.2	565.3	565.4	565.5	565.6	566.4
170°	571.0	570.3	569.6	568.9	568.3	568.0	568.1	568.2	568.3	568.4	569.1
172.5°	573.0	572.3	571.7	571.0	570.3	570.1	570.2	570.4	570.6	570.8	571.5
175°	575.2	574.7	574.1	573.5	573.0	572.7	572.8	572.9	573.0	573.1	573.8
177.5°	576.3	575.8	575.3	574.9	574.4	574.2	574.3	574.4	574.5	574.6	575.0
180°	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2
2.5°	945.0	946.2	947.5	948.1	948.0	947.8	947.7	947.6
5°	939.1	940.8	942.4	943.0	942.6	942.4	942.1	941.7
7.5°	927.5	928.6	929.7	930.1	929.7	929.3	929.1	928.7
10°	917.6	918.0	918.6	918.6	918.0	917.6	917.1	916.6
12.5°	903.6	904.0	904.3	904.1	903.3	902.7	901.9	901.2
15°	880.5	880.3	880.2	879.4	878.0	876.6	875.2	873.6
17.5°	851.8	850.9	850.2	849.1	848.0	846.8	845.6	844.4
20°	830.6	829.7	829.0	827.8	826.4	825.0	823.6	822.1
22.5°	809.5	807.9	806.4	805.0	803.9	802.7	801.5	800.3
25°	775.1	773.0	770.9	768.9	767.2	765.4	763.7	762.0
27.5°	737.7	734.8	731.9	729.6	727.9	726.2	724.5	722.8
30°	711.0	707.3	703.6	701.1	699.6	698.2	696.8	695.4
32.5°	684.9	681.0	676.9	674.0	672.1	670.3	668.5	666.8
35°	644.6	640.0	635.4	632.0	629.7	627.5	625.3	623.0
37.5°	602.4	596.8	591.3	587.4	585.2	583.2	581.0	578.8
40°	574.4	568.4	562.3	558.4	556.5	554.5	552.6	550.7
42.5°	546.9	541.0	535.3	530.9	528.2	525.4	522.5	519.8
45°	502.8	496.5	490.1	485.8	483.4	481.0	478.6	476.3
47.5°	459.4	452.8	446.3	441.7	439.0	436.4	433.8	431.1
50°	429.9	423.2	416.5	412.0	409.6	407.3	404.8	402.5
52.5°	402.0	394.7	387.6	382.8	380.4	378.1	375.6	373.2
55°	359.5	352.3	345.2	340.4	337.8	335.3	332.7	330.2
57.5°	317.0	310.0	303.0	298.3	296.1	293.8	291.6	289.4
60°	288.9	281.9	274.9	270.2	267.9	265.4	263.1	260.7
62.5°	261.3	254.8	248.3	243.8	241.5	239.1	236.7	234.3
65°	220.7	214.3	208.0	203.6	201.2	198.9	196.4	194.1
67.5°	182.0	176.2	170.3	166.5	164.6	162.7	160.7	158.8
70°	156.3	151.4	146.4	143.0	141.1	139.2	137.2	135.3
72.5°	132.4	127.8	123.3	120.4	119.1	117.8	116.6	115.3
75°	99.0	95.5	92.0	89.6	88.6	87.5	86.3	85.2
77.5°	70.4	68.0	65.5	63.9	63.1	62.2	61.5	60.6
80°	53.0	51.6	50.1	49.3	48.9	48.6	48.3	48.0
82.5°	39.6	38.9	38.3	37.9	37.7	37.5	37.3	37.1
85°	22.6	22.4	22.2	22.1	22.0	21.8	21.7	21.5
87.5°	10.2	10.3	10.4	10.4	10.3	10.2	10.2	10.1
90°	7.7	8.2	8.7	9.1	9.4	9.7	10.0	10.3
92.5°	7.7	8.2	8.7	9.0	9.1	9.3	9.4	9.5
95°	7.7	8.2	8.7	9.0	9.0	9.0	9.0	9.0
97.5°	15.6	13.0	10.3	9.0	9.0	9.0	9.0	9.0
100°	46.0	31.9	17.7	10.5	10.1	9.7	9.3	9.0
102.5°	89.4	86.6	84.0	79.5	73.0	66.5	60.0	53.6
105°	127.1	127.1	127.1	127.1	127.0	126.9	126.8	126.7
107.5°	160.9	160.9	160.9	160.8	160.5	160.2	159.9	159.7
110°	182.8	182.5	182.2	182.1	182.2	182.3	182.4	182.5



TEST NUMBER: P333662-830

CATALOG NUMBER: S125RDIW-S610D470U830-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	204.4	204.1	203.8	203.5	203.4	203.2	203.1	202.9
115°	237.1	236.8	236.4	235.9	235.4	234.8	234.2	233.7
117.5°	268.7	268.2	267.8	267.4	267.1	266.9	266.6	266.5
120°	289.2	289.0	288.8	288.4	287.9	287.5	287.0	286.5
122.5°	308.6	308.4	308.2	307.8	307.3	306.7	306.2	305.7
125°	337.0	336.6	336.2	335.8	335.5	335.3	335.0	334.7
127.5°	362.9	362.7	362.5	362.0	361.3	360.6	359.9	359.2
130°	379.8	379.5	379.2	378.8	378.3	377.9	377.4	376.9
132.5°	395.6	395.5	395.5	395.2	394.7	394.3	393.8	393.3
135°	418.8	418.6	418.4	418.0	417.5	416.9	416.3	415.8
137.5°	440.4	440.5	440.5	440.3	439.7	439.2	438.8	438.3
140°	453.6	453.8	454.0	453.8	453.3	452.7	452.1	451.6
142.5°	466.7	466.7	466.7	466.5	465.9	465.3	464.8	464.2
145°	485.0	485.1	485.2	484.9	484.4	483.8	483.2	482.7
147.5°	500.8	500.9	501.0	500.7	500.0	499.4	498.6	497.9
150°	510.8	511.0	511.1	510.9	510.1	509.3	508.6	507.8
152.5°	519.6	519.8	520.0	519.8	519.1	518.4	517.7	517.1
155°	531.9	532.2	532.4	532.2	531.4	530.7	529.9	529.1
157.5°	542.0	542.2	542.5	542.3	541.6	540.8	540.1	539.3
160°	548.3	548.7	549.0	548.8	548.1	547.3	546.6	545.8
162.5°	554.0	554.6	555.1	555.0	554.1	553.3	552.4	551.6
165°	561.5	562.0	562.6	562.5	561.8	560.9	560.2	559.4
167.5°	567.0	567.7	568.4	568.4	567.4	566.6	565.7	564.9
170°	569.9	570.7	571.5	571.4	570.5	569.7	568.8	568.0
172.5°	572.1	572.8	573.5	573.4	572.6	571.7	570.9	570.0
175°	574.6	575.3	576.1	576.1	575.2	574.4	573.5	572.7
177.5°	575.6	576.1	576.6	576.6	576.0	575.4	574.8	574.2
180°	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2

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