

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: P333524-830

Luminaire Tested: **S125RDIP-S610D365U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333524-830
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: S125RDIP-S610D365U830-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3435.4 lumens
Efficiency: N/A
Efficacy: 124.9 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: Semi-Direct

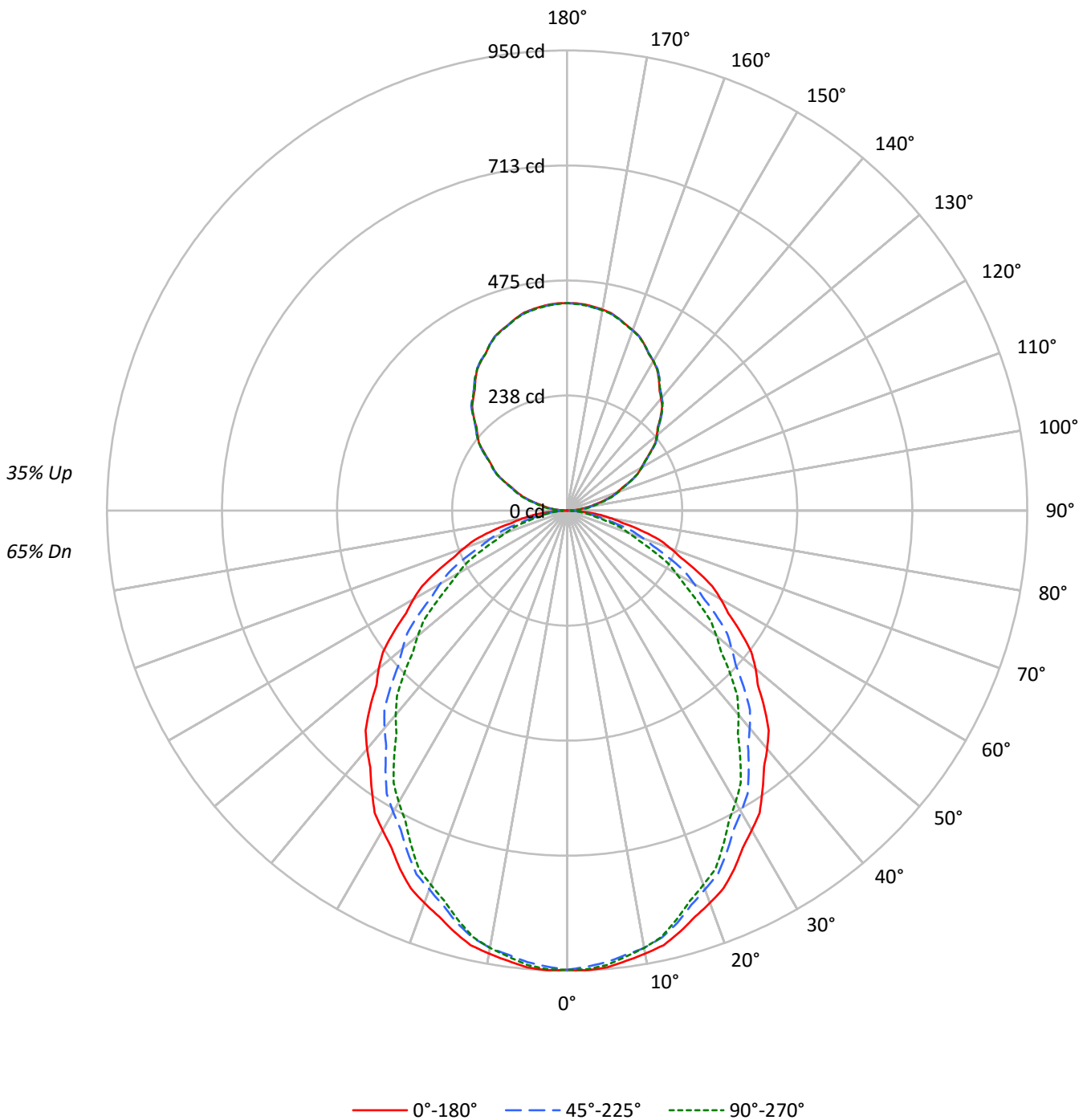
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	111	111	111	104	104	104	104	92	92	92	80	80	80	70	70	70	65
1	102	97	93	90	95	92	88	85	81	78	76	71	69	68	62	61	60	56
2	93	85	79	74	87	80	75	70	71	67	64	63	60	57	55	53	51	47
3	85	75	68	62	79	71	64	59	63	58	54	56	52	49	49	46	44	40
4	78	67	59	53	73	63	56	50	56	51	46	50	46	42	44	41	38	35
5	71	60	51	45	67	57	49	44	51	45	40	45	40	36	40	36	33	30
6	66	54	46	40	62	51	44	38	46	40	35	41	36	32	36	32	29	27
7	61	49	41	35	57	46	39	34	42	36	31	37	32	29	33	29	26	24
8	57	44	36	31	53	42	35	30	38	32	28	34	29	26	31	27	23	21
9	53	41	33	28	50	39	32	27	35	29	25	32	27	23	28	24	21	19
10	50	37	30	25	47	36	29	24	32	27	23	29	24	21	26	22	19	17

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	2.6
10°-20°	249.2	7.3
20°-30°	361.3	10.5
30°-40°	411.8	12.0
40°-50°	401.4	11.7
50°-60°	337.9	9.8
60°-70°	236.8	6.9
70°-80°	121.7	3.5
80°-90°	31.7	0.9
90°-100°	28.7	0.8
100°-110°	84.7	2.5
110°-120°	143.4	4.2
120°-130°	188.7	5.5
130°-140°	211.5	6.2
140°-150°	207.3	6.0
150°-160°	174.1	5.1
160°-170°	115.7	3.4
170°-180°	40.5	1.2
0°-30°	699.6	20.4
0°-40°	1111.4	32.4
0°-60°	1850.7	53.9
0°-90°	2240.9	65.2
90°-120°	256.8	7.5
90°-150°	864.2	25.2
90°-180°	1195.0	34.8
0°-180°	3435.4	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	3	5	7	8	3
95°	22	22	26	28	29	23
105°	76	78	80	82	83	81
115°	144	145	146	145	145	142
125°	210	211	212	211	211	188
135°	272	274	275	275	274	210
145°	330	331	332	332	332	206
155°	378	378	378	379	378	174
165°	411	410	410	412	410	116
175°	427	426	426	427	425	41
180°	428	428	428	428	428	



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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	12.4	11.7	10.9	10.2	9.7	9.7	9.7	9.7	9.6	9.7
90°	0.4	0.9	1.5	2.1	2.7	3.3	3.8	4.3	4.8	5.4	5.7
92.5°	8.1	8.5	8.9	9.3	9.7	10.3	10.8	11.5	12.2	12.8	13.3
95°	21.7	21.8	22.0	22.1	22.2	22.7	23.5	24.1	24.9	25.6	26.2
97.5°	36.0	36.0	36.1	36.2	36.2	36.8	37.8	38.8	39.8	40.8	41.4
100°	46.7	46.7	46.7	46.7	46.7	47.1	48.1	49.0	50.0	51.0	51.7
102.5°	58.1	58.4	58.7	59.0	59.3	59.7	60.1	60.6	61.2	61.6	62.4
105°	76.0	76.3	76.7	77.1	77.5	77.9	78.3	78.7	79.2	79.6	80.0
107.5°	95.7	96.0	96.4	96.8	97.2	97.6	97.8	98.2	98.5	98.9	99.1
110°	109.2	109.6	110.0	110.4	110.7	111.0	111.2	111.5	111.7	112.0	112.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	123.1	123.3	123.5	123.7	123.9	124.1	124.4	124.7	125.0	125.3	125.4
115°	143.5	143.8	144.2	144.5	144.8	145.0	145.2	145.2	145.4	145.6	145.5
117.5°	164.1	164.2	164.4	164.5	164.7	164.8	164.9	165.0	165.1	165.3	165.3
120°	176.9	177.3	177.7	178.0	178.3	178.6	178.7	178.7	178.8	178.9	178.9
122.5°	190.8	190.9	191.1	191.1	191.2	191.4	191.6	191.8	192.0	192.2	192.2
125°	209.5	210.0	210.5	210.8	211.3	211.6	211.7	211.7	211.8	211.9	211.7
127.5°	229.5	229.8	230.1	230.3	230.5	230.7	230.8	230.9	231.0	231.0	231.0
130°	241.5	241.9	242.2	242.6	243.0	243.3	243.4	243.6	243.7	243.8	243.7
132.5°	253.5	254.1	254.8	255.3	255.9	256.3	256.2	256.2	256.2	256.1	256.0
135°	272.5	273.0	273.4	273.8	274.3	274.6	274.7	274.7	274.8	274.8	274.8
137.5°	290.4	290.8	291.2	291.6	292.1	292.4	292.6	292.7	292.8	293.0	293.1
140°	301.8	302.2	302.6	302.9	303.3	303.6	303.8	304.1	304.3	304.4	304.6
142.5°	313.3	313.6	313.9	314.2	314.5	314.8	315.1	315.4	315.7	315.9	316.0
145°	330.2	330.5	330.7	331.0	331.3	331.6	331.8	332.1	332.2	332.4	332.4
147.5°	345.7	345.9	346.0	346.2	346.4	346.6	346.8	346.9	347.0	347.2	347.4
150°	356.1	356.1	356.0	355.9	355.8	355.9	356.2	356.6	356.8	357.1	357.1
152.5°	364.7	364.8	364.9	365.0	365.0	365.1	365.3	365.4	365.5	365.6	365.8
155°	377.8	377.8	377.8	377.8	377.8	377.8	377.9	378.0	378.1	378.1	378.4
157.5°	389.5	389.4	389.2	389.0	388.9	388.8	388.9	389.0	389.0	389.1	389.4
160°	396.4	396.2	396.0	395.8	395.6	395.5	395.6	395.6	395.7	395.8	396.1
162.5°	402.6	402.4	402.3	402.1	401.9	401.8	401.8	401.9	401.9	401.9	402.3
165°	410.8	410.6	410.5	410.3	410.2	410.1	410.2	410.3	410.4	410.4	410.8
167.5°	417.6	417.4	417.1	416.8	416.5	416.3	416.3	416.3	416.3	416.3	416.8
170°	421.4	421.1	420.8	420.6	420.2	420.1	420.1	420.1	420.1	420.1	420.6
172.5°	424.0	423.8	423.5	423.2	422.9	422.7	422.7	422.7	422.7	422.7	423.2
175°	427.1	426.8	426.5	426.2	425.9	425.7	425.7	425.7	425.7	425.7	426.2
177.5°	428.6	428.4	428.1	427.9	427.6	427.5	427.4	427.4	427.3	427.3	427.6
180°	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1



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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°	9.8	9.9	10.0	10.0	9.9	9.8	9.7	9.6
90°	6.0	6.4	6.8	7.1	7.4	7.5	7.7	8.0
92.5°	13.8	14.2	14.7	15.1	15.3	15.4	15.6	15.7
95°	26.7	27.2	27.7	28.1	28.2	28.4	28.5	28.7
97.5°	41.8	42.3	42.8	43.1	43.2	43.3	43.4	43.5
100°	52.3	53.0	53.6	54.0	54.2	54.4	54.5	54.7
102.5°	63.1	63.8	64.6	65.0	65.2	65.4	65.6	65.8
105°	80.5	81.0	81.4	81.7	81.9	82.2	82.4	82.7
107.5°	99.3	99.5	99.7	99.9	99.8	99.8	99.8	99.8
110°	112.4	112.6	112.8	112.9	112.8	112.7	112.6	112.6



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CATALOG NUMBER: S125RDIP-S610D365U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	125.5	125.5	125.6	125.6	125.5	125.4	125.3	125.2
115°	145.4	145.3	145.2	145.2	145.2	145.1	145.0	144.9
117.5°	165.4	165.5	165.5	165.4	165.1	164.9	164.6	164.2
120°	178.9	178.9	178.9	178.7	178.4	178.1	177.9	177.6
122.5°	192.1	192.0	192.0	191.8	191.6	191.3	191.1	190.9
125°	211.6	211.4	211.3	211.1	211.1	211.0	210.9	210.8
127.5°	230.9	230.8	230.7	230.6	230.5	230.4	230.2	230.1
130°	243.7	243.6	243.6	243.5	243.3	243.2	243.0	242.9
132.5°	256.0	255.9	255.8	255.7	255.4	255.2	255.1	254.9
135°	274.8	274.8	274.8	274.7	274.4	274.1	273.8	273.5
137.5°	293.2	293.3	293.4	293.2	292.8	292.5	292.1	291.7
140°	304.8	304.9	305.1	305.0	304.6	304.3	303.9	303.5
142.5°	316.1	316.2	316.3	316.1	315.8	315.4	315.1	314.7
145°	332.4	332.4	332.4	332.3	332.2	331.9	331.7	331.5
147.5°	347.6	347.8	348.0	347.8	347.3	346.8	346.3	345.8
150°	357.1	357.1	357.1	357.0	356.9	356.8	356.6	356.5
152.5°	366.0	366.2	366.4	366.3	366.1	365.8	365.5	365.2
155°	378.7	379.0	379.3	379.3	378.9	378.5	378.1	377.8
157.5°	389.6	390.0	390.3	390.2	389.7	389.2	388.7	388.2
160°	396.3	396.6	396.9	396.9	396.5	396.2	395.8	395.4
162.5°	402.6	402.9	403.3	403.3	402.8	402.4	402.0	401.5
165°	411.0	411.3	411.6	411.5	411.0	410.7	410.2	409.7
167.5°	417.3	417.6	418.1	418.1	417.6	417.2	416.7	416.3
170°	420.9	421.4	421.9	421.8	421.3	420.8	420.3	419.7
172.5°	423.7	424.0	424.5	424.5	424.0	423.6	423.1	422.6
175°	426.6	427.1	427.5	427.4	427.0	426.4	425.9	425.4
177.5°	428.0	428.4	428.7	428.7	428.3	427.8	427.4	427.0
180°	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1

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