

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: SHAPER

Report Number: P25986

Luminaire Tested: **604-25-W-L1/835-UNV-MW**

Test Date: 04/07/15

Test Information

Test Method: LM-79-08
Report Number: P25986
Test Lab: INNOVATION CENTER-P2
Test Date: 04/07/15
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 604-25-W-L1/835-UNV-MW
Description: SHAPER LED INDOOR, HORIZONTAL MOUNT WALL SCONCE
Light Source: (24) 3500K METROSPEC LED
12439451
Ballast/Driver: (1) ROAL 0-10V ELECTRONIC DRIVER
RSLD035-7C

Summary

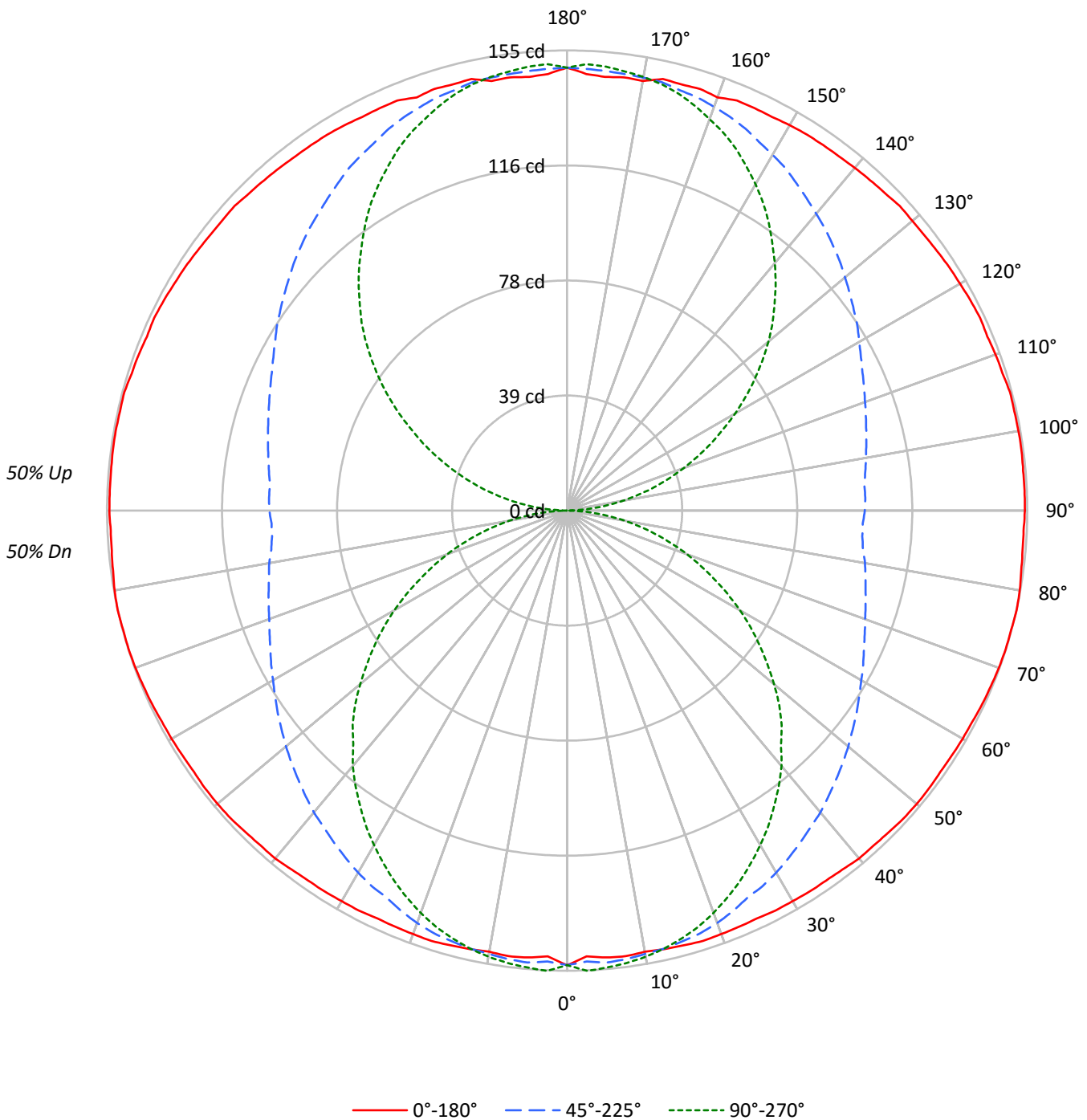
Lumens per Lamp: N/A
Luminaire Lumens: 1448.3 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Spacing Criteria (0/90/45): 1.53 / 1.26 / 1.54
Luminous Opening: Rectangular w/ Sides (W: 1.42' x L: 0.25' x H: 0.31')
CIE Type: General Diffuse

Input Watts (W): 14
Input Voltage (V): 120.04
Input Current (Ain): 0.12843
Voltage Rise (V): NR
Power Factor: 0.9549
Total Harmonic Distortion (THDi): 27.1
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: HR
Ambient Temperature (°C): NR
Test Distance: 25 FT

TEST NUMBER: P25986

CATALOG NUMBER: 604-25-W-L1/835-UNV-MW

Luminous Intensity Polar Plot





TEST NUMBER: P25986

CATALOG NUMBER: 604-25-W-L1/835-UNV-MW

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	107	107	107	107	99	99	99	99	83	83	83		69	69	69		56	56	56	50
1	95	89	84	79	87	82	77	73	68	65	62		56	53	51		45	43	41	36
2	85	76	68	62	78	70	63	58	58	53	49		47	44	40		38	35	32	27
3	77	66	57	50	70	60	53	47	50	44	40		41	37	33		32	29	26	22
4	70	58	49	42	64	53	45	39	44	38	33		36	31	27		28	25	22	18
5	64	51	42	35	58	47	39	33	39	33	28		32	27	23		25	22	19	15
6	59	45	37	30	53	42	34	28	35	29	24		29	24	20		23	19	16	13
7	54	41	32	26	49	38	30	24	32	25	21		26	21	17		21	17	14	11
8	50	37	29	23	46	34	27	21	29	23	18		24	19	15		19	15	12	10
9	47	34	26	20	43	31	24	19	26	20	16		22	17	14		17	14	11	9
10	43	31	23	18	40	28	22	17	24	18	15		20	15	12		16	13	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4653	4653	4653
5°	4155	4273	4624
10°	3816	3954	4533
15°	3573	3696	4432
20°	3374	3468	4317
25°	3210	3248	4187
30°	3096	3088	4050
35°	3009	2935	3905
40°	2963	2812	3760
45°	2927	2699	3599
50°	2919	2610	3407
55°	2920	2537	3191
60°	2954	2483	2956
65°	3015	2456	2670
70°	3102	2461	2379
75°	3211	2505	1997
80°	3349	2586	1532
85°	3513	2701	871



TEST NUMBER: P25986

CATALOG NUMBER: 604-25-W-L1/835-UNV-MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	14.6	1.0
10°-20°	42.6	2.9
20°-30°	66.9	4.6
30°-40°	85.9	5.9
40°-50°	99.1	6.8
50°-60°	105.7	7.3
60°-70°	107.1	7.4
70°-80°	105.1	7.3
80°-90°	101.5	7.0
90°-100°	101.6	7.0
100°-110°	104.6	7.2
110°-120°	106.1	7.3
120°-130°	104.3	7.2
130°-140°	97.5	6.7
140°-150°	84.4	5.8
150°-160°	65.6	4.5
160°-170°	41.6	2.9
170°-180°	14.2	1.0
0°-30°	124.0	8.6
0°-40°	209.9	14.5
0°-60°	414.7	28.6
0°-90°	728.3	50.3
90°-120°	312.3	21.6
90°-150°	598.5	41.3
90°-180°	720.0	49.7
0°-180°	1448.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	153	153	153	153	153	
5°	151	152	153	154	154	14
15°	152	152	150	149	149	43
25°	152	150	144	140	138	70
35°	152	148	137	126	122	96
45°	153	146	128	110	102	119
55°	154	144	119	92	79	138
65°	154	142	110	74	55	153
75°	155	141	104	58	31	164
85°	154	138	100	49	9	126
90°	154	138	100	49	0	84
95°	154	139	100	50	9	126
105°	154	141	104	58	30	163
115°	154	141	110	73	54	152
125°	152	143	118	90	77	137
135°	151	145	126	108	99	117
145°	150	146	135	124	118	94
155°	150	148	142	137	134	69
165°	149	148	147	146	145	42
175°	147	148	149	150	150	14
180°	149	149	149	149	149	



TEST NUMBER: P25986

CATALOG NUMBER: 604-25-W-L1/835-UNV-MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	153.1	153.1	153.1	153.1	153.1	153.1	153.1	153.1	153.1	153.1	153.1
2.5°	150.3	151.0	151.0	151.6	151.2	151.7	151.7	151.9	152.8	152.0	153.7
5°	151.1	151.8	151.8	152.1	151.8	152.1	152.0	152.1	152.9	152.8	153.6
7.5°	151.4	151.9	152.0	152.3	152.0	152.1	152.0	152.1	152.7	152.4	153.2
10°	150.9	152.1	151.5	151.8	151.5	151.5	151.4	151.5	152.1	151.6	152.5
12.5°	151.3	151.6	151.7	152.9	151.6	151.3	151.1	151.2	151.6	151.1	151.8
15°	151.6	151.9	152.1	152.3	151.9	151.6	150.9	150.9	150.9	150.2	150.7
17.5°	152.0	152.2	152.3	152.5	152.0	151.4	150.6	150.4	150.3	149.3	149.6
20°	151.8	153.1	152.0	152.1	151.6	150.8	149.9	149.5	149.2	147.8	147.6
22.5°	151.7	151.6	151.6	151.6	150.9	149.9	148.9	148.2	147.7	146.0	145.9
25°	151.5	151.6	151.5	151.3	150.6	149.8	148.3	147.0	146.3	143.8	144.0
27.5°	151.9	151.6	151.6	151.1	150.3	148.9	147.2	146.1	145.0	142.6	141.7
30°	151.9	151.6	151.7	151.0	149.9	148.2	146.3	144.9	143.5	140.8	139.7
32.5°	152.1	151.7	151.5	150.8	149.6	147.7	146.1	143.7	141.8	138.8	137.3
35°	152.1	151.9	151.6	150.5	149.1	146.9	144.4	142.3	140.2	136.7	134.8
37.5°	152.4	151.9	151.7	150.5	148.9	146.4	143.5	141.2	138.6	134.6	132.4
40°	153.0	152.4	151.0	150.6	149.0	145.9	142.7	140.5	137.0	132.7	130.0
42.5°	152.9	152.2	152.0	150.5	148.4	145.4	141.7	138.8	135.2	130.4	127.3
45°	153.2	152.6	151.9	150.2	148.1	144.5	140.7	137.3	133.3	128.1	124.5
47.5°	153.6	152.7	151.9	150.3	147.8	144.0	139.7	135.9	131.6	125.9	121.8
50°	153.7	152.9	152.1	150.2	147.5	143.4	138.9	134.6	129.8	123.6	119.0
52.5°	153.7	152.8	152.2	149.9	146.9	142.8	137.8	133.4	127.9	121.2	116.3
55°	153.5	152.9	152.1	149.7	146.5	142.0	136.9	131.9	125.9	119.0	113.5
57.5°	153.6	152.8	151.7	149.4	146.0	141.3	135.6	130.4	124.1	116.6	110.6
60°	153.8	153.2	152.0	149.1	145.4	140.6	134.5	129.0	122.4	114.4	107.8
62.5°	153.9	153.2	152.2	149.2	145.3	140.1	133.9	127.9	120.7	112.4	105.3
65°	154.3	153.0	152.2	148.9	144.8	139.4	132.9	126.6	119.2	110.3	102.8
67.5°	154.5	153.4	152.4	150.0	144.7	139.2	132.4	125.7	117.7	108.5	100.5
70°	154.8	153.6	152.6	148.9	144.6	138.8	131.7	124.8	116.4	106.8	98.3
72.5°	154.9	153.7	152.7	148.9	144.3	138.6	131.2	124.1	115.3	105.4	96.5
75°	154.9	153.8	152.6	148.7	143.8	137.9	130.3	123.1	114.3	104.1	94.9
77.5°	155.1	153.9	152.8	149.0	143.9	137.7	129.9	122.5	113.4	102.9	93.5
80°	154.8	153.7	152.6	148.3	143.0	136.7	129.0	120.5	112.5	101.9	92.2
82.5°	154.3	153.3	152.0	147.5	142.1	135.9	128.1	120.4	112.2	100.5	90.8
85°	154.0	153.0	151.3	146.7	141.3	135.3	127.5	119.8	110.5	99.8	89.8
87.5°	153.9	153.0	151.4	146.7	141.2	135.2	127.5	119.8	110.4	99.7	89.6
90°	154.2	153.0	149.5	145.6	139.8	135.2	128.8	120.1	109.8	100.3	89.5
92.5°	154.2	153.0	150.3	146.7	141.7	135.3	128.5	119.8	110.2	100.5	89.7
95°	154.2	153.0	150.2	146.7	141.8	135.3	128.5	119.7	110.2	100.5	89.1
97.5°	154.4	153.3	150.7	147.3	142.2	135.8	129.0	120.2	110.8	101.3	90.8
100°	154.4	153.5	151.0	148.0	143.1	136.6	130.0	121.6	111.7	102.2	91.8
102.5°	154.3	153.5	151.0	148.3	143.7	137.3	130.5	122.1	112.6	103.2	93.0
105°	154.4	153.2	151.1	148.2	143.7	137.5	131.0	122.6	113.4	104.3	94.3
107.5°	153.8	152.9	150.8	148.1	143.8	137.7	131.6	123.2	114.3	105.5	95.8
110°	153.6	152.7	150.8	148.0	143.8	138.2	132.1	124.0	115.3	106.8	97.5



TEST NUMBER: P25986

CATALOG NUMBER: 604-25-W-L1/835-UNV-MW

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	153.2	152.3	150.2	147.7	143.7	138.2	132.3	124.6	116.0	108.2	99.1
115°	153.5	152.3	150.4	148.1	144.0	138.9	133.3	125.6	117.6	109.8	101.2
117.5°	153.2	152.1	150.3	148.2	144.3	139.3	134.0	126.6	118.9	111.6	103.6
120°	152.8	151.9	150.1	148.0	144.4	139.7	134.7	127.5	120.4	113.6	106.1
122.5°	152.6	151.7	150.0	148.1	144.6	140.2	136.1	128.9	122.2	115.9	108.8
125°	152.2	151.2	149.7	147.9	144.6	140.6	136.1	130.8	123.8	117.9	111.2
127.5°	151.9	151.0	149.7	148.1	144.9	141.1	137.0	131.4	125.6	120.0	113.9
130°	151.8	151.1	149.7	148.9	145.4	141.9	138.1	132.8	127.4	122.2	116.7
132.5°	151.9	150.7	149.8	148.7	146.3	142.8	139.2	134.2	129.3	124.5	119.4
135°	151.3	150.6	149.8	148.6	146.0	143.2	139.2	135.4	130.9	126.5	122.0
137.5°	151.0	150.5	149.5	148.6	146.4	143.7	140.9	136.6	132.5	128.7	124.5
140°	150.7	150.1	149.4	148.4	146.3	144.0	141.4	137.5	133.9	130.5	126.7
142.5°	150.4	149.7	148.9	148.1	146.4	143.4	142.3	138.7	135.5	132.5	129.2
145°	150.3	149.8	149.1	148.3	146.9	145.3	143.3	140.1	137.4	134.6	131.8
147.5°	150.2	149.6	149.2	148.9	147.4	146.1	144.0	141.4	139.2	136.8	134.3
150°	149.9	149.2	148.9	148.4	147.3	147.2	144.9	142.3	140.5	138.4	136.2
152.5°	149.5	148.0	148.7	148.8	147.5	145.8	145.5	143.2	141.8	140.0	138.4
155°	149.5	149.2	148.5	148.5	148.0	147.2	146.5	144.5	143.7	142.0	140.5
157.5°	149.5	149.2	149.1	149.4	148.4	148.0	146.5	145.5	144.7	143.5	142.5
160°	148.1	149.0	148.7	148.5	148.3	148.2	147.7	146.2	145.6	144.7	143.9
162.5°	148.9	148.4	148.3	148.2	148.2	148.3	148.0	147.5	146.4	145.9	145.4
165°	148.6	148.2	148.1	148.1	148.2	148.5	148.1	147.1	147.1	146.6	146.5
167.5°	148.9	148.5	148.4	148.6	148.3	149.1	149.0	148.3	148.3	147.8	147.7
170°	146.9	148.0	148.1	148.2	147.9	148.9	149.0	148.0	148.6	148.1	148.4
172.5°	147.2	147.1	146.7	147.4	147.9	148.5	148.5	147.8	148.6	148.3	148.5
175°	146.6	146.6	146.8	147.2	147.5	148.3	148.3	147.8	148.7	148.6	149.1
177.5°	147.2	147.2	147.3	148.2	148.1	148.8	148.7	148.2	149.2	148.9	149.3
180°	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2



TEST NUMBER: P25986

CATALOG NUMBER: 604-25-W-L1/835-UNV-MW

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	153.1	153.1	153.1	153.1	153.1	153.1	153.1	153.1
2.5°	153.6	154.1	154.4	154.0	154.3	155.0	154.6	155.2
5°	153.3	153.8	154.0	153.6	153.8	154.5	154.1	154.5
7.5°	152.8	153.2	153.5	152.9	153.0	153.6	153.2	153.7
10°	152.0	152.3	152.4	151.9	151.2	152.5	152.1	152.6
12.5°	151.1	151.3	151.4	150.6	150.7	151.3	150.7	151.1
15°	149.8	149.9	149.2	148.9	148.2	149.3	148.8	149.2
17.5°	148.5	148.4	148.2	147.0	146.9	147.1	146.5	147.0
20°	146.6	146.3	145.9	144.6	144.5	144.5	143.8	144.2
22.5°	144.3	143.8	143.3	141.8	141.4	141.4	140.6	141.1
25°	142.0	141.1	140.5	138.8	138.1	138.0	137.3	137.7
27.5°	139.6	138.0	137.6	135.6	134.8	134.4	133.5	134.0
30°	137.2	135.8	134.4	132.3	130.5	130.7	129.7	130.1
32.5°	134.5	132.8	131.1	128.7	127.3	126.6	125.6	126.1
35°	131.6	129.4	127.5	124.7	123.2	122.2	121.1	121.5
37.5°	128.7	126.1	123.9	120.9	119.0	117.8	116.9	117.1
40°	125.1	122.8	120.2	116.8	114.8	113.4	112.1	112.3
42.5°	122.8	119.3	116.3	112.9	110.2	108.5	107.2	106.6
45°	119.9	115.7	112.1	107.9	105.2	103.4	101.9	102.2
47.5°	116.3	112.0	107.9	103.5	100.4	98.2	96.6	96.9
50°	113.1	108.2	103.6	98.7	94.9	92.8	91.0	91.0
52.5°	109.7	104.3	99.3	93.9	90.1	87.3	85.2	85.0
55°	106.5	100.5	95.1	89.1	84.9	81.8	79.4	79.2
57.5°	103.1	96.6	90.5	84.2	79.5	76.1	73.6	73.3
60°	99.9	92.7	86.2	79.4	74.3	70.4	67.5	67.2
62.5°	96.8	89.2	82.0	74.7	69.1	64.8	61.5	61.0
65°	93.7	85.5	77.9	69.9	63.6	58.9	55.4	54.7
67.5°	90.9	82.2	74.0	65.5	58.8	53.4	49.8	48.8
70°	88.2	79.0	70.1	61.2	53.7	47.5	43.5	43.0
72.5°	86.0	76.1	66.7	57.2	49.0	42.4	38.1	36.9
75°	84.0	73.6	63.4	53.4	44.7	37.4	32.5	31.0
77.5°	82.1	71.5	60.9	50.1	40.7	32.6	27.2	25.2
80°	80.6	69.6	58.6	47.2	37.0	28.2	21.9	19.7
82.5°	79.2	68.0	56.6	44.9	34.0	24.4	16.9	13.9
85°	78.1	66.8	55.3	43.3	31.9	21.4	12.8	8.8
87.5°	78.4	66.2	54.4	42.3	30.6	19.5	9.6	3.6
90°	78.3	66.7	54.8	42.7	30.8	19.3	8.9	0.1
92.5°	78.5	66.7	54.9	42.9	31.2	19.7	10.0	3.2
95°	79.0	67.5	55.9	44.1	32.4	21.8	12.8	8.6
97.5°	80.0	68.6	57.0	45.4	34.3	24.5	16.9	13.7
100°	81.0	69.8	58.7	47.5	37.1	28.1	21.5	19.0
102.5°	81.8	71.6	60.9	50.1	40.4	32.3	26.8	24.6
105°	84.0	73.7	63.4	53.4	44.4	36.9	32.1	30.3
107.5°	85.9	75.9	66.2	56.8	48.7	41.9	37.6	36.0
110°	88.0	78.5	69.0	60.8	53.2	47.0	43.2	41.8



TEST NUMBER: P25986

CATALOG NUMBER: 604-25-W-L1/835-UNV-MW

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	90.2	81.3	73.0	64.9	57.9	52.2	48.8	47.5
115°	93.0	84.7	76.9	69.4	63.0	57.8	54.7	53.5
117.5°	95.8	88.1	80.9	73.8	68.1	63.2	60.5	59.2
120°	98.8	91.6	84.9	78.4	73.2	68.9	66.3	65.3
122.5°	102.0	95.3	89.2	83.1	78.5	74.7	72.0	71.3
125°	104.9	98.9	93.2	87.7	83.3	80.0	77.8	77.1
127.5°	108.2	102.5	97.4	92.4	88.7	85.2	83.2	82.8
130°	111.4	106.3	101.4	97.0	93.7	90.6	88.9	88.5
132.5°	114.6	109.7	105.6	101.7	98.8	96.0	94.4	93.9
135°	117.6	113.4	109.6	106.0	103.3	101.0	100.0	98.8
137.5°	120.6	116.7	113.5	110.4	107.9	105.8	104.8	104.0
140°	123.3	120.0	117.2	114.5	112.3	110.4	109.4	108.8
142.5°	126.1	123.4	120.9	118.4	116.4	115.0	114.2	113.5
145°	129.4	126.9	124.7	122.6	121.0	119.5	118.8	118.4
147.5°	132.2	130.0	128.3	126.5	125.3	123.8	123.3	122.9
150°	134.6	132.8	131.5	129.9	128.8	128.4	127.2	126.9
152.5°	136.9	135.5	134.6	133.2	132.4	131.5	131.5	130.7
155°	139.5	138.2	137.6	136.4	136.0	135.1	134.7	134.5
157.5°	141.8	140.7	140.3	139.3	138.7	138.2	138.0	137.7
160°	143.4	142.6	142.5	141.8	141.5	141.4	140.7	140.3
162.5°	145.3	144.5	144.6	144.0	144.0	144.1	143.2	143.0
165°	146.5	146.0	146.3	145.9	146.0	145.4	145.4	145.3
167.5°	147.8	147.5	148.0	147.6	147.7	148.1	147.4	147.1
170°	148.4	148.3	149.6	148.5	148.8	148.5	148.5	148.3
172.5°	148.9	148.9	148.9	149.4	149.7	150.0	149.5	149.2
175°	149.4	149.4	150.2	150.1	150.5	150.3	150.3	150.1
177.5°	149.7	149.7	150.6	150.5	150.9	150.7	150.7	150.5
180°	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2

(END OF REPORT)