

Scaled data based on original data using
LM-66-11 Electrical and Photometric Measurements of Single-Ended Compact
Fluorescent Lamps

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: SHAPER

Report Number: 25483

Luminaire Tested: **103-CFL/2/18-120V-JBE**

Issue Date: 3/3/2020

Test Information

Test Method: LM-66-11
Report Number: 25483
Test Lab: LIGHTING SCIENCES, INC.
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 103-CFL/2/18-120V-JBE
Description: TAUPE FABRIC SHADE RECTILINEAR WALL SCONCE

Light Source: TWO SYLVANIA 18 WATT CFL LAMPS

FT18DL/830/RS/ECO. LUMEN RATING = 2500 LMS.

Ballast/Driver: -

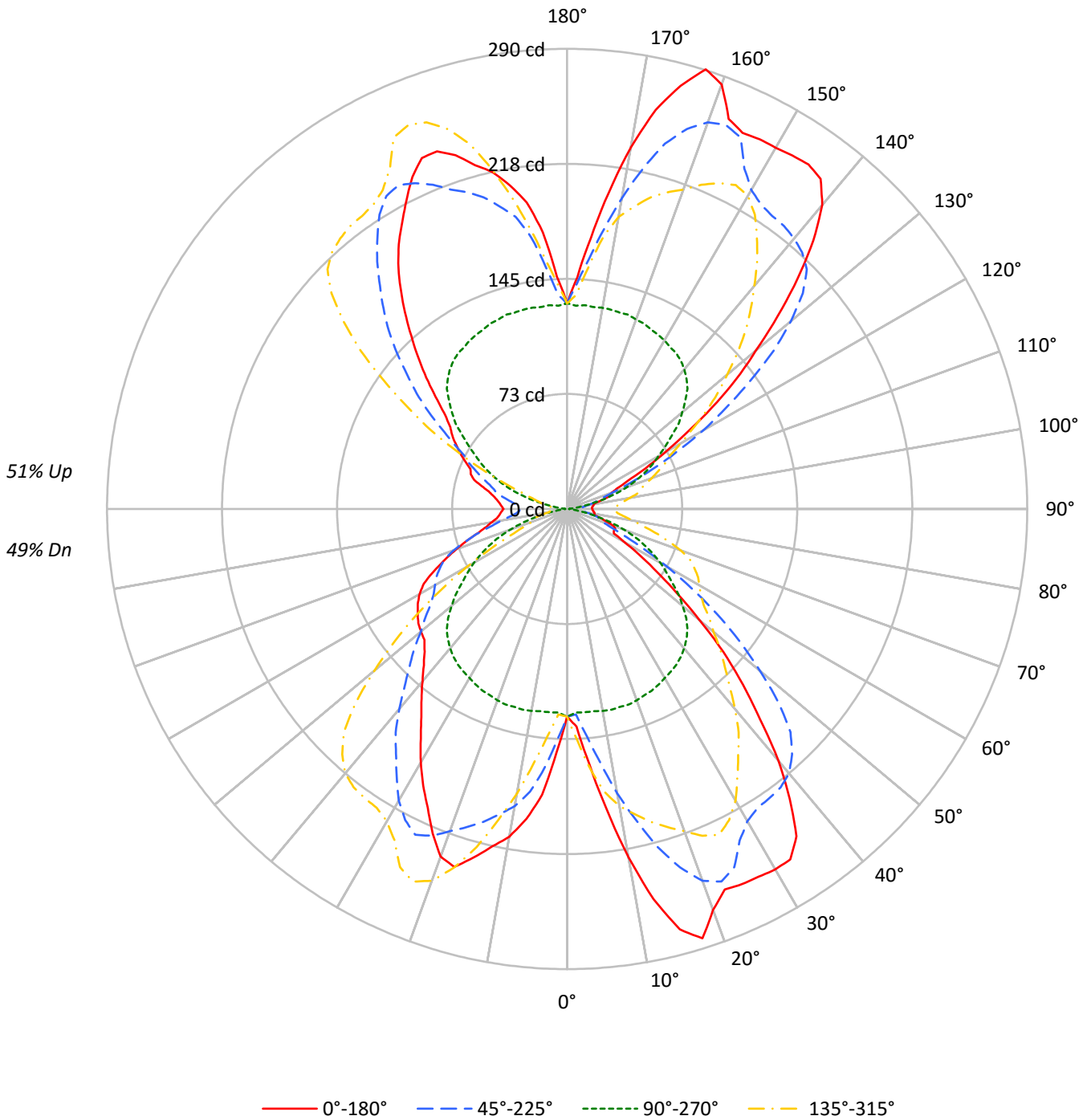
Summary

Lumens per Lamp: 2500 (1 lamp)
Luminaire Lumens: 1279.9 lumens
Efficiency: 51.2%
Efficacy: 32.0 lumens/watt
Spacing Criteria (0/90/45): 1.81 / 1.41 / 1.77
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 2.17' x H: 0.71')
CIE Type: General Diffuse

Input Watts (W): 40
Input Voltage (V): NR
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	55	55	55	55	50	50	50	50	42	42	42	35	35	35	28	28	28	25
1	50	48	45	44	46	44	42	40	37	36	34	31	30	29	25	24	24	21
2	45	41	38	36	42	38	36	33	32	30	28	27	25	24	22	21	20	17
3	41	36	33	30	38	34	30	28	28	26	24	24	22	20	19	18	17	15
4	38	32	28	25	35	30	26	23	25	23	20	21	19	17	17	16	14	13
5	35	29	24	21	32	27	23	20	23	20	17	19	17	15	15	14	13	11
6	32	26	21	18	29	24	20	17	20	17	15	17	15	13	14	12	11	9
7	29	23	19	16	27	21	18	15	18	15	13	15	13	12	13	11	10	8
8	27	21	17	14	25	19	16	13	17	14	12	14	12	10	12	10	9	7
9	25	19	15	13	23	18	14	12	15	12	11	13	11	9	11	9	8	7
10	24	17	14	11	22	16	13	11	14	11	9	12	10	8	10	8	7	6

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	1966	1966	1966	1966
5°	2375	1633	2652	1633
10°	3215	1430	3025	1430
15°	3924	1274	3252	1274
20°	3844	1151	3333	1151
25°	3754	1046	2990	1046
30°	3829	952	2692	952
35°	3761	878	2390	878
40°	3190	802	2183	802
45°	2510	724	2034	724
50°	1834	624	2022	624
55°	1231	519	2054	519
60°	794	431	2061	431
65°	679	340	1933	340
70°	720	244	1724	244
75°	554	141	1514	141
80°	527	57	1464	57
85°	604	18	1561	18



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	15.4	1.2	0.6
10°-20°	57.4	4.5	2.3
20°-30°	96.4	7.5	3.9
30°-40°	119.0	9.3	4.8
40°-50°	117.3	9.2	4.7
50°-60°	94.6	7.4	3.8
60°-70°	65.5	5.1	2.6
70°-80°	38.0	3.0	1.5
80°-90°	21.6	1.7	0.9
90°-100°	21.4	1.7	0.9
100°-110°	36.3	2.8	1.5
110°-120°	65.8	5.1	2.6
120°-130°	102.6	8.0	4.1
130°-140°	128.6	10.0	5.1
140°-150°	125.6	9.8	5.0
150°-160°	100.0	7.8	4.0
160°-170°	58.7	4.6	2.3
170°-180°	15.6	1.2	0.6
0°-30°	169.2	13.2	6.8
0°-40°	288.1	22.5	11.5
0°-60°	500.1	39.1	20.0
0°-90°	625.2	48.8	25.0
90°-120°	123.6	9.7	4.9
90°-150°	480.4	37.5	19.2
90°-180°	655.0	51.2	26.2
0°-180°	1279.9	100.0	51.2

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	131	131	131	131	131	
5°	162	129	181	129	162	17
15°	274	129	227	129	274	76
25°	261	126	208	126	261	121
35°	252	120	160	120	252	153
45°	157	107	127	107	157	121
55°	69	81	115	81	69	63
65°	32	54	92	54	32	33
75°	21	22	58	22	21	23
85°	17	3	43	3	17	14
90°	16	1	40	1	16	9
95°	16	2	43	2	16	13
105°	24	24	56	24	24	25
115°	42	54	71	54	42	45
125°	111	80	90	80	111	100
135°	206	107	131	107	206	157
145°	265	120	185	120	265	164
155°	262	125	231	125	262	123
165°	276	128	224	128	276	78
175°	171	129	175	129	171	18
180°	130	130	130	130	130	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	130.8	130.8	130.8	130.8	130.8	130.8	130.8	130.8	130.8	130.8	130.8
2.5°	137.3	133.2	129.6	127.5	128.4	136.4	145.8	151.9	153.7	151.9	145.8
5°	161.9	154.1	144.0	131.4	128.6	144.5	163.9	176.1	180.8	176.1	163.9
7.5°	190.8	181.8	161.7	139.3	128.5	152.5	179.7	192.6	197.0	192.6	179.7
10°	222.8	210.8	182.1	146.7	129.2	160.5	190.1	204.4	209.6	204.4	190.1
12.5°	251.9	236.5	200.8	154.1	129.5	168.1	197.0	212.8	217.8	212.8	197.0
15°	274.3	260.7	220.6	162.1	129.1	173.6	204.2	220.4	227.3	220.4	204.2
17.5°	283.7	275.3	236.9	170.0	129.2	176.7	210.2	230.8	236.5	230.8	210.2
20°	268.9	272.5	249.3	177.6	128.3	179.3	216.1	235.4	233.2	235.4	216.1
22.5°	259.5	256.7	254.1	184.4	127.0	182.1	222.9	228.2	221.4	228.2	222.9
25°	260.9	250.3	249.1	190.6	126.3	183.9	226.5	216.6	207.8	216.6	226.5
27.5°	261.3	250.5	235.5	194.6	124.8	184.7	221.0	203.8	196.4	203.8	221.0
30°	262.3	251.5	227.2	195.6	123.0	184.0	212.2	194.6	184.4	194.6	212.2
32.5°	261.8	251.3	223.3	194.0	121.6	184.4	199.8	181.6	171.7	181.6	199.8
35°	251.9	249.5	222.4	189.0	119.9	184.3	188.0	169.5	160.1	169.5	188.0
37.5°	230.5	239.0	221.1	183.0	117.6	184.0	177.5	157.9	150.7	157.9	177.5
40°	207.2	218.8	217.5	177.1	114.7	183.0	164.6	147.7	141.8	147.7	164.6
42.5°	180.0	193.6	209.8	168.9	111.2	178.6	151.5	137.9	133.7	137.9	151.5
45°	156.7	167.5	199.0	162.9	107.3	169.7	140.5	130.6	127.0	130.6	140.5
47.5°	133.6	145.5	180.7	157.7	101.7	160.1	130.7	123.0	122.0	123.0	130.7
50°	109.0	122.0	158.7	151.3	95.1	147.7	120.3	118.6	120.2	118.6	120.3
52.5°	87.1	100.4	136.8	144.0	88.5	134.3	112.8	116.6	118.2	116.6	112.8
55°	68.9	79.1	115.0	136.0	80.6	122.4	104.8	114.0	115.0	114.0	104.8
57.5°	54.1	61.7	93.0	127.0	74.1	108.8	99.7	110.2	111.6	110.2	99.7
60°	41.4	46.4	72.7	115.0	67.7	94.8	96.2	106.6	107.4	106.6	96.2
62.5°	33.2	36.1	54.1	100.8	61.0	84.6	93.0	102.0	101.8	102.0	93.0
65°	32.5	30.7	38.9	82.6	53.6	73.2	88.6	94.4	92.5	94.4	88.6
67.5°	32.9	30.0	29.2	63.1	46.4	64.9	83.9	85.4	83.1	85.4	83.9
70°	31.1	28.9	23.0	45.5	38.3	57.3	76.1	75.5	74.5	75.5	76.1
72.5°	25.8	26.0	21.2	28.4	30.1	52.5	66.1	66.7	65.9	66.7	66.1
75°	21.2	20.2	20.2	17.2	21.9	47.7	57.3	58.7	57.9	58.7	57.3
77.5°	17.8	16.4	15.6	11.8	14.4	40.7	48.3	51.5	52.2	51.5	48.3
80°	17.4	15.6	11.8	9.0	8.7	32.4	41.5	46.9	48.3	46.9	41.5
82.5°	17.4	15.4	10.6	6.4	4.3	23.5	36.4	42.5	44.6	42.5	36.4
85°	16.6	14.8	9.8	5.6	2.7	18.0	32.1	40.0	42.9	40.0	32.1
87.5°	16.0	14.6	9.4	5.0	2.3	14.0	30.3	38.9	41.5	38.9	30.3
90°	16.0	13.4	9.4	4.6	1.2	13.6	29.8	37.5	40.1	37.5	29.8
92.5°	15.6	14.4	9.6	4.8	1.6	15.4	31.0	39.2	41.4	39.2	31.0
95°	16.0	14.6	9.2	5.0	2.1	19.6	32.4	39.7	42.8	39.7	32.4
97.5°	16.8	14.0	10.2	6.6	4.7	23.5	35.6	41.9	44.7	41.9	35.6
100°	16.8	14.4	12.4	9.6	9.4	28.2	40.0	45.4	47.2	45.4	40.0
102.5°	18.6	18.1	16.0	13.4	15.4	32.9	45.5	49.1	50.5	49.1	45.5
105°	24.2	22.8	19.4	22.2	24.0	40.0	47.7	55.1	55.7	55.1	47.7
107.5°	28.9	27.1	23.4	36.1	32.0	46.9	51.5	59.3	61.7	59.3	51.5
110°	29.8	28.4	30.7	53.5	40.0	58.3	56.7	60.7	64.7	60.7	56.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	34.2	34.7	43.6	72.3	47.0	71.4	61.9	64.7	65.9	64.7	61.9
115°	42.3	44.3	59.1	89.3	53.7	84.6	68.1	69.1	70.9	69.1	68.1
117.5°	55.9	59.1	77.7	107.2	60.5	99.0	73.2	74.5	75.9	74.5	73.2
120°	70.7	75.3	98.8	119.8	66.3	112.6	82.5	80.3	80.7	80.3	82.5
122.5°	88.9	94.8	118.8	131.8	73.3	126.8	93.4	84.6	85.8	84.6	93.4
125°	111.4	117.1	141.1	140.4	80.3	138.6	106.4	91.2	89.8	91.2	106.4
127.5°	134.3	140.0	164.1	148.1	88.6	153.3	119.4	101.0	96.6	101.0	119.4
130°	155.3	160.1	183.9	152.3	94.7	165.1	131.5	112.0	106.6	112.0	131.5
132.5°	180.0	185.8	201.4	157.9	101.0	176.1	145.4	124.8	118.8	124.8	145.4
135°	205.6	210.2	213.6	164.6	107.2	183.9	159.1	138.2	131.4	138.2	159.1
137.5°	229.7	230.9	219.3	170.9	111.3	188.0	171.3	150.5	144.1	150.5	171.3
140°	250.1	246.9	222.5	180.0	114.9	188.6	183.6	164.5	157.9	164.5	183.6
142.5°	262.3	252.9	224.7	188.8	117.7	189.8	196.6	176.8	171.8	176.8	196.6
145°	265.1	253.5	225.4	196.0	119.8	189.0	208.6	190.2	185.4	190.2	208.6
147.5°	264.1	253.9	227.3	203.4	120.9	189.7	220.0	200.4	197.6	200.4	220.0
150°	262.9	252.9	232.2	206.6	122.7	189.7	227.8	213.8	208.0	213.8	227.8
152.5°	262.7	252.7	241.9	208.6	123.8	188.4	230.1	226.5	219.3	226.5	230.1
155°	261.5	253.1	258.3	205.8	124.9	187.2	226.5	236.2	230.8	236.2	226.5
157.5°	266.1	265.9	261.8	200.6	126.5	184.7	221.1	238.3	239.4	238.3	221.1
160°	284.7	284.0	259.3	192.4	127.0	182.9	214.2	235.5	239.9	235.5	214.2
162.5°	290.5	282.0	251.1	184.7	128.3	178.9	209.2	226.0	233.7	226.0	209.2
165°	276.1	267.5	238.3	176.3	128.1	174.3	203.4	217.9	224.3	217.9	203.4
167.5°	257.5	249.7	219.3	166.9	128.6	165.9	195.1	210.0	217.5	210.0	195.1
170°	231.5	225.1	199.0	159.1	128.7	156.9	187.0	200.0	207.0	200.0	187.0
172.5°	201.2	195.4	177.9	149.9	128.3	147.3	172.5	187.2	194.8	187.2	172.5
175°	171.4	168.9	157.9	143.1	128.9	137.5	152.7	165.1	174.9	165.1	152.7
177.5°	146.1	144.9	142.3	135.7	128.2	129.6	135.1	139.5	146.3	139.5	135.1
180°	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6



TEST NUMBER: 25483

CATALOG NUMBER: 103-CFL/2/18-120V-JBE

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	130.8	130.8	130.8	130.8	130.8	130.8
2.5°	136.4	128.4	127.5	129.6	133.2	137.3
5°	144.5	128.6	131.4	144.0	154.1	161.9
7.5°	152.5	128.5	139.3	161.7	181.8	190.8
10°	160.5	129.2	146.7	182.1	210.8	222.8
12.5°	168.1	129.5	154.1	200.8	236.5	251.9
15°	173.6	129.1	162.1	220.6	260.7	274.3
17.5°	176.7	129.2	170.0	236.9	275.3	283.7
20°	179.3	128.3	177.6	249.3	272.5	268.9
22.5°	182.1	127.0	184.4	254.1	256.7	259.5
25°	183.9	126.3	190.6	249.1	250.3	260.9
27.5°	184.7	124.8	194.6	235.5	250.5	261.3
30°	184.0	123.0	195.6	227.2	251.5	262.3
32.5°	184.4	121.6	194.0	223.3	251.3	261.8
35°	184.3	119.9	189.0	222.4	249.5	251.9
37.5°	184.0	117.6	183.0	221.1	239.0	230.5
40°	183.0	114.7	177.1	217.5	218.8	207.2
42.5°	178.6	111.2	168.9	209.8	193.6	180.0
45°	169.7	107.3	162.9	199.0	167.5	156.7
47.5°	160.1	101.7	157.7	180.7	145.5	133.6
50°	147.7	95.1	151.3	158.7	122.0	109.0
52.5°	134.3	88.5	144.0	136.8	100.4	87.1
55°	122.4	80.6	136.0	115.0	79.1	68.9
57.5°	108.8	74.1	127.0	93.0	61.7	54.1
60°	94.8	67.7	115.0	72.7	46.4	41.4
62.5°	84.6	61.0	100.8	54.1	36.1	33.2
65°	73.2	53.6	82.6	38.9	30.7	32.5
67.5°	64.9	46.4	63.1	29.2	30.0	32.9
70°	57.3	38.3	45.5	23.0	28.9	31.1
72.5°	52.5	30.1	28.4	21.2	26.0	25.8
75°	47.7	21.9	17.2	20.2	20.2	21.2
77.5°	40.7	14.4	11.8	15.6	16.4	17.8
80°	32.4	8.7	9.0	11.8	15.6	17.4
82.5°	23.5	4.3	6.4	10.6	15.4	17.4
85°	18.0	2.7	5.6	9.8	14.8	16.6
87.5°	14.0	2.3	5.0	9.4	14.6	16.0
90°	13.6	1.2	4.6	9.4	13.4	16.0
92.5°	15.4	1.6	4.8	9.6	14.4	15.6
95°	19.6	2.1	5.0	9.2	14.6	16.0
97.5°	23.5	4.7	6.6	10.2	14.0	16.8
100°	28.2	9.4	9.6	12.4	14.4	16.8
102.5°	32.9	15.4	13.4	16.0	18.1	18.6
105°	40.0	24.0	22.2	19.4	22.8	24.2
107.5°	46.9	32.0	36.1	23.4	27.1	28.9
110°	58.3	40.0	53.5	30.7	28.4	29.8



TEST NUMBER: 25483

CATALOG NUMBER: 103-CFL/2/18-120V-JBE

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	71.4	47.0	72.3	43.6	34.7	34.2
115°	84.6	53.7	89.3	59.1	44.3	42.3
117.5°	99.0	60.5	107.2	77.7	59.1	55.9
120°	112.6	66.3	119.8	98.8	75.3	70.7
122.5°	126.8	73.3	131.8	118.8	94.8	88.9
125°	138.6	80.3	140.4	141.1	117.1	111.4
127.5°	153.3	88.6	148.1	164.1	140.0	134.3
130°	165.1	94.7	152.3	183.9	160.1	155.3
132.5°	176.1	101.0	157.9	201.4	185.8	180.0
135°	183.9	107.2	164.6	213.6	210.2	205.6
137.5°	188.0	111.3	170.9	219.3	230.9	229.7
140°	188.6	114.9	180.0	222.5	246.9	250.1
142.5°	189.8	117.7	188.8	224.7	252.9	262.3
145°	189.0	119.8	196.0	225.4	253.5	265.1
147.5°	189.7	120.9	203.4	227.3	253.9	264.1
150°	189.7	122.7	206.6	232.2	252.9	262.9
152.5°	188.4	123.8	208.6	241.9	252.7	262.7
155°	187.2	124.9	205.8	258.3	253.1	261.5
157.5°	184.7	126.5	200.6	261.8	265.9	266.1
160°	182.9	127.0	192.4	259.3	284.0	284.7
162.5°	178.9	128.3	184.7	251.1	282.0	290.5
165°	174.3	128.1	176.3	238.3	267.5	276.1
167.5°	165.9	128.6	166.9	219.3	249.7	257.5
170°	156.9	128.7	159.1	199.0	225.1	231.5
172.5°	147.3	128.3	149.9	177.9	195.4	201.2
175°	137.5	128.9	143.1	157.9	168.9	171.4
177.5°	129.6	128.2	135.7	142.3	144.9	146.1
180°	129.6	129.6	129.6	129.6	129.6	129.6

(END OF REPORT)