

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: 18660A

Luminaire Tested: **635-CF2/26**

Issue Date: 3/3/2020

Test Information

Test Method: LM-66-11
Report Number: 18660A
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 635-CF2/26
Description: FLUORESCENT WALL MOUNT LUMINAIRE WITH WHITE INTERIOR AND CONVEX
WHITE PLASTIC LENS
Light Source: TWO 26 WATT CPFL LAMPS. LUMEN RATING = 3600 LMS.

Ballast/Driver: -

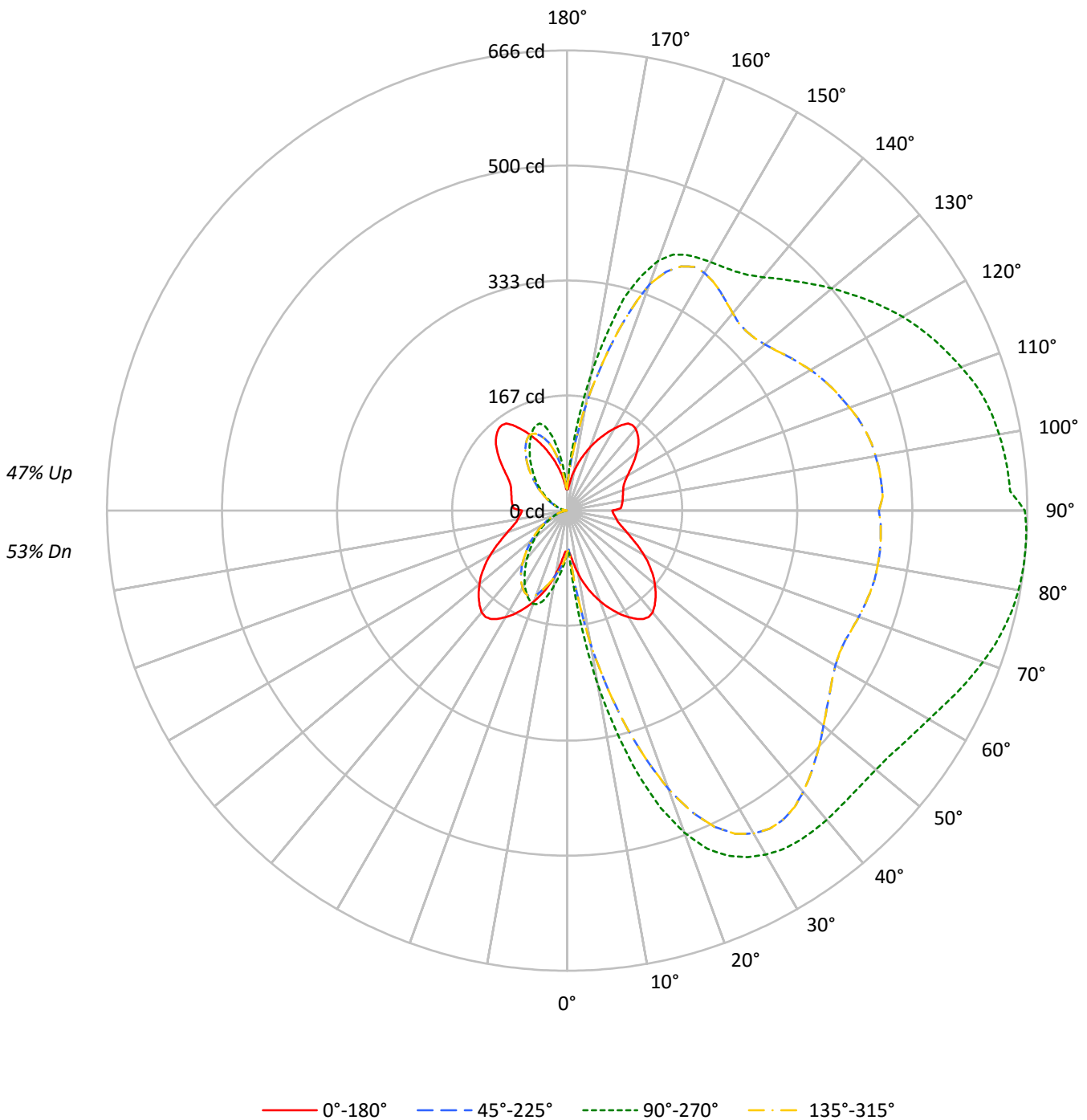
Summary

Lumens per Lamp: 3600 (1 lamp)
Luminaire Lumens: 2859.2 lumens
Efficiency: 79.4%
Efficacy: -
Spacing Criteria (0/90/45): 2.77 / 3.92 / 3.24
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 0.92' x H: 0.75')
CIE Type: General Diffuse

Input Watts (W): 0
Input Voltage (V): NR
Input Current (Ain): 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

TEST NUMBER: 18660A
CATALOG NUMBER: 635-CF2/26

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	86	86	86	86	79	79	79	79	68	68	68	57	57	57	47	47	47	42
1	75	70	66	62	69	65	61	58	55	52	49	45	43	41	37	35	34	29
2	67	60	54	48	62	55	50	45	46	42	38	38	35	32	31	28	26	22
3	61	52	45	39	55	47	41	36	40	35	31	33	29	26	26	23	21	17
4	55	45	38	32	50	41	35	30	35	30	25	29	24	21	23	20	17	14
5	50	40	32	27	46	37	30	25	31	25	21	25	21	18	20	17	14	12
6	46	35	28	23	42	32	26	21	27	22	18	23	18	15	18	15	12	10
7	42	32	25	20	39	29	23	18	25	19	16	20	16	13	16	13	11	8
8	39	28	22	17	36	26	20	16	22	17	14	18	14	11	15	12	9	7
9	36	26	19	15	33	24	18	14	20	15	12	17	13	10	14	10	8	6
10	34	23	17	13	31	22	16	12	18	14	11	15	12	9	12	9	7	6

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	4157	4157	4157	4157
5°	4379	5598	4379	4267
10°	5676	10070	5676	4379
15°	6859	12865	6859	4431
20°	7885	13933	7885	4036
25°	8809	13691	8809	3383
30°	9619	12878	9619	2753
35°	10248	11999	10248	2192
40°	10270	11166	10270	1725
45°	9694	10469	9694	1333
50°	8993	9982	8993	1023
55°	8200	9718	8200	772
60°	7316	9629	7316	565
65°	6423	9692	6423	395
70°	5720	9823	5720	262
75°	5243	9970	5243	157
80°	5124	10105	5124	65
85°	5219	10222	5219	8



TEST NUMBER: 18660A
 CATALOG NUMBER: 635-CF2/26

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	9.8	0.3	0.3
10°-20°	58.1	2.0	1.6
20°-30°	131.2	4.6	3.6
30°-40°	189.8	6.6	5.3
40°-50°	217.9	7.6	6.1
50°-60°	225.2	7.9	6.3
60°-70°	227.5	8.0	6.3
70°-80°	233.0	8.1	6.5
80°-90°	234.5	8.2	6.5
90°-100°	234.5	8.2	6.5
100°-110°	227.4	8.0	6.3
110°-120°	210.2	7.4	5.8
120°-130°	189.4	6.6	5.3
130°-140°	168.4	5.9	4.7
140°-150°	143.6	5.0	4.0
150°-160°	103.8	3.6	2.9
160°-170°	47.4	1.7	1.3
170°-180°	7.3	0.3	0.2
0°-30°	199.1	7.0	5.5
0°-40°	388.9	13.6	10.8
0°-60°	832.1	29.1	23.1
0°-90°	1527.1	53.4	42.4
90°-120°	672.1	23.5	18.7
90°-150°	1173.6	41.0	32.6
90°-180°	1332.0	46.6	37.0
0°-180°	2859.2	100.0	79.4

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	60	60	60	60	60	
5°	68	112	68	86	68	7
15°	117	394	117	136	117	34
25°	160	551	160	136	160	74
35°	192	584	192	107	192	119
45°	181	582	181	74	181	139
55°	148	591	148	47	148	132
65°	108	623	108	25	108	108
75°	80	655	80	10	80	85
85°	68	666	68	0	68	57
90°	65	662	65	0	65	38
95°	79	640	79	0	79	65
105°	84	625	84	8	84	89
115°	91	586	91	21	91	91
125°	116	531	116	41	116	104
135°	146	469	146	66	146	112
145°	154	423	154	94	154	95
155°	118	408	118	122	118	55
165°	77	319	77	127	77	23
175°	39	93	39	61	39	4
180°	31	31	31	31	31	



TEST NUMBER: 18660A
 CATALOG NUMBER: 635-CF2/26

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4
2.5°	59.2	54.3	56.6	59.8	61.3	59.8	56.6	54.3	59.2	67.2	70.9
5°	67.9	68.7	86.9	104.4	112.3	104.4	86.9	68.7	67.9	75.1	79.2
7.5°	79.9	92.6	135.3	171.1	180.9	171.1	135.3	92.6	79.9	80.5	86.9
10°	92.9	124.8	195.9	240.6	256.2	240.6	195.9	124.8	92.9	83.7	94.8
12.5°	105.5	160.5	255.2	308.1	325.1	308.1	255.2	160.5	105.5	86.5	103.5
15°	117.3	199.1	316.8	377.4	394.0	377.4	316.8	199.1	117.3	88.8	112.3
17.5°	128.6	238.3	374.2	437.7	451.4	437.7	374.2	238.3	128.6	91.6	121.0
20°	139.6	279.5	428.5	487.4	495.7	487.4	428.5	279.5	139.6	94.8	129.8
22.5°	150.0	317.4	472.1	523.2	529.8	523.2	472.1	317.4	150.0	98.0	133.8
25°	160.1	352.2	504.9	547.1	551.2	547.1	504.9	352.2	160.1	101.2	135.3
27.5°	169.6	383.5	527.3	562.3	565.5	562.3	527.3	383.5	169.6	105.0	133.4
30°	178.0	407.9	539.7	571.0	574.8	571.0	539.7	407.9	178.0	108.6	129.3
32.5°	185.8	426.8	545.8	575.7	581.2	575.7	545.8	426.8	185.8	111.4	123.3
35°	191.6	437.3	545.8	576.6	584.0	576.6	545.8	437.3	191.6	112.3	116.9
37.5°	194.1	440.5	540.7	574.8	584.7	574.8	540.7	440.5	194.1	111.4	109.1
40°	192.5	438.3	531.4	571.0	584.4	571.0	531.4	438.3	192.5	108.6	100.9
42.5°	187.3	430.0	520.5	566.5	583.0	566.5	520.5	430.0	187.3	104.1	92.0
45°	180.8	417.9	508.5	561.8	582.1	561.8	508.5	417.9	180.8	98.4	83.7
47.5°	173.7	403.8	496.6	558.2	582.1	558.2	496.6	403.8	173.7	92.0	75.4
50°	165.6	387.6	484.2	555.9	583.4	555.9	484.2	387.6	165.6	84.3	67.7
52.5°	157.5	370.1	473.1	555.0	585.7	555.0	473.1	370.1	157.5	76.9	60.4
55°	147.9	351.3	463.5	555.4	591.3	555.4	463.5	351.3	147.9	68.7	53.0
57.5°	138.5	332.4	454.8	558.2	597.2	558.2	454.8	332.4	138.5	60.7	46.6
60°	128.2	313.2	448.2	562.3	604.5	562.3	448.2	313.2	128.2	53.0	40.0
62.5°	118.3	296.7	444.7	567.8	612.8	567.8	444.7	296.7	118.3	46.1	34.2
65°	108.4	282.0	444.1	575.1	622.6	575.1	444.1	282.0	108.4	39.3	28.6
67.5°	99.4	270.5	446.5	583.4	631.8	583.4	446.5	270.5	99.4	32.7	23.7
70°	92.1	261.3	449.2	590.4	640.5	590.4	449.2	261.3	92.1	27.2	19.5
72.5°	85.3	256.2	452.0	597.2	648.7	597.2	452.0	256.2	85.3	21.8	14.8
75°	79.7	253.9	454.3	602.2	654.8	602.2	454.3	253.9	79.7	17.1	11.2
77.5°	75.1	252.4	456.1	606.4	660.2	606.4	456.1	252.4	75.1	12.9	7.5
80°	72.7	250.7	456.5	609.2	663.4	609.2	456.5	250.7	72.7	9.3	4.3
82.5°	70.3	248.8	456.5	610.2	665.3	610.2	456.5	248.8	70.3	6.1	2.0
85°	68.2	247.0	455.6	610.2	665.7	610.2	455.6	247.0	68.2	3.3	0.5
87.5°	66.3	244.7	454.3	609.2	665.3	609.2	454.3	244.7	66.3	2.4	0.5
90°	65.4	242.4	451.1	606.9	662.5	606.9	451.1	242.4	65.4	2.0	0.5
92.5°	77.8	259.8	457.1	598.7	641.8	598.7	457.1	259.8	77.8	4.3	0.5
95°	79.1	260.3	456.5	598.1	640.5	598.1	456.5	260.3	79.1	6.1	0.5
97.5°	80.3	260.3	455.6	595.8	638.2	595.8	455.6	260.3	80.3	8.4	1.1
100°	81.5	259.8	453.3	592.6	635.0	592.6	453.3	259.8	81.5	11.2	2.9
102.5°	82.6	259.0	451.1	588.9	630.9	588.9	451.1	259.0	82.6	13.9	5.6
105°	83.5	257.5	446.9	583.4	625.2	583.4	446.9	257.5	83.5	17.6	8.4
107.5°	84.8	255.6	441.8	575.7	617.5	575.7	441.8	255.6	84.8	21.8	11.6
110°	86.3	253.0	435.1	566.5	606.9	566.5	435.1	253.0	86.3	26.3	15.4



TEST NUMBER: 18660A
 CATALOG NUMBER: 635-CF2/26

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	88.1	250.7	428.5	556.9	596.4	556.9	428.5	250.7	88.1	31.0	19.0
115°	90.7	248.8	422.1	547.1	585.7	547.1	422.1	248.8	90.7	36.5	23.7
117.5°	95.0	246.6	414.7	536.5	573.8	536.5	414.7	246.6	95.0	42.5	28.6
120°	100.6	244.7	407.0	524.7	561.0	524.7	407.0	244.7	100.6	48.9	33.6
122.5°	107.5	244.7	398.1	511.3	546.1	511.3	398.1	244.7	107.5	56.2	39.3
125°	115.5	247.0	389.5	497.9	531.1	497.9	389.5	247.0	115.5	63.6	45.1
127.5°	123.8	252.0	380.8	483.6	515.4	483.6	380.8	252.0	123.8	71.3	52.1
130°	131.8	260.3	373.9	470.4	500.2	470.4	373.9	260.3	131.8	78.8	58.5
132.5°	139.6	271.8	368.8	456.1	484.6	456.1	368.8	271.8	139.6	85.6	66.4
135°	145.9	283.3	366.9	443.7	468.9	443.7	366.9	283.3	145.9	91.1	74.1
137.5°	150.7	295.2	367.8	432.2	454.8	432.2	367.8	295.2	150.7	95.8	82.0
140°	154.4	306.6	372.9	423.0	440.9	423.0	372.9	306.6	154.4	98.4	89.7
142.5°	155.7	314.9	379.3	417.5	430.0	417.5	379.3	314.9	155.7	99.9	97.7
145°	153.9	321.5	386.7	415.3	422.6	415.3	386.7	321.5	153.9	99.9	105.4
147.5°	146.6	324.2	393.1	414.7	418.5	414.7	393.1	324.2	146.6	99.9	111.8
150°	137.3	320.0	397.2	414.3	415.3	414.3	397.2	320.0	137.3	99.3	117.4
152.5°	127.7	304.4	397.8	413.4	412.1	413.4	397.8	304.4	127.7	99.3	121.0
155°	117.6	281.0	389.9	410.2	408.3	410.2	389.9	281.0	117.6	99.0	122.3
157.5°	107.9	253.4	373.9	400.0	401.0	400.0	373.9	253.4	107.9	98.4	120.6
160°	97.6	222.1	348.1	379.9	384.4	379.9	348.1	222.1	97.6	95.8	115.9
162.5°	87.2	189.0	303.1	349.9	355.4	349.9	303.1	189.0	87.2	92.0	109.5
165°	77.4	158.7	251.5	305.3	318.7	305.3	251.5	158.7	77.4	86.5	101.2
167.5°	67.5	128.9	199.7	243.8	258.1	243.8	199.7	128.9	67.5	78.3	89.7
170°	58.2	102.2	152.8	188.6	200.1	188.6	152.8	102.2	58.2	66.4	77.3
172.5°	48.6	75.4	109.1	134.4	142.1	134.4	109.1	75.4	48.6	51.1	63.6
175°	39.0	54.0	76.0	88.8	92.6	88.8	76.0	54.0	39.0	40.6	47.0
177.5°	30.9	39.3	50.2	56.6	55.3	56.6	50.2	39.3	30.9	32.7	34.6
180°	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2



TEST NUMBER: 18660A
 CATALOG NUMBER: 635-CF2/26

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	60.4	60.4	60.4	60.4	60.4	60.4
2.5°	73.2	74.1	73.2	70.9	67.2	59.2
5°	84.3	85.6	84.3	79.2	75.1	67.9
7.5°	95.2	98.0	95.2	86.9	80.5	79.9
10°	107.6	111.4	107.6	94.8	83.7	92.9
12.5°	119.1	123.8	119.1	103.5	86.5	105.5
15°	131.5	135.7	131.5	112.3	88.8	117.3
17.5°	139.5	142.1	139.5	121.0	91.6	128.6
20°	142.1	143.6	142.1	129.8	94.8	139.6
22.5°	141.3	141.3	141.3	133.8	98.0	150.0
25°	137.6	136.2	137.6	135.3	101.2	160.1
27.5°	131.5	129.8	131.5	133.4	105.0	169.6
30°	124.8	122.9	124.8	129.3	108.6	178.0
32.5°	117.4	114.6	117.4	123.3	111.4	185.8
35°	109.5	106.7	109.5	116.9	112.3	191.6
37.5°	100.9	98.0	100.9	109.1	111.4	194.1
40°	92.6	90.3	92.6	100.9	108.6	192.5
42.5°	84.3	81.5	84.3	92.0	104.1	187.3
45°	76.4	74.1	76.4	83.7	98.4	180.8
47.5°	69.0	66.8	69.0	75.4	92.0	173.7
50°	61.7	59.8	61.7	67.7	84.3	165.6
52.5°	54.9	53.4	54.9	60.4	76.9	157.5
55°	48.3	47.0	48.3	53.0	68.7	147.9
57.5°	42.5	41.5	42.5	46.6	60.7	138.5
60°	36.5	35.5	36.5	40.0	53.0	128.2
62.5°	31.4	30.4	31.4	34.2	46.1	118.3
65°	26.3	25.4	26.3	28.6	39.3	108.4
67.5°	22.2	21.2	22.2	23.7	32.7	99.4
70°	18.0	17.1	18.0	19.5	27.2	92.1
72.5°	13.9	13.5	13.9	14.8	21.8	85.3
75°	10.7	10.3	10.7	11.2	17.1	79.7
77.5°	7.1	7.1	7.1	7.5	12.9	75.1
80°	4.3	4.3	4.3	4.3	9.3	72.7
82.5°	1.4	1.4	1.4	2.0	6.1	70.3
85°	0.5	0.5	0.5	0.5	3.3	68.2
87.5°	0.5	0.5	0.5	0.5	2.4	66.3
90°	0.5	0.5	0.5	0.5	2.0	65.4
92.5°	0.5	0.5	0.5	0.5	4.3	77.8
95°	0.5	0.5	0.5	0.5	6.1	79.1
97.5°	1.4	2.0	1.4	1.1	8.4	80.3
100°	3.3	3.9	3.3	2.9	11.2	81.5
102.5°	5.2	6.1	5.2	5.6	13.9	82.6
105°	8.4	8.4	8.4	8.4	17.6	83.5
107.5°	10.7	11.2	10.7	11.6	21.8	84.8
110°	13.9	14.4	13.9	15.4	26.3	86.3



TEST NUMBER: 18660A
 CATALOG NUMBER: 635-CF2/26

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	17.1	17.6	17.1	19.0	31.0	88.1
115°	21.2	21.2	21.2	23.7	36.5	90.7
117.5°	25.4	25.9	25.4	28.6	42.5	95.0
120°	30.4	30.1	30.4	33.6	48.9	100.6
122.5°	35.5	35.5	35.5	39.3	56.2	107.5
125°	41.0	41.0	41.0	45.1	63.6	115.5
127.5°	47.0	47.0	47.0	52.1	71.3	123.8
130°	53.4	53.0	53.4	58.5	78.8	131.8
132.5°	59.8	59.8	59.8	66.4	85.6	139.6
135°	66.4	65.8	66.4	74.1	91.1	145.9
137.5°	73.2	72.2	73.2	82.0	95.8	150.7
140°	80.5	79.2	80.5	89.7	98.4	154.4
142.5°	87.9	86.5	87.9	97.7	99.9	155.7
145°	95.8	93.9	95.8	105.4	99.9	153.9
147.5°	103.1	100.9	103.1	111.8	99.9	146.6
150°	110.5	108.6	110.5	117.4	99.3	137.3
152.5°	117.4	115.5	117.4	121.0	99.3	127.7
155°	123.3	122.3	123.3	122.3	99.0	117.6
157.5°	127.4	128.0	127.4	120.6	98.4	107.9
160°	129.3	131.5	129.3	115.9	95.8	97.6
162.5°	127.0	132.1	127.0	109.5	92.0	87.2
165°	119.7	127.4	119.7	101.2	86.5	77.4
167.5°	107.3	115.9	107.3	89.7	78.3	67.5
170°	92.0	100.9	92.0	77.3	66.4	58.2
172.5°	73.7	81.1	73.7	63.6	51.1	48.6
175°	56.2	61.3	56.2	47.0	40.6	39.0
177.5°	37.4	40.6	37.4	34.6	32.7	30.9
180°	31.2	31.2	31.2	31.2	31.2	31.2

(END OF REPORT)