

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: 25486

Luminaire Tested: **103-CFL/2/39-120V-JBE**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-66-11  
Report Number: 25486  
Test Lab: LIGHTING SCIENCES, INC.  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: SHAPER  
Catalog Number: 103-CFL/2/39-120V-JBE  
Description: TAUPE FABRIC SHADE RECTILINEAR WALL SCONCE  
  
Light Source: TWO SYLVANIA 36 WATT CFL LAMPS  
  
FT36DL/830/ECO. LUMEN RATING = 5800 LMS.  
  
Ballast/Driver: -

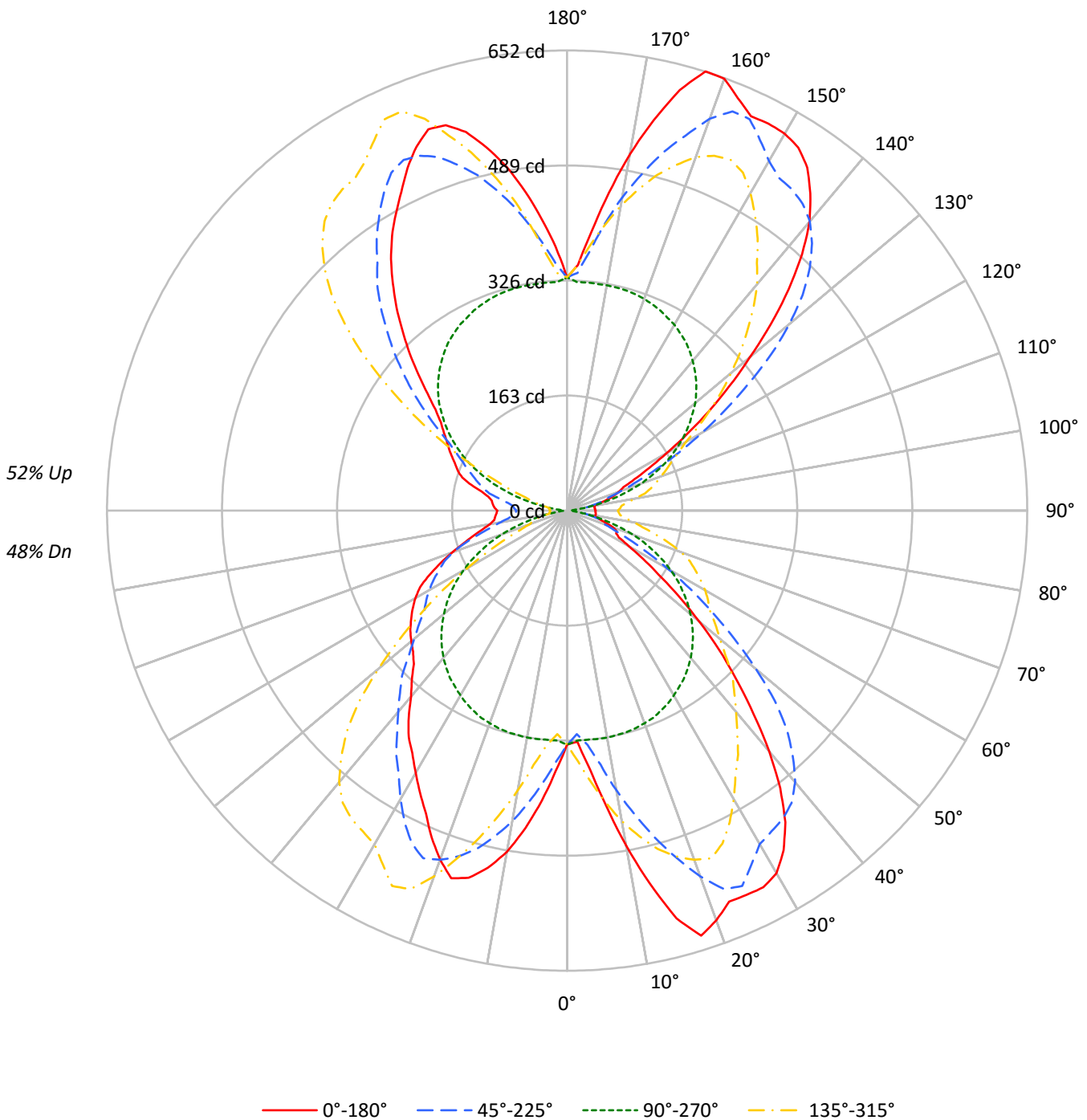
**Summary**

Lumens per Lamp: 5800 (1 lamp)  
Luminaire Lumens: 3009.1 lumens  
Efficiency: 51.9%  
Efficacy: 42.4 lumens/watt  
Spacing Criteria (0/90/45): 1.73 / 1.35 / 1.7  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 2.17' x H: 0.71')  
CIE Type: General Diffuse  
  
Input Watts (W): 71  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: 25486

CATALOG NUMBER: 103-CFL/2/39-120V-JBE

### Luminous Intensity Polar Plot





TEST NUMBER: 25486

CATALOG NUMBER: 103-CFL/2/39-120V-JBE

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				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	51	51	51	51	43	43	43	35	35	35	28	28	28	25
1	50	48	46	44	46	44	43	41	37	36	35	31	30	29	25	24	24	21
2	46	42	39	36	42	39	36	34	33	31	29	27	25	24	22	21	20	17
3	42	37	33	30	38	34	31	28	29	26	24	24	22	20	19	18	17	15
4	38	33	28	25	35	30	26	24	26	23	21	21	19	17	17	16	14	13
5	35	29	25	22	32	27	23	20	23	20	18	19	17	15	15	14	13	11
6	32	26	22	19	30	24	20	18	20	18	15	17	15	13	14	12	11	9
7	30	23	19	16	27	22	18	15	19	16	13	16	13	12	13	11	10	8
8	28	21	17	14	25	20	16	14	17	14	12	14	12	10	12	10	9	7
9	26	19	15	13	24	18	14	12	15	13	11	13	11	9	11	9	8	7
10	24	18	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°	4984	4984	4984	4984
5°	5381	4138	6054	4138
10°	6963	3614	7085	3614
15°	8556	3208	7707	3208
20°	8831	2876	7520	2876
25°	8647	2594	6814	2594
30°	8663	2341	6261	2341
35°	8045	2119	5845	2119
40°	6859	1906	5296	1906
45°	5438	1700	4922	1700
50°	4105	1495	4852	1495
55°	2818	1289	4821	1289
60°	1934	1078	4764	1078
65°	1603	856	4494	856
70°	1595	624	4013	624
75°	1234	378	3585	378
80°	1228	168	3371	168
85°	1485	61	3730	61



TEST NUMBER: 25486

CATALOG NUMBER: 103-CFL/2/39-120V-JBE

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	36.1	1.2	0.6
10°-20°	132.9	4.4	2.3
20°-30°	225.1	7.5	3.9
30°-40°	277.3	9.2	4.8
40°-50°	270.2	9.0	4.7
50°-60°	218.7	7.3	3.8
60°-70°	153.1	5.1	2.6
70°-80°	89.3	3.0	1.5
80°-90°	52.2	1.7	0.9
90°-100°	53.5	1.8	0.9
100°-110°	92.5	3.1	1.6
110°-120°	160.3	5.3	2.8
120°-130°	239.2	7.9	4.1
130°-140°	298.3	9.9	5.1
140°-150°	297.8	9.9	5.1
150°-160°	237.5	7.9	4.1
160°-170°	138.0	4.6	2.4
170°-180°	37.3	1.2	0.6
0°-30°	394.1	13.1	6.8
0°-40°	671.4	22.3	11.6
0°-60°	1160.3	38.6	20.0
0°-90°	1454.9	48.4	25.1
90°-120°	306.2	10.2	5.3
90°-150°	1141.5	37.9	19.7
90°-180°	1554.0	51.6	26.8
0°-180°	3009.1	100.0	51.9

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	332	332	332	332	332	
5°	367	326	413	326	367	39
15°	598	325	539	325	598	167
25°	601	313	474	313	601	278
35°	539	289	392	289	539	332
45°	340	252	307	252	340	263
55°	158	200	270	200	158	146
65°	77	135	215	135	77	79
75°	47	59	137	59	47	53
85°	41	9	102	9	41	33
90°	40	4	99	4	40	22
95°	40	9	106	9	40	32
105°	57	70	140	70	57	61
115°	105	148	180	148	105	109
125°	244	210	218	210	244	219
135°	444	259	316	259	444	340
145°	593	292	435	292	593	367
155°	616	313	535	313	616	289
165°	617	323	555	323	617	174
175°	396	324	415	324	396	42
180°	330	330	330	330	330	



TEST NUMBER: 25486

CATALOG NUMBER: 103-CFL/2/39-120V-JBE

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	331.6	331.6	331.6	331.6	331.6	331.6	331.6	331.6	331.6	331.6	331.6
2.5°	327.7	321.9	317.0	318.1	326.0	342.7	355.5	366.8	369.0	366.8	355.5
5°	366.8	354.4	333.4	317.2	325.9	357.1	385.8	408.4	412.7	408.4	385.8
7.5°	420.8	401.9	363.3	324.0	326.5	371.6	416.7	446.0	453.9	446.0	416.7
10°	482.5	458.8	402.7	337.2	326.6	387.0	446.9	483.0	491.0	483.0	446.9
12.5°	541.2	513.1	440.2	350.7	325.6	401.6	472.8	513.1	518.3	513.1	472.8
15°	598.0	564.4	479.5	366.5	325.0	415.4	496.4	536.1	538.7	536.1	496.4
17.5°	631.5	612.6	516.2	381.6	323.2	427.7	513.9	550.6	546.2	550.6	513.9
20°	617.8	620.9	551.8	397.1	320.6	439.4	526.6	541.0	526.1	541.0	526.6
22.5°	599.8	599.1	580.4	412.4	317.8	447.8	533.3	517.6	501.4	517.6	533.3
25°	600.9	586.9	586.9	423.7	313.3	455.5	520.5	490.6	473.5	490.6	520.5
27.5°	601.8	589.8	565.3	436.3	308.5	459.5	498.3	465.3	451.1	465.3	498.3
30°	593.4	586.2	545.8	444.4	302.4	460.2	472.1	439.7	428.9	439.7	472.1
32.5°	570.7	572.8	538.9	451.6	295.6	460.0	443.8	416.0	408.0	416.0	443.8
35°	538.9	548.4	532.9	459.3	289.4	455.7	422.1	394.9	391.5	394.9	422.1
37.5°	495.8	514.7	522.1	458.8	281.1	446.6	395.5	375.7	368.8	375.7	395.5
40°	445.5	471.6	502.5	449.1	272.5	427.1	372.4	352.4	344.0	352.4	372.4
42.5°	391.0	420.3	473.6	428.6	262.6	401.2	350.7	329.1	325.5	329.1	350.7
45°	339.5	366.3	441.0	407.7	252.0	373.0	330.5	311.2	307.3	311.2	330.5
47.5°	292.2	315.9	399.1	387.2	240.4	344.7	304.6	294.5	296.0	294.5	304.6
50°	244.0	267.0	349.0	370.4	227.8	317.7	282.3	283.9	288.4	283.9	282.3
52.5°	198.8	222.2	299.0	351.6	215.0	290.9	264.5	274.9	280.1	274.9	264.5
55°	157.8	179.0	250.4	327.7	200.3	263.8	247.0	265.2	269.9	265.2	247.0
57.5°	127.0	142.0	206.8	300.1	186.1	238.8	236.6	255.7	259.8	255.7	236.6
60°	100.8	110.9	163.9	266.8	169.5	215.4	225.8	244.0	248.3	244.0	225.8
62.5°	82.8	87.5	127.0	231.5	153.6	190.0	213.4	232.1	235.1	232.1	213.4
65°	76.7	73.4	96.6	191.1	135.1	167.7	200.6	216.5	215.0	216.5	200.6
67.5°	75.6	71.4	71.6	149.0	117.5	150.4	188.4	195.1	194.0	195.1	188.4
70°	68.9	67.0	56.3	110.9	98.1	136.4	172.0	174.9	173.4	174.9	172.0
72.5°	56.9	56.9	51.7	75.6	77.6	122.5	150.1	154.7	153.5	154.7	150.1
75°	47.2	46.1	46.4	48.1	58.7	108.7	129.0	136.2	137.1	136.2	129.0
77.5°	41.2	37.8	35.1	30.8	40.5	92.3	109.6	120.2	122.0	120.2	109.6
80°	40.5	36.4	26.3	24.1	25.6	72.0	95.9	108.5	111.2	108.5	95.9
82.5°	40.9	36.7	25.0	16.9	13.9	54.9	83.9	99.5	104.2	99.5	83.9
85°	40.8	36.0	25.0	12.8	9.1	43.2	75.6	96.4	102.5	96.4	75.6
87.5°	40.0	36.2	23.9	12.8	5.6	35.5	73.4	94.3	100.4	94.3	73.4
90°	40.5	35.3	24.3	11.4	4.4	36.2	71.8	92.5	99.0	92.5	71.8
92.5°	39.2	36.0	24.5	12.8	4.7	38.5	75.2	97.0	103.3	97.0	75.2
95°	39.6	36.4	25.5	12.8	8.9	48.9	77.5	99.2	105.8	99.2	77.5
97.5°	38.9	35.5	25.0	17.5	17.0	60.3	84.8	101.7	107.8	101.7	84.8
100°	39.8	36.2	29.7	26.7	32.0	70.2	97.9	108.5	113.4	108.5	97.9
102.5°	44.1	43.0	40.0	39.8	49.3	82.4	113.0	119.8	124.0	119.8	113.0
105°	56.7	54.9	51.6	64.2	70.2	95.0	122.9	137.1	140.5	137.1	122.9
107.5°	69.8	68.9	61.7	95.0	89.9	109.6	132.2	151.2	155.8	151.2	132.2
110°	77.8	75.4	81.7	133.4	111.0	132.6	141.4	158.4	165.0	158.4	141.4



TEST NUMBER: 25486

CATALOG NUMBER: 103-CFL/2/39-120V-JBE

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	86.2	88.4	106.7	176.5	129.4	158.2	152.4	165.7	171.5	165.7	152.4
115°	105.1	108.9	139.5	219.8	148.0	185.5	163.4	174.9	179.8	174.9	163.4
117.5°	131.0	138.7	179.2	261.8	165.1	214.1	177.0	183.9	188.7	183.9	177.0
120°	162.3	172.0	220.4	296.9	181.0	242.7	194.0	194.0	197.0	194.0	194.0
122.5°	201.0	213.9	266.3	329.8	196.3	272.1	219.0	205.6	207.3	205.6	219.0
125°	244.0	258.9	314.0	354.1	210.4	298.7	246.0	219.3	218.4	219.3	246.0
127.5°	289.9	306.2	365.7	376.6	223.4	325.7	275.1	241.8	235.3	241.8	275.1
130°	337.7	353.9	410.8	392.9	236.9	355.0	302.8	268.5	258.4	268.5	302.8
132.5°	391.9	407.5	452.3	408.4	248.1	383.2	333.0	297.4	286.2	297.4	333.0
135°	443.9	456.1	486.3	426.9	258.7	409.3	361.1	325.1	315.7	325.1	361.1
137.5°	492.6	502.0	513.6	448.3	268.1	432.7	390.8	355.2	344.9	355.2	390.8
140°	534.5	539.2	535.0	469.4	276.9	450.5	418.8	385.4	376.2	385.4	418.8
142.5°	566.2	569.8	548.0	485.8	285.0	460.8	441.7	413.6	405.5	413.6	441.7
145°	593.4	592.6	555.4	493.7	292.4	467.2	470.5	443.0	435.2	443.0	470.5
147.5°	609.7	604.7	558.8	492.6	298.0	467.8	495.5	468.3	461.7	468.3	495.5
150°	616.7	609.0	571.9	483.8	304.0	465.6	519.6	493.5	485.4	493.5	519.6
152.5°	618.0	605.9	591.9	477.5	307.9	459.7	539.7	521.6	508.8	521.6	539.7
155°	616.4	612.6	611.9	467.2	312.7	453.0	548.2	546.4	535.3	546.4	548.2
157.5°	632.4	631.5	612.2	456.3	316.1	445.5	544.2	564.7	558.1	564.7	544.2
160°	651.1	650.6	590.6	442.7	319.1	435.4	533.1	572.3	575.0	572.3	533.1
162.5°	652.5	640.1	557.0	426.6	321.4	424.4	513.3	561.3	572.5	561.3	513.3
165°	616.9	598.6	525.3	411.1	322.9	411.8	492.2	541.0	555.4	541.0	492.2
167.5°	566.4	550.3	488.1	391.3	323.7	398.5	465.8	510.8	527.0	510.8	465.8
170°	512.8	501.9	451.0	373.3	324.0	383.8	438.3	477.3	495.0	477.3	438.3
172.5°	454.1	446.9	409.7	353.9	324.0	368.3	408.0	438.8	456.1	438.8	408.0
175°	396.3	392.7	369.0	338.2	324.3	351.9	378.0	401.0	414.7	401.0	378.0
177.5°	347.9	346.5	337.2	327.4	324.0	335.0	348.3	361.8	373.7	361.8	348.3
180°	330.4	330.4	330.4	330.4	330.4	330.4	330.4	330.4	330.4	330.4	330.4



TEST NUMBER: 25486

CATALOG NUMBER: 103-CFL/2/39-120V-JBE

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	331.6	331.6	331.6	331.6	331.6	331.6
2.5°	342.7	326.0	318.1	317.0	321.9	327.7
5°	357.1	325.9	317.2	333.4	354.4	366.8
7.5°	371.6	326.5	324.0	363.3	401.9	420.8
10°	387.0	326.6	337.2	402.7	458.8	482.5
12.5°	401.6	325.6	350.7	440.2	513.1	541.2
15°	415.4	325.0	366.5	479.5	564.4	598.0
17.5°	427.7	323.2	381.6	516.2	612.6	631.5
20°	439.4	320.6	397.1	551.8	620.9	617.8
22.5°	447.8	317.8	412.4	580.4	599.1	599.8
25°	455.5	313.3	423.7	586.9	586.9	600.9
27.5°	459.5	308.5	436.3	565.3	589.8	601.8
30°	460.2	302.4	444.4	545.8	586.2	593.4
32.5°	460.0	295.6	451.6	538.9	572.8	570.7
35°	455.7	289.4	459.3	532.9	548.4	538.9
37.5°	446.6	281.1	458.8	522.1	514.7	495.8
40°	427.1	272.5	449.1	502.5	471.6	445.5
42.5°	401.2	262.6	428.6	473.6	420.3	391.0
45°	373.0	252.0	407.7	441.0	366.3	339.5
47.5°	344.7	240.4	387.2	399.1	315.9	292.2
50°	317.7	227.8	370.4	349.0	267.0	244.0
52.5°	290.9	215.0	351.6	299.0	222.2	198.8
55°	263.8	200.3	327.7	250.4	179.0	157.8
57.5°	238.8	186.1	300.1	206.8	142.0	127.0
60°	215.4	169.5	266.8	163.9	110.9	100.8
62.5°	190.0	153.6	231.5	127.0	87.5	82.8
65°	167.7	135.1	191.1	96.6	73.4	76.7
67.5°	150.4	117.5	149.0	71.6	71.4	75.6
70°	136.4	98.1	110.9	56.3	67.0	68.9
72.5°	122.5	77.6	75.6	51.7	56.9	56.9
75°	108.7	58.7	48.1	46.4	46.1	47.2
77.5°	92.3	40.5	30.8	35.1	37.8	41.2
80°	72.0	25.6	24.1	26.3	36.4	40.5
82.5°	54.9	13.9	16.9	25.0	36.7	40.9
85°	43.2	9.1	12.8	25.0	36.0	40.8
87.5°	35.5	5.6	12.8	23.9	36.2	40.0
90°	36.2	4.4	11.4	24.3	35.3	40.5
92.5°	38.5	4.7	12.8	24.5	36.0	39.2
95°	48.9	8.9	12.8	25.5	36.4	39.6
97.5°	60.3	17.0	17.5	25.0	35.5	38.9
100°	70.2	32.0	26.7	29.7	36.2	39.8
102.5°	82.4	49.3	39.8	40.0	43.0	44.1
105°	95.0	70.2	64.2	51.6	54.9	56.7
107.5°	109.6	89.9	95.0	61.7	68.9	69.8
110°	132.6	111.0	133.4	81.7	75.4	77.8





TEST NUMBER: 25486

CATALOG NUMBER: 103-CFL/2/39-120V-JBE

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	158.2	129.4	176.5	106.7	88.4	86.2
115°	185.5	148.0	219.8	139.5	108.9	105.1
117.5°	214.1	165.1	261.8	179.2	138.7	131.0
120°	242.7	181.0	296.9	220.4	172.0	162.3
122.5°	272.1	196.3	329.8	266.3	213.9	201.0
125°	298.7	210.4	354.1	314.0	258.9	244.0
127.5°	325.7	223.4	376.6	365.7	306.2	289.9
130°	355.0	236.9	392.9	410.8	353.9	337.7
132.5°	383.2	248.1	408.4	452.3	407.5	391.9
135°	409.3	258.7	426.9	486.3	456.1	443.9
137.5°	432.7	268.1	448.3	513.6	502.0	492.6
140°	450.5	276.9	469.4	535.0	539.2	534.5
142.5°	460.8	285.0	485.8	548.0	569.8	566.2
145°	467.2	292.4	493.7	555.4	592.6	593.4
147.5°	467.8	298.0	492.6	558.8	604.7	609.7
150°	465.6	304.0	483.8	571.9	609.0	616.7
152.5°	459.7	307.9	477.5	591.9	605.9	618.0
155°	453.0	312.7	467.2	611.9	612.6	616.4
157.5°	445.5	316.1	456.3	612.2	631.5	632.4
160°	435.4	319.1	442.7	590.6	650.6	651.1
162.5°	424.4	321.4	426.6	557.0	640.1	652.5
165°	411.8	322.9	411.1	525.3	598.6	616.9
167.5°	398.5	323.7	391.3	488.1	550.3	566.4
170°	383.8	324.0	373.3	451.0	501.9	512.8
172.5°	368.3	324.0	353.9	409.7	446.9	454.1
175°	351.9	324.3	338.2	369.0	392.7	396.3
177.5°	335.0	324.0	327.4	337.2	346.5	347.9
180°	330.4	330.4	330.4	330.4	330.4	330.4

(END OF REPORT)