

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: FAIL-SAFE

Report Number: H26069

Luminaire Tested: **RVS-12-32CT**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: H26069
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: RVS-12-32CT
Description: FAIL-SAFE EVS-12 WITH VISION TRIM
Light Source: F32PLT 32W 2400 LUMENS
HEX TUBE COMPACT FLUORESCENT
Ballast/Driver: -

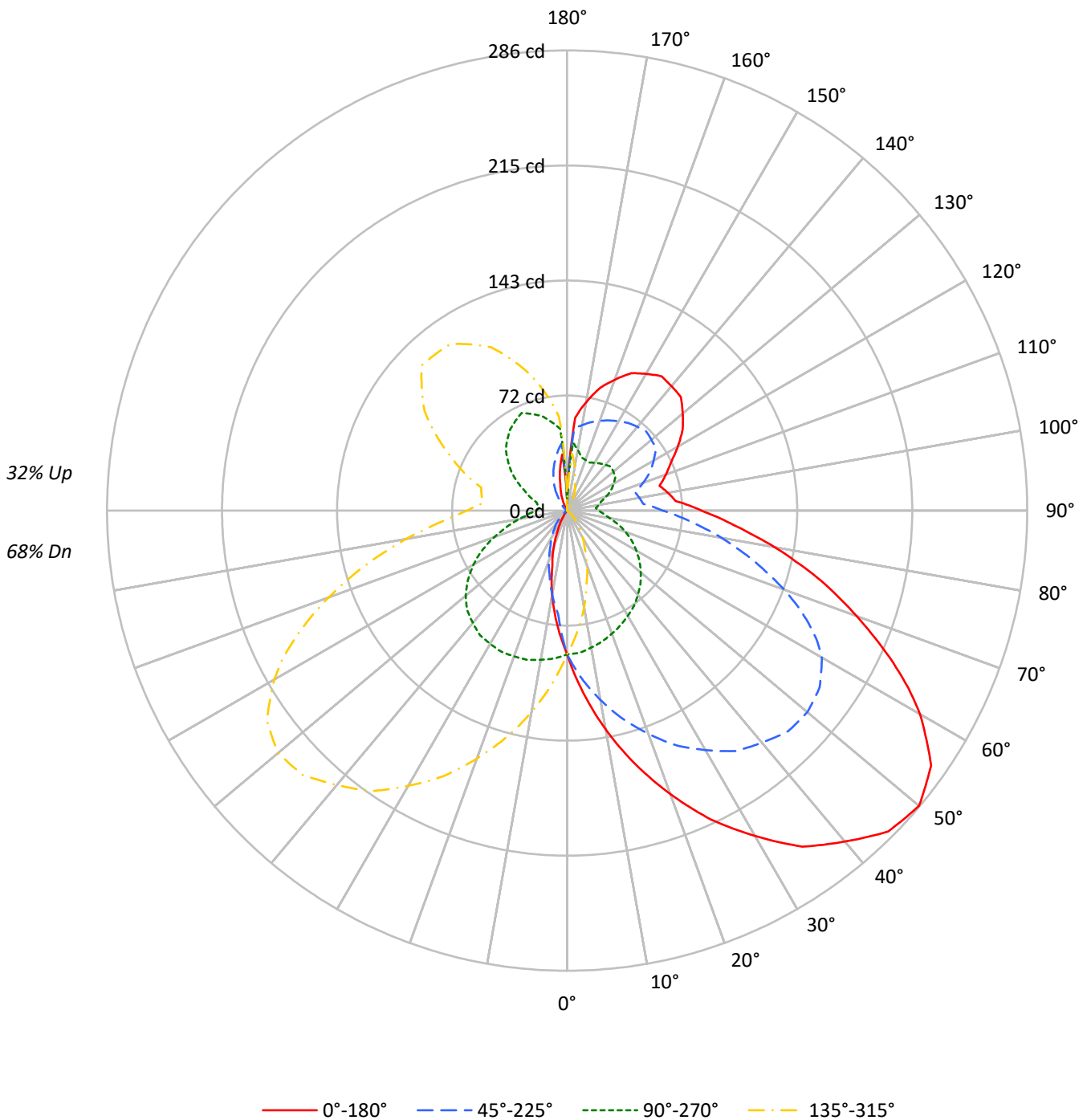
Summary

Lumens per Lamp: 2400 (1 lamp)
Luminaire Lumens: 752.4 lumens
Efficiency: 31.3%
Efficacy: 20.9 lumens/watt
Spacing Criteria (0/90/45): 2.16 / 1.43 / 1.93
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Semi-Direct

Input Watts (W): 36
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: H26069
CATALOG NUMBER: RVS-12-32CT

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	50	30	10	50	30	10	50	30	10	0																			
RCR																																														
0	35	35	35	35	33	33	33	33	29	29	29	26	26	26	23	23	23	21									21																			
1	31	29	28	26	29	27	26	25	24	23	22	21	21	20	19	18	17	16									16																			
2	28	25	22	20	26	23	21	19	21	19	17	18	17	16	16	15	14	13									13																			
3	25	21	19	16	23	20	18	16	18	16	14	16	14	13	14	12	11	10									10																			
4	23	19	16	13	21	18	15	13	15	13	12	14	12	10	12	10	9	8									8																			
5	21	16	13	11	19	15	13	11	14	11	10	12	10	9	10	9	8	7									7																			
6	19	15	12	10	18	14	11	9	12	10	8	11	9	7	9	8	7	6									6																			
7	17	13	10	8	16	12	10	8	11	9	7	10	8	6	8	7	6	5									5																			
8	16	12	9	7	15	11	9	7	10	8	6	9	7	6	8	6	5	4									4																			
9	15	11	8	6	14	10	8	6	9	7	6	8	6	5	7	6	4	4									4																			
10	14	10	7	6	13	9	7	5	8	6	5	7	6	4	6	5	4	3									3																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	Luminaire represents a point source (luminous area is zero).			
5°	No luminance values can be calculated.			
10°				
15°				
20°				
25°				
30°				
35°				
40°				
45°				
50°				
55°				
60°				
65°				
70°				
75°				
80°				
85°				



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	90°	180°	270°	360°	Flux
0°-10°	8.6	1.1	0.4	0°	89	89	89	89	89	
10°-20°	26.7	3.6	1.1	5°	113	89	71	92	113	11
20°-30°	46.2	6.1	1.9	15°	163	84	36	96	163	46
30°-40°	66.0	8.8	2.8	25°	212	79	14	97	212	97
40°-50°	83.5	11.1	3.5	35°	255	72	2	94	255	158
50°-60°	92.4	12.3	3.8	45°	282	64	0	88	282	215
60°-70°	84.1	11.2	3.5	55°	276	55	0	75	276	245
70°-80°	63.9	8.5	2.7	65°	224	44	0	58	224	221
80°-90°	42.2	5.6	1.8	75°	161	32	0	39	161	170
90°-100°	28.9	3.8	1.2	85°	104	23	0	24	104	91
100°-110°	28.7	3.8	1.2	90°	83	19	0	19	83	46
110°-120°	33.4	4.4	1.4	95°	68	18	0	17	68	57
120°-130°	37.9	5.0	1.6	105°	59	22	0	20	59	68
130°-140°	37.3	5.0	1.6	115°	71	30	0	29	71	72
140°-150°	31.6	4.2	1.3	125°	88	37	0	42	88	78
150°-160°	23.1	3.1	1.0	135°	100	38	0	54	100	75
160°-170°	13.7	1.8	0.6	145°	102	36	0	62	102	63
170°-180°	2.3	0.3	0.1	155°	94	33	5	67	94	43
0°-30°	81.5	10.8	3.4	165°	79	34	16	61	79	22
0°-40°	147.6	19.6	6.1	175°	58	42	35	51	58	3
0°-60°	323.4	43.0	13.5	180°	0	0	0	0	0	
0°-90°	513.5	68.3	21.4							
90°-120°	91.0	12.1	3.8							
90°-150°	197.8	26.3	8.2							
90°-180°	237.0	31.5	9.9							
0°-180°	752.4	100.0	31.3							



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3
5°	113.3	112.6	111.6	109.8	107.5	104.9	101.5	97.9	94.4	90.7	88.7
15°	162.9	161.1	157.1	151.5	143.7	134.1	123.6	112.5	101.0	90.0	84.2
25°	211.9	210.0	202.8	191.9	177.5	161.1	143.2	124.5	105.6	87.7	78.6
35°	255.0	252.2	241.8	225.8	205.2	182.5	157.2	131.6	106.7	83.7	72.4
45°	282.1	278.6	266.1	246.9	222.5	194.1	163.5	133.0	103.7	76.9	64.4
50°	285.5	281.9	269.1	249.7	224.8	194.9	162.9	131.1	100.1	72.4	59.8
55°	276.2	273.6	263.5	245.2	220.7	191.6	159.7	127.2	95.6	67.7	54.8
60°	253.3	251.6	242.9	228.4	208.8	182.8	152.7	120.9	89.7	62.1	49.7
62.5°	239.1	237.0	229.4	216.2	198.6	175.1	147.8	117.0	86.3	59.4	47.0
65°	223.5	221.7	215.0	203.4	187.4	165.6	140.5	111.9	82.5	56.3	44.3
67.5°	207.3	205.9	199.2	188.7	173.8	154.9	132.6	106.0	78.1	53.1	41.4
70°	191.2	189.8	183.5	173.2	160.5	143.5	123.4	99.3	73.2	49.4	38.5
72.5°	176.1	174.9	169.1	159.2	147.0	131.2	112.8	91.6	67.8	45.6	35.7
75°	160.9	159.9	154.4	145.3	133.5	119.7	102.9	83.7	62.1	41.9	32.5
77.5°	145.2	144.5	139.7	131.4	121.0	108.2	93.2	76.0	56.8	38.1	29.5
80°	131.1	130.0	125.5	118.6	108.6	97.4	83.8	68.3	51.5	34.4	26.9
82.5°	116.5	116.3	112.3	105.6	97.1	86.6	75.3	61.3	46.3	31.0	24.2
85°	104.1	103.5	99.9	93.8	86.3	76.8	66.8	54.7	41.8	28.2	22.7
87.5°	93.4	92.3	88.9	83.0	76.1	67.7	58.7	48.8	37.4	25.7	20.9
90°	83.4	82.6	78.7	74.0	67.4	59.4	51.7	43.3	34.0	24.3	19.4
95°	67.8	66.6	63.7	59.2	53.7	47.5	41.8	36.1	29.3	22.4	17.9
105°	59.4	57.7	53.9	50.0	46.8	43.7	40.5	37.6	32.6	26.2	21.8
115°	71.2	68.2	62.8	58.7	57.4	56.8	55.7	52.4	45.6	36.0	30.1
125°	87.6	83.1	74.9	69.8	68.3	67.3	65.8	61.7	54.0	43.2	36.6
135°	99.9	94.6	84.7	76.5	71.8	69.5	67.0	62.0	54.1	44.3	38.5
145°	102.0	96.9	86.8	78.2	71.2	66.4	61.5	55.5	48.2	40.4	35.7
155°	94.2	91.0	83.1	75.6	68.5	61.8	55.9	49.7	42.9	36.4	32.9
165°	78.9	77.2	72.4	67.1	61.9	56.8	51.9	46.7	41.1	36.7	34.2
175°	58.0	57.7	56.5	54.9	53.1	51.1	49.1	46.9	44.8	43.3	42.2
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3
5°	87.0	83.5	80.4	77.7	74.9	73.1	71.9	71.1	71.0	71.1	70.7
15°	79.0	69.1	60.4	53.0	46.7	41.8	38.5	36.3	35.8	35.7	36.0
25°	70.7	56.3	43.6	34.0	25.8	20.9	17.0	14.6	13.7	13.7	13.9
35°	62.5	44.6	30.5	20.5	12.9	7.7	4.5	2.7	2.0	2.0	2.1
45°	53.4	34.6	21.1	11.2	4.9	1.5	0.1	0.3	0.3	0.3	0.3
50°	48.6	30.1	17.1	8.0	2.6	0.2	0.3	0.3	0.4	0.4	0.4
55°	43.9	25.7	13.7	5.6	1.2	0.1	0.3	0.4	0.4	0.4	0.4
60°	39.0	22.8	11.0	3.9	0.5	0.2	0.4	0.4	0.4	0.4	0.4
62.5°	36.8	21.0	9.8	3.2	0.2	0.3	0.4	0.4	0.4	0.4	0.4
65°	34.4	19.3	8.6	2.6	0.1	0.3	0.4	0.4	0.4	0.4	0.4
67.5°	31.9	17.7	7.6	2.2	0.0	0.3	0.4	0.4	0.4	0.4	0.4
70°	29.5	16.1	6.7	1.7	0.0	0.3	0.4	0.4	0.4	0.4	0.4
72.5°	27.2	14.6	5.8	1.4	0.0	0.4	0.4	0.4	0.4	0.4	0.3
75°	24.7	13.1	5.0	1.1	0.1	0.4	0.4	0.4	0.4	0.3	0.3
77.5°	23.0	11.8	4.3	0.8	0.1	0.4	0.4	0.4	0.3	0.3	0.3
80°	20.9	10.5	3.7	0.5	0.2	0.4	0.4	0.4	0.3	0.3	0.3
82.5°	18.9	9.4	3.1	0.3	0.2	0.4	0.4	0.4	0.3	0.3	0.3
85°	17.1	8.4	2.6	0.2	0.3	0.4	0.4	0.3	0.3	0.3	0.3
87.5°	15.8	7.6	2.3	0.0	0.3	0.4	0.4	0.3	0.3	0.3	0.3
90°	14.6	7.0	2.0	0.1	0.3	0.4	0.4	0.3	0.3	0.4	0.4
95°	13.7	6.6	2.0	0.1	0.3	0.4	0.4	0.4	0.4	0.4	0.4
105°	17.0	8.6	3.2	0.4	0.2	0.3	0.3	0.4	0.4	0.4	0.4
115°	24.3	13.4	5.6	1.7	0.0	0.2	0.2	0.3	0.3	0.3	0.3
125°	30.1	18.6	9.4	3.7	0.7	0.1	0.1	0.1	0.1	0.1	0.1
135°	32.7	22.1	13.1	6.6	2.6	0.5	0.0	0.1	0.1	0.1	0.1
145°	31.0	22.6	15.2	9.4	5.2	2.5	0.9	0.1	0.1	0.1	0.1
155°	29.6	23.4	17.8	13.2	9.6	7.1	5.4	4.7	4.7	5.0	5.3
165°	31.9	27.7	24.1	21.0	18.6	16.9	15.7	15.3	15.7	16.2	16.7
175°	41.3	39.2	37.6	36.4	35.4	34.8	34.4	34.5	34.9	35.0	35.5
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3
5°	71.3	71.4	66.4	64.4	68.1	75.5	84.3	90.0	92.3	94.6	98.5
15°	36.9	36.8	37.5	42.0	53.0	65.4	77.8	89.5	96.0	101.9	113.8
25°	15.1	16.9	19.3	24.6	37.5	52.2	68.7	86.3	96.8	107.1	127.5
35°	3.0	4.7	7.7	13.8	24.4	39.7	58.6	81.3	94.5	108.2	136.0
45°	0.3	0.0	1.6	6.1	15.3	28.3	47.9	72.9	87.8	103.9	137.3
50°	0.4	0.3	0.2	3.4	11.5	24.1	42.6	67.0	82.3	99.0	133.8
55°	0.4	0.3	0.1	1.6	8.3	19.8	36.8	60.3	75.4	92.1	127.2
60°	0.4	0.4	0.3	0.4	5.7	15.9	31.1	52.8	67.2	83.0	117.0
62.5°	0.4	0.4	0.3	0.1	4.6	14.1	28.3	49.1	63.0	78.2	110.6
65°	0.4	0.4	0.4	0.1	3.7	12.5	25.4	44.9	58.0	72.5	103.3
67.5°	0.4	0.4	0.4	0.2	2.9	10.8	23.6	40.9	53.2	66.5	95.3
70°	0.3	0.4	0.4	0.2	2.3	9.3	21.0	36.8	48.2	60.7	86.9
72.5°	0.3	0.4	0.4	0.3	1.7	8.0	18.6	32.9	43.3	54.6	78.6
75°	0.3	0.4	0.4	0.3	1.3	6.8	16.5	29.3	38.7	48.7	70.4
77.5°	0.3	0.4	0.4	0.4	0.8	5.6	14.3	25.9	34.2	43.2	62.3
80°	0.3	0.4	0.4	0.4	0.5	4.7	12.5	23.6	30.3	37.8	54.5
82.5°	0.4	0.4	0.5	0.4	0.2	3.8	10.9	20.6	26.4	33.0	47.9
85°	0.4	0.4	0.5	0.4	0.0	3.1	9.5	18.2	24.0	29.2	41.6
87.5°	0.4	0.5	0.5	0.5	0.1	2.5	8.4	16.4	21.3	25.7	36.6
90°	0.4	0.5	0.5	0.5	0.3	2.3	7.6	15.0	19.4	24.0	32.9
95°	0.5	0.5	0.5	0.5	0.3	1.9	6.7	13.3	17.3	21.4	28.4
105°	0.4	0.4	0.4	0.3	0.1	2.9	8.0	15.3	19.7	24.0	31.6
115°	0.3	0.2	0.2	0.0	1.6	6.0	13.3	23.2	29.2	35.8	48.3
125°	0.1	0.1	0.0	0.7	4.6	11.3	21.2	34.4	42.3	50.6	68.1
135°	0.0	0.1	0.7	3.7	9.6	18.3	30.3	45.3	53.9	63.4	83.6
145°	0.5	1.8	4.4	9.1	16.4	26.0	38.5	52.9	61.7	70.7	88.7
155°	6.8	9.4	13.6	19.7	27.3	37.0	47.9	60.4	66.9	73.8	87.2
165°	18.7	21.7	25.7	30.5	36.3	43.0	49.3	56.9	60.8	65.0	72.8
175°	36.8	38.0	39.7	41.7	43.6	46.0	47.6	49.7	51.0	52.3	54.2
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3
5°	102.0	105.3	108.2	110.3	112.1	113.0	113.2	113.3
15°	125.5	136.4	145.8	153.0	158.7	162.1	163.2	162.9
25°	147.3	166.0	182.2	195.2	205.6	211.7	213.5	211.9
35°	163.7	189.8	212.9	232.0	246.0	254.5	256.3	255.0
45°	171.4	203.8	232.4	255.8	272.8	282.4	284.4	282.1
50°	170.3	204.8	234.5	258.7	276.1	286.0	288.1	285.5
55°	164.4	198.9	227.8	249.9	266.3	275.4	277.8	276.2
60°	152.5	184.5	210.2	230.7	244.7	252.3	254.7	253.3
62.5°	144.5	174.5	199.3	217.3	230.6	238.4	240.3	239.1
65°	135.3	163.1	186.0	203.3	215.2	223.0	224.8	223.5
67.5°	125.1	150.9	172.2	188.3	199.2	206.6	209.0	207.3
70°	114.7	138.1	157.7	172.9	183.3	190.1	192.5	191.2
72.5°	103.4	125.5	143.2	157.2	167.6	174.7	177.4	176.1
75°	92.4	112.6	128.9	142.4	152.7	158.8	161.7	160.9
77.5°	82.3	99.6	114.8	127.5	137.0	143.7	145.9	145.2
80°	72.3	87.8	101.5	113.3	122.2	128.0	131.0	131.1
82.5°	62.8	76.7	88.9	100.1	108.4	113.6	116.9	116.5
85°	55.0	67.1	78.1	88.0	96.0	101.5	104.0	104.1
87.5°	48.3	58.9	69.2	78.2	85.0	90.3	93.2	93.4
90°	43.1	52.7	62.0	70.2	76.7	80.9	83.3	83.4
95°	37.1	45.2	52.6	58.9	63.8	66.9	67.9	67.8
105°	40.4	48.3	55.3	60.1	62.3	62.3	60.5	59.4
115°	61.1	72.3	80.1	83.9	83.3	79.6	74.1	71.2
125°	85.3	98.9	108.2	111.4	108.6	101.4	91.9	87.6
135°	103.2	118.5	127.7	129.2	124.7	115.7	105.1	99.9
145°	105.3	118.6	126.4	128.0	124.5	116.5	106.9	102.0
155°	99.1	107.3	112.0	112.6	109.9	105.1	98.7	94.2
165°	79.1	83.9	87.0	87.8	86.7	84.9	81.7	78.9
175°	56.2	57.5	58.7	59.3	59.2	59.3	58.9	58.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)