

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: H26063

Luminaire Tested: **RDS-12-32CT-SW**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: H26063  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: RDS-12-32CT-SW  
Description: FAIL-SAFE RDS-12-32CT-SW WITH DOME TRIM RING  
CONTAINING LENS WITH "FADE NOT" GLARE GUARD COATING  
Light Source: F32WPLT 32W 2400 LUMENS  
HEX TUBE COMPACT FLUORESCENT LAMP  
Ballast/Driver: -

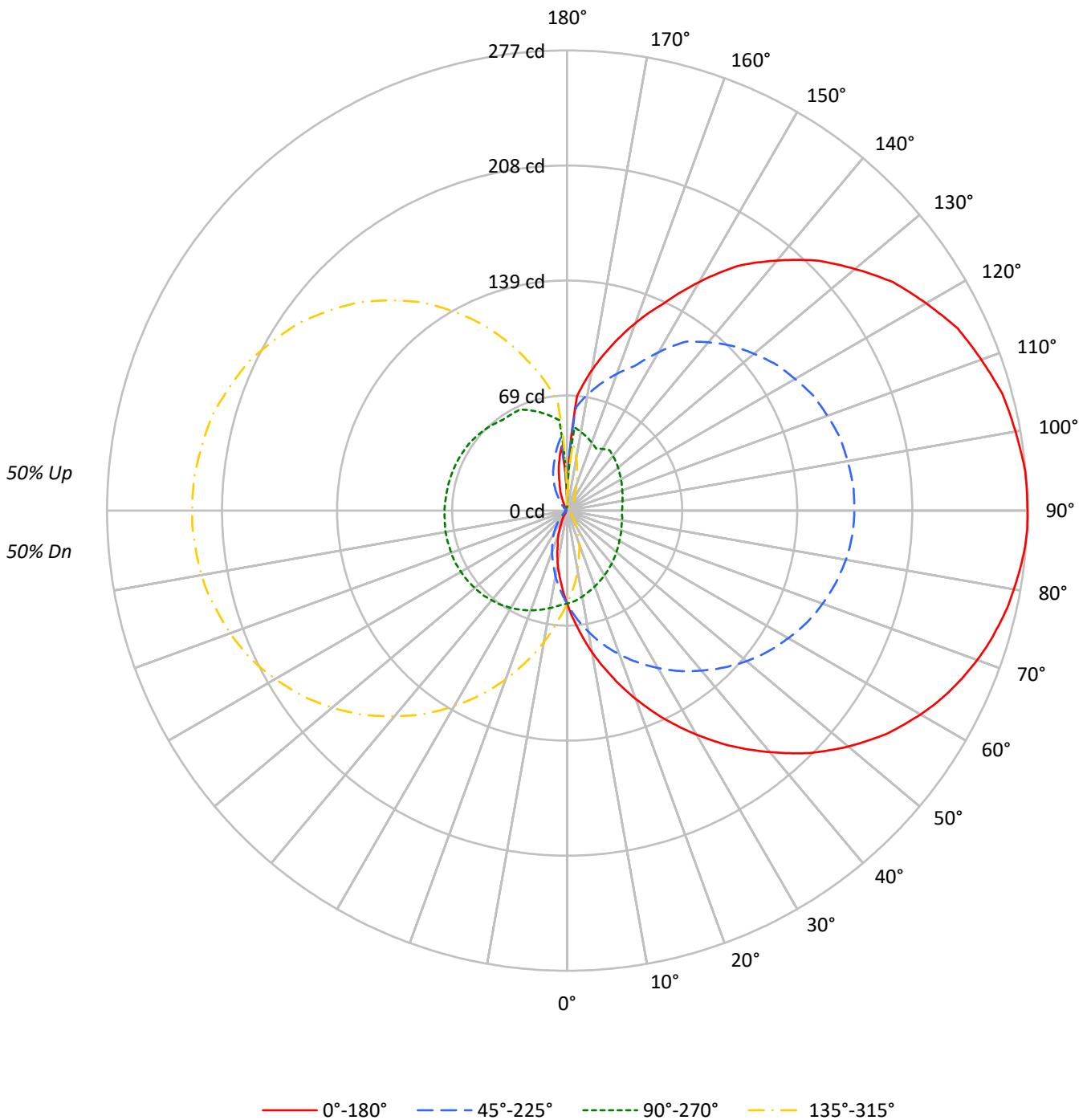
**Summary**

Lumens per Lamp: 2400 (1 lamp)  
Luminaire Lumens: 1073.6 lumens  
Efficiency: 44.7%  
Efficacy: 29.8 lumens/watt  
Spacing Criteria (0/90/45): 2.47 / 1.54 / 2.21  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: General Diffuse

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: H26063  
CATALOG NUMBER: RDS-12-32CT-SW

### 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	48	48	48	48	44	44	44	44	37	37	37	31	31	31	25	25	25	22
1	41	39	36	34	38	35	33	31	29	28	26	24	22	21	19	18	17	14
2	37	32	29	26	34	30	26	24	24	22	20	20	18	16	15	14	12	10
3	33	28	24	21	30	25	22	19	21	18	16	17	15	13	13	11	10	8
4	30	24	20	17	27	22	18	15	18	15	13	14	12	10	11	9	8	6
5	27	21	17	14	25	19	16	13	16	13	11	13	10	9	10	8	7	5
6	25	19	15	12	23	17	14	11	14	11	9	11	9	7	9	7	5	4
7	23	17	13	10	21	16	12	9	13	10	8	10	8	6	8	6	5	3
8	21	15	11	9	19	14	11	8	12	9	7	9	7	5	7	5	4	3
9	20	14	10	8	18	13	9	7	11	8	6	9	6	5	7	5	4	3
10	18	13	9	7	17	12	8	6	10	7	5	8	6	4	6	4	3	2

**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°	5.4	0.5	0.2	0°	56	56	56	56	56	
10°-20°	17.0	1.6	0.7	5°	70	55	43	57	70	7
20°-30°	30.1	2.8	1.3	15°	103	50	22	62	103	29
30°-40°	45.1	4.2	1.9	25°	138	47	8	66	138	64
40°-50°	61.4	5.7	2.6	35°	173	43	2	69	173	109
50°-60°	77.6	7.2	3.2	45°	206	40	1	72	206	159
60°-70°	91.4	8.5	3.8	55°	234	38	1	73	234	210
70°-80°	101.3	9.4	4.2	65°	255	35	1	74	255	253
80°-90°	106.6	9.9	4.4	75°	269	34	1	74	269	284
90°-100°	106.6	9.9	4.4	85°	276	33	1	74	276	225
100°-110°	101.6	9.5	4.2	90°	277	33	1	74	277	152
110°-120°	92.1	8.6	3.8	95°	277	33	1	74	277	225
120°-130°	78.6	7.3	3.3	105°	271	34	1	73	271	285
130°-140°	62.6	5.8	2.6	115°	259	36	1	72	259	256
140°-150°	45.5	4.2	1.9	125°	240	39	1	71	240	213
150°-160°	29.5	2.7	1.2	135°	213	42	1	69	213	164
160°-170°	16.2	1.5	0.7	145°	180	44	1	67	180	112
170°-180°	2.8	0.3	0.1	155°	138	41	5	67	138	65
0°-30°	52.5	4.9	2.2	165°	102	46	18	61	102	29
0°-40°	97.7	9.1	4.1	175°	69	50	39	55	69	4
0°-60°	236.7	22.0	9.9	180°	3	2	1	5	3	
0°-90°	536.0	49.9	22.3							
90°-120°	300.3	28.0	12.5							
90°-150°	486.9	45.3	20.3							
90°-180°	535.0	49.8	22.3							
0°-180°	1073.6	100.0	44.7							



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
5°	70.3	70.2	69.8	68.3	66.9	65.1	63.3	60.8	58.4	55.6	54.6
15°	103.1	102.3	99.2	95.1	89.5	83.3	76.1	68.8	61.3	53.9	50.5
25°	138.2	136.3	130.6	122.3	112.3	100.9	88.6	75.8	63.6	52.0	46.7
35°	173.2	170.0	162.3	150.1	134.7	117.9	100.2	82.2	65.4	50.0	43.2
45°	206.4	202.5	192.2	175.6	156.1	133.6	110.7	87.7	66.6	48.1	40.2
50°	221.0	217.4	205.8	188.1	165.8	141.0	115.3	90.2	67.2	47.4	38.7
55°	234.5	230.7	218.4	199.4	175.4	147.8	119.8	92.5	67.6	46.4	37.5
60°	245.6	242.0	229.2	209.2	183.7	153.7	123.7	94.4	67.9	45.7	36.3
62.5°	250.7	246.9	233.8	213.7	187.3	156.6	125.4	95.2	68.3	45.6	35.8
65°	255.1	251.4	238.0	217.6	191.0	159.3	127.1	96.2	68.5	45.3	35.4
67.5°	259.1	255.2	242.0	221.3	193.9	161.7	128.6	96.9	68.5	45.0	35.1
70°	262.8	258.7	245.3	224.7	196.9	163.7	129.9	97.6	68.7	44.5	34.6
72.5°	266.1	261.9	248.5	227.5	199.3	165.7	131.3	98.4	68.8	44.5	34.3
75°	268.7	264.6	251.1	229.9	201.6	167.6	132.5	98.9	68.8	44.3	33.9
77.5°	271.3	267.1	253.3	232.2	203.5	169.0	133.4	99.3	68.8	44.3	33.7
80°	273.1	269.0	255.2	233.9	205.2	170.4	134.0	99.8	69.0	44.0	33.7
82.5°	274.8	270.4	256.9	235.5	206.6	171.5	134.9	100.3	69.3	44.0	33.4
85°	276.3	271.7	257.9	236.4	207.3	172.2	135.3	100.5	69.3	44.0	33.2
87.5°	277.2	272.5	258.5	237.1	208.0	172.7	135.9	100.8	69.3	44.0	33.0
90°	277.2	273.0	258.8	237.6	208.5	172.9	136.0	101.0	69.5	43.8	33.0
95°	276.8	272.5	258.8	237.4	208.3	172.9	136.4	101.2	69.6	43.8	33.4
105°	271.3	267.3	254.0	233.0	204.3	170.0	134.7	100.8	70.1	45.0	34.4
115°	259.4	255.7	242.9	222.2	195.4	163.5	131.1	99.3	70.7	46.4	36.3
125°	239.6	236.2	224.3	205.5	181.2	153.4	124.7	96.4	70.7	48.3	38.6
135°	212.9	209.6	198.8	183.4	163.0	140.3	116.1	92.6	70.1	50.5	41.5
145°	180.0	177.5	169.2	156.9	141.7	124.1	105.8	87.1	68.6	52.2	44.4
155°	137.6	134.9	128.3	118.8	108.2	96.0	83.3	70.2	57.5	46.0	41.2
165°	102.5	101.1	97.6	92.4	86.5	79.2	71.9	64.1	56.3	48.8	45.8
175°	69.1	68.9	67.9	66.5	64.7	62.6	60.2	57.3	54.6	51.7	50.3
180°	3.0	4.0	6.0	9.0	9.0	8.0	6.0	4.0	3.0	3.0	2.0



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**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
5°	53.1	51.2	49.1	47.2	45.9	44.7	43.7	43.3	43.2	43.1	43.5
15°	46.8	41.1	35.8	31.2	27.4	24.7	23.4	22.2	21.9	22.0	22.5
25°	41.4	32.7	25.4	20.0	15.5	12.2	9.9	8.6	8.2	8.1	8.5
35°	36.6	26.0	18.3	12.1	7.6	4.7	2.9	2.1	1.8	1.8	1.9
45°	32.6	21.4	12.8	6.9	3.3	1.4	0.6	0.6	0.8	0.9	0.8
50°	30.8	19.3	10.7	5.2	2.1	0.8	0.6	0.6	0.8	0.9	0.9
55°	29.1	17.5	9.0	3.8	1.3	0.7	0.7	0.7	0.9	1.0	1.0
60°	27.9	16.0	7.6	2.9	0.9	0.7	0.7	0.8	1.0	1.0	1.0
62.5°	27.2	15.3	7.1	2.5	0.8	0.7	0.7	0.8	1.0	1.1	1.1
65°	26.7	14.8	6.6	2.3	0.8	0.7	0.8	0.9	1.1	1.1	1.1
67.5°	26.2	14.2	6.1	2.1	0.8	0.7	0.8	0.9	1.1	1.1	1.1
70°	25.9	13.8	5.7	1.9	0.8	0.7	0.8	1.0	1.2	1.2	1.2
72.5°	25.3	13.3	5.4	1.7	0.8	0.8	0.9	1.1	1.3	1.2	1.2
75°	25.0	13.0	5.1	1.6	0.8	0.8	0.9	1.1	1.3	1.3	1.2
77.5°	24.7	12.7	4.9	1.5	0.8	0.8	0.9	1.1	1.3	1.3	1.2
80°	24.4	12.4	4.7	1.4	0.8	0.8	1.0	1.2	1.2	1.2	1.2
82.5°	24.4	12.2	4.5	1.3	0.8	0.8	1.0	1.1	1.1	1.2	1.2
85°	24.2	12.1	4.4	1.3	0.8	0.8	1.0	1.1	1.1	1.2	1.1
87.5°	24.3	12.0	4.4	1.3	0.8	0.8	1.0	1.1	1.0	1.1	1.1
90°	24.1	11.9	4.3	1.2	0.8	0.8	1.0	1.1	1.1	1.1	1.1
95°	24.2	12.1	4.4	1.2	0.8	0.8	1.0	1.0	1.1	1.1	1.1
105°	25.3	13.0	5.0	1.4	0.8	0.7	0.9	0.9	1.0	1.0	1.0
115°	27.4	14.8	6.3	2.1	0.8	0.7	0.9	0.9	0.9	0.9	0.9
125°	29.9	17.6	8.7	3.5	1.1	0.8	0.8	0.9	0.8	0.8	0.8
135°	33.4	21.5	12.3	6.3	2.7	1.0	0.7	0.7	0.7	0.7	0.7
145°	37.4	26.6	17.6	11.1	6.3	3.5	1.7	0.9	0.6	0.6	0.6
155°	36.3	27.8	20.7	15.1	11.0	8.0	6.0	5.1	4.8	5.0	5.3
165°	42.4	36.3	31.0	26.6	23.1	20.5	18.9	17.7	17.6	17.8	18.2
175°	48.9	46.9	44.5	42.5	40.7	39.6	38.6	38.2	38.3	38.6	38.8
180°	2.0	1.0	1.0	1.0	1.0	1.3	1.5	1.2	0.9	0.8	0.6



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**CANDELA DISTRIBUTION (continued):**

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
5°	44.2	44.9	46.1	47.9	49.7	51.6	53.9	55.8	57.4	58.6	60.5
15°	23.6	25.2	28.4	32.5	37.8	43.6	50.7	57.7	61.8	65.7	73.2
25°	9.6	11.8	15.4	20.7	26.9	36.1	47.0	58.9	65.9	72.7	86.0
35°	2.3	3.6	6.4	11.3	19.1	29.3	43.3	59.6	69.3	78.8	97.9
45°	0.7	0.8	1.8	5.1	12.4	23.9	39.9	59.9	71.8	83.8	107.8
50°	0.8	0.8	0.9	3.1	9.8	21.4	38.2	59.9	72.5	86.0	112.3
55°	0.9	0.9	0.8	1.8	7.5	19.2	36.8	59.8	73.3	87.3	116.0
60°	1.0	1.0	0.8	0.9	5.8	17.4	35.5	59.4	73.8	88.7	118.9
62.5°	1.0	1.0	0.8	0.7	5.0	16.5	34.9	59.3	74.0	89.5	120.4
65°	1.1	1.0	0.8	0.7	4.4	15.8	34.4	59.2	74.3	90.0	121.5
67.5°	1.1	1.0	0.8	0.7	3.8	15.1	33.9	58.9	74.3	90.2	122.6
70°	1.2	1.0	0.8	0.7	3.3	14.4	33.4	58.7	74.3	90.6	123.4
72.5°	1.2	1.1	0.8	0.7	2.9	13.9	33.0	58.7	74.2	90.8	124.1
75°	1.2	1.1	0.8	0.6	2.5	13.3	32.5	58.4	74.3	91.1	124.8
77.5°	1.2	1.1	0.8	0.6	2.3	12.9	32.2	58.2	74.3	91.0	125.3
80°	1.2	1.1	0.8	0.6	2.1	12.6	31.7	58.3	74.3	91.2	125.8
82.5°	1.2	1.1	0.8	0.6	1.9	12.2	31.5	58.0	74.2	91.2	126.2
85°	1.1	1.1	0.8	0.6	1.7	12.0	31.3	57.7	73.9	91.3	126.3
87.5°	1.1	1.1	0.8	0.6	1.6	11.8	31.3	57.8	73.9	91.0	126.4
90°	1.1	1.0	0.7	0.6	1.5	11.7	31.0	57.5	73.9	91.0	126.4
95°	1.0	1.0	0.7	0.6	1.5	11.6	30.8	57.5	73.5	90.7	125.9
105°	0.9	0.9	0.7	0.6	1.9	12.4	31.1	57.5	73.1	90.0	124.2
115°	0.9	0.8	0.7	0.6	3.2	14.1	32.5	57.5	72.4	88.5	120.7
125°	0.8	0.8	0.6	0.8	5.6	17.0	34.4	57.5	71.4	85.9	115.0
135°	0.7	0.6	0.7	3.2	9.7	21.1	37.0	57.2	69.4	82.0	107.1
145°	0.8	1.7	3.9	8.2	15.7	26.5	40.4	57.2	66.9	77.3	97.2
155°	6.6	9.2	13.2	19.0	26.6	36.2	47.2	60.1	67.1	74.2	88.2
165°	19.8	22.3	25.9	30.1	35.7	42.1	48.8	56.8	61.1	65.1	73.4
175°	39.5	40.9	42.2	44.1	46.1	48.1	50.7	53.2	54.6	55.9	58.4
180°	0.4	0.3	0.3	0.6	1.2	1.9	2.9	3.9	4.8	5.3	6.9





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**CANDELA DISTRIBUTION (continued):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
5°	62.7	64.7	66.9	68.3	69.3	70.1	70.6	70.3
15°	81.0	87.7	93.8	98.4	101.9	103.9	103.8	103.1
25°	99.3	111.6	122.2	130.3	136.7	139.4	139.3	138.2
35°	116.9	134.2	149.4	161.3	169.7	174.3	174.6	173.2
45°	132.2	153.9	173.8	189.8	200.6	207.2	207.6	206.4
50°	138.7	163.4	184.6	201.9	214.7	222.0	223.2	221.0
55°	144.6	171.2	194.5	213.7	227.5	235.2	236.7	234.5
60°	150.1	178.3	202.8	223.6	238.0	246.5	247.7	245.6
62.5°	152.1	181.2	206.8	227.8	242.9	251.5	252.8	250.7
65°	154.2	184.0	210.4	231.5	247.1	255.9	257.5	255.1
67.5°	155.8	186.4	213.2	235.3	250.9	259.9	261.4	259.1
70°	157.3	188.6	216.0	238.3	254.4	263.4	264.9	262.8
72.5°	158.5	190.4	218.0	240.8	257.3	266.2	268.3	266.1
75°	159.7	192.2	220.1	243.2	259.6	269.1	270.9	268.7
77.5°	160.8	193.3	222.2	245.2	261.9	271.3	273.2	271.3
80°	161.6	194.3	223.6	246.9	263.7	273.2	275.3	273.1
82.5°	162.0	195.5	224.4	248.3	264.8	274.9	276.6	274.8
85°	162.5	196.0	225.1	249.2	265.6	275.9	277.8	276.3
87.5°	162.8	196.3	225.8	249.7	266.3	276.3	278.7	277.2
90°	162.8	196.3	225.8	249.9	266.5	276.8	278.8	277.2
95°	162.2	195.9	225.5	249.3	266.5	276.2	278.8	276.8
105°	159.7	192.3	221.2	244.5	261.2	271.4	273.5	271.3
115°	153.9	184.5	211.7	233.9	249.8	259.4	261.0	259.4
125°	145.0	172.7	196.9	216.8	231.3	239.7	241.9	239.6
135°	132.6	156.3	177.3	193.8	206.0	212.9	214.3	212.9
145°	117.9	136.3	153.0	166.0	175.3	180.4	181.6	180.0
155°	102.0	114.1	124.6	132.5	138.1	140.3	139.0	137.6
165°	81.3	88.0	93.9	98.9	101.7	103.4	103.3	102.5
175°	61.2	63.4	65.5	67.4	68.6	69.3	69.3	69.1
180°	7.9	8.6	6.6	4.8	4.0	2.5	2.6	3.0

(END OF REPORT)