

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: io LED

Report Number: P273346

Luminaire Tested: **0.03-1W-840-25-ID-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P273346  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (ITL89170-GONIOPHOTOMETRY)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: 0.03-1W-840-25-ID-STD-UNV-AN-3F0  
Description: iO LIGHTING SERIES .75 LINEAR LED LUMINAIRE, 25 DEGREE OPTIC.  
STANDARD OUTPUT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 296.1 lumens  
Efficiency: N/A  
Efficacy: 39.5 lumens/watt  
Spacing Criteria (0/90/45): 0.49 / 1.12 / 0.73  
Luminous Opening: Rectangular (W 2.92' x L: 0.05' x H: 0')  
CIE Type: Direct

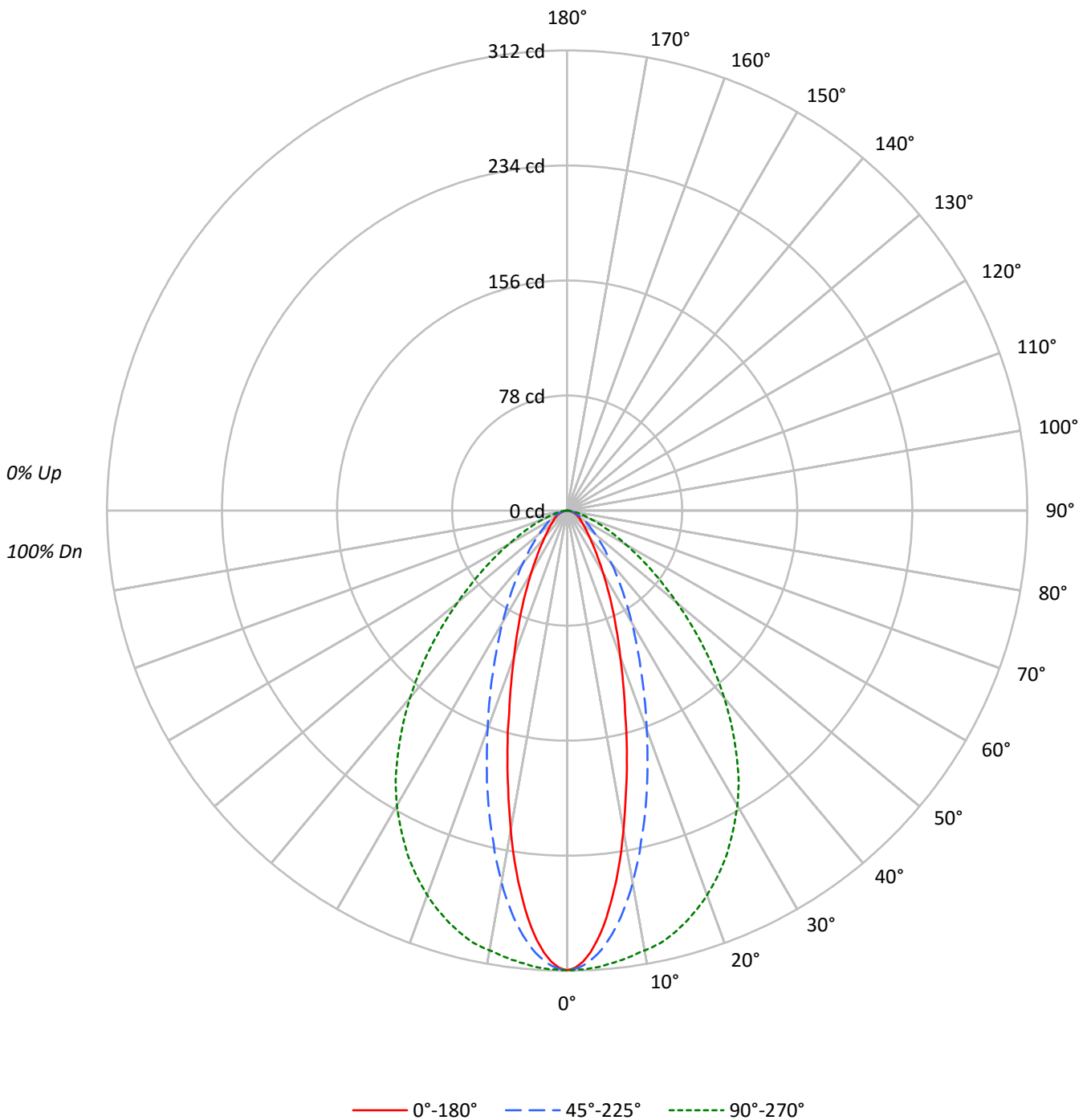
Input Watts (W): 7.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P273346

CATALOG NUMBER: 0.03-1W-840-25-ID-STD-UNV-AN-3F0

### Luminous Intensity Polar Plot





TEST NUMBER: P273346

CATALOG NUMBER: 0.03-1W-840-25-ID-STD-UNV-AN-3F0

**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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90					90			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80					80			
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72					72			
4	91	82	75	70	89	81	74	69	78	73	69	76	72	68	74	70	67	65					65			
5	86	75	68	63	84	74	68	63	72	67	62	71	66	61	69	64	61	59					59			
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54					54			
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	51	50					50			
8	72	60	53	48	70	60	53	48	59	52	48	57	52	48	56	51	48	46					46			
9	68	56	50	45	66	56	49	45	55	49	45	54	48	45	53	48	44	43					43			
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40					40			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	24532	24532	24532
5°	22350	23362	24421
10°	17580	20466	24215
15°	12674	16807	23906
20°	8831	13221	23250
25°	6246	10242	22291
30°	4418	7946	20991
35°	3191	6161	19203
40°	2425	4789	17030
45°	1982	3797	14563
50°	1678	3038	11881
55°	1524	2512	9430
60°	1417	2110	7243
65°	1360	1844	5477
70°	1197	1611	4097
75°	1156	1430	3103
80°	907	1179	2358
85°	813	813	1536



TEST NUMBER: P273346

CATALOG NUMBER: 0.03-1W-840-25-ID-STD-UNV-AN-3F0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	27.0	9.1
10°-20°	59.8	20.2
20°-30°	64.6	21.8
30°-40°	55.4	18.7
40°-50°	41.0	13.8
50°-60°	26.2	8.8
60°-70°	14.5	4.9
70°-80°	6.4	2.1
80°-90°	1.4	0.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	151.4	51.1
0°-40°	206.8	69.8
0°-60°	273.9	92.5
0°-90°	296.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	296.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	312	312	312	312	312	
5°	283	286	296	305	309	25
15°	156	169	206	261	293	43
25°	72	83	118	196	257	33
35°	33	40	64	133	200	21
45°	18	21	34	83	131	14
55°	11	12	18	46	69	10
65°	7	7	10	22	29	7
75°	4	4	5	8	10	4
85°	1	1	1	1	2	1
90°	0	0	0	0	0	



TEST NUMBER: P273346

CATALOG NUMBER: 0.03-1W-840-25-ID-STD-UNV-AN-3F0

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	311.6	311.6	311.6	311.6	311.6	311.6	311.6	311.6	311.6	311.6	311.6
0.5°	311.0	311.1	311.1	311.2	311.3	311.3	311.3	311.3	311.3	311.3	311.4
1°	309.9	309.9	310.0	310.1	310.1	310.2	310.4	310.5	310.6	310.7	310.9
1.5°	308.1	308.2	308.4	308.5	308.6	308.8	309.1	309.3	309.6	309.9	310.1
2°	306.1	306.2	306.3	306.5	306.6	306.9	307.3	307.8	308.2	308.7	309.0
2.5°	303.2	303.4	303.7	304.0	304.2	304.7	305.3	306.0	306.6	307.2	307.8
3°	300.0	300.3	300.6	300.9	301.2	301.8	302.7	303.5	304.4	305.2	306.1
3.5°	296.2	296.6	297.1	297.5	298.0	298.8	299.9	301.0	302.1	303.2	304.3
4°	292.1	292.6	293.2	293.6	294.2	295.2	296.7	298.2	299.6	301.1	302.5
4.5°	287.7	288.3	288.9	289.5	290.1	291.3	293.1	294.9	296.7	298.5	300.2
5°	282.8	283.5	284.2	284.9	285.6	287.1	289.2	291.3	293.5	295.6	297.7
5.5°	277.5	278.4	279.2	280.1	280.9	282.6	285.0	287.5	289.9	292.4	294.9
6°	271.7	272.8	273.8	274.8	275.9	277.8	280.7	283.5	286.3	289.2	292.1
6.5°	265.9	267.0	268.1	269.2	270.3	272.5	275.8	279.1	282.4	285.7	289.1
7°	259.8	261.0	262.2	263.5	264.7	267.1	270.8	274.5	278.2	281.9	285.7
7.5°	253.7	255.0	256.4	257.7	259.1	261.8	265.9	270.0	274.0	278.1	282.4
8°	247.0	248.4	249.9	251.4	252.9	255.9	260.4	265.0	269.5	274.0	278.8
8.5°	240.6	242.1	243.7	245.2	246.8	250.0	254.9	259.8	264.8	269.7	275.0
9°	233.9	235.5	237.2	238.9	240.6	244.1	249.4	254.7	260.0	265.3	271.2
9.5°	226.9	228.7	230.6	232.5	234.4	238.2	243.8	249.6	255.2	260.9	267.3
10°	219.9	221.9	223.9	225.9	227.9	231.9	237.9	244.0	250.0	256.0	263.0
10.5°	212.9	215.0	217.0	219.1	221.2	225.4	231.8	238.2	244.6	251.0	258.7
11°	205.9	208.3	210.7	213.1	215.5	220.0	226.6	233.2	239.8	246.4	254.6
11.5°	199.2	201.6	204.1	206.6	209.0	213.7	220.7	227.6	234.5	241.4	250.2
12°	192.5	195.0	197.5	200.1	202.6	207.5	214.7	222.0	229.2	236.5	245.9
12.5°	186.1	188.6	191.1	193.7	196.2	201.2	208.6	216.1	223.5	230.9	241.1
13°	179.7	182.3	184.9	187.5	190.1	195.2	202.9	210.6	218.3	226.0	236.6
13.5°	173.3	175.9	178.6	181.2	183.9	189.2	197.2	205.1	213.1	221.0	232.2
14°	167.2	169.8	172.5	175.1	177.8	183.2	191.4	199.7	207.9	216.1	227.7
14.5°	161.3	163.9	166.5	169.1	171.7	177.2	185.7	194.2	202.7	211.1	223.3
15°	155.5	158.2	160.8	163.5	166.1	171.8	180.4	189.0	197.6	206.2	218.7
16°	142.7	145.7	148.6	151.6	154.6	160.6	169.5	178.4	187.3	196.3	209.7
17°	132.5	135.4	138.3	141.2	144.2	150.2	159.2	168.3	177.3	186.4	200.6
18°	122.6	125.5	128.3	131.1	134.0	140.0	149.0	158.1	167.1	176.2	191.3
19°	113.6	116.4	119.1	121.9	124.7	130.6	139.7	148.8	157.8	166.9	182.6
20°	105.4	108.1	110.7	113.4	116.0	121.9	130.8	139.8	148.8	157.8	174.1
22.5°	87.1	89.5	91.9	94.3	96.7	102.2	110.9	119.5	128.2	136.9	154.0
25°	71.9	74.1	76.3	78.5	80.7	85.9	93.9	101.9	109.9	117.9	135.5
27.5°	59.1	61.1	63.1	65.1	67.2	71.9	79.3	86.8	94.2	101.6	119.1
30°	48.6	50.4	52.1	53.9	55.6	59.9	66.8	73.7	80.5	87.4	104.4
32.5°	39.9	41.4	43.0	44.6	46.1	50.0	56.2	62.4	68.6	74.8	91.2
35°	33.2	34.5	35.8	37.1	38.4	41.8	47.4	52.9	58.5	64.1	79.5
37.5°	28.0	29.0	30.0	31.1	32.1	35.1	40.0	44.9	49.8	54.8	69.1
40°	23.6	24.5	25.4	26.3	27.2	29.8	34.0	38.2	42.4	46.6	59.8
42.5°	20.4	21.0	21.7	22.3	23.0	25.1	28.8	32.5	36.2	39.9	51.9



TEST NUMBER: P273346

CATALOG NUMBER: 0.03-1W-840-25-ID-STD-UNV-AN-3F0

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
45°	17.8	18.3	18.8	19.3	19.8	21.6	24.8	27.9	31.0	34.1	44.9
47.5°	15.4	15.9	16.3	16.8	17.2	18.8	21.3	23.9	26.5	29.1	38.7
50°	13.7	14.0	14.3	14.6	15.0	16.2	18.3	20.5	22.6	24.8	33.2
52.5°	12.2	12.5	12.8	13.0	13.3	14.3	16.0	17.8	19.5	21.3	28.5
55°	11.1	11.3	11.4	11.6	11.9	12.6	14.1	15.5	16.9	18.3	24.4
57.5°	10.2	10.3	10.3	10.4	10.5	11.1	12.2	13.4	14.6	15.7	20.8
60°	9.0	9.1	9.1	9.2	9.3	9.8	10.7	11.6	12.5	13.4	17.6
62.5°	8.2	8.2	8.3	8.4	8.4	8.8	9.5	10.2	11.0	11.6	15.0
65°	7.3	7.3	7.3	7.3	7.3	7.6	8.2	8.7	9.3	9.9	12.6
67.5°	6.4	6.4	6.4	6.4	6.4	6.6	7.1	7.5	8.0	8.4	10.5
70°	5.2	5.3	5.4	5.4	5.5	5.7	6.0	6.3	6.7	7.0	8.5
72.5°	4.4	4.4	4.5	4.6	4.6	4.8	5.0	5.3	5.6	5.8	6.9
75°	3.8	3.8	3.8	3.8	3.8	3.9	4.1	4.3	4.5	4.7	5.4
77.5°	2.9	2.9	2.9	2.9	2.9	3.0	3.1	3.2	3.4	3.5	4.1
80°	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.4	2.5	2.6	2.9
82.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.7	1.7	2.0
85°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0
87.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P273346

CATALOG NUMBER: 0.03-1W-840-25-ID-STD-UNV-AN-3F0

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	311.6	311.6	311.6	311.6	311.6	311.6	311.6	311.6
0.5°	311.4	311.5	311.6	311.6	311.6	311.6	311.6	311.6
1°	311.0	311.1	311.3	311.4	311.4	311.5	311.6	311.6
1.5°	310.2	310.5	310.7	310.8	310.9	311.1	311.2	311.3
2°	309.3	309.7	310.0	310.3	310.5	310.8	311.1	311.3
2.5°	308.4	309.0	309.6	310.0	310.2	310.5	310.8	311.0
3°	306.9	307.7	308.6	309.2	309.6	310.0	310.4	310.7
3.5°	305.4	306.5	307.6	308.4	308.9	309.4	309.9	310.5
4°	303.8	305.2	306.6	307.6	308.2	308.9	309.5	310.2
4.5°	301.9	303.5	305.2	306.5	307.2	308.0	308.8	309.6
5°	299.7	301.8	303.9	305.4	306.3	307.2	308.1	309.0
5.5°	297.4	300.0	302.5	304.3	305.3	306.3	307.4	308.4
6°	295.0	297.9	300.8	302.9	304.2	305.5	306.8	308.1
6.5°	292.4	295.8	299.2	301.5	303.0	304.4	305.8	307.2
7°	289.5	293.4	297.2	300.0	301.7	303.5	305.2	307.0
7.5°	286.7	290.9	295.2	298.3	300.3	302.2	304.1	306.1
8°	283.6	288.4	293.2	296.7	298.9	301.1	303.3	305.5
8.5°	280.3	285.6	290.9	294.8	297.3	299.9	302.4	304.9
9°	277.1	283.0	288.9	293.2	295.9	298.6	301.3	304.0
9.5°	273.8	280.2	286.6	291.3	294.2	297.2	300.2	303.2
10°	270.1	277.2	284.2	289.4	292.8	296.2	299.5	302.9
10.5°	266.4	274.1	281.9	287.5	291.2	294.9	298.6	302.3
11°	262.8	271.0	279.3	285.4	289.5	293.6	297.6	301.7
11.5°	259.0	267.8	276.6	283.2	287.6	292.0	296.4	300.8
12°	255.2	264.6	274.0	281.1	285.9	290.7	295.5	300.3
12.5°	251.1	261.2	271.3	278.9	284.0	289.2	294.3	299.4
13°	247.2	257.8	268.5	276.5	281.9	287.4	292.8	298.2
13.5°	243.3	254.4	265.6	274.0	279.8	285.5	291.3	297.1
14°	239.3	250.8	262.4	271.3	277.5	283.6	289.7	295.9
14.5°	235.3	247.5	259.5	268.8	275.3	281.8	288.3	294.7
15°	231.3	243.8	256.4	266.1	272.9	279.7	286.5	293.3
16°	223.1	236.5	249.9	260.4	267.9	275.5	283.1	290.6
17°	214.9	229.1	243.4	254.6	262.8	271.0	279.2	287.4
18°	206.4	221.4	236.5	248.5	257.5	266.5	275.5	284.5
19°	198.3	214.1	229.8	242.5	252.1	261.8	271.4	281.0
20°	190.3	206.6	222.8	236.1	246.5	256.8	267.2	277.5
22.5°	171.2	188.3	205.5	220.0	231.9	243.8	255.7	267.6
25°	153.2	170.7	188.4	203.8	217.0	230.2	243.4	256.6
27.5°	136.6	154.1	171.5	187.3	201.4	215.5	229.7	243.8
30°	121.4	138.4	155.5	171.4	186.3	201.2	216.1	230.9
32.5°	107.5	123.8	140.1	155.8	171.0	186.1	201.2	216.4
35°	94.9	110.3	125.7	140.8	155.5	170.3	185.0	199.8
37.5°	83.3	97.6	111.9	126.2	140.4	154.6	168.7	182.9
40°	73.0	86.2	99.4	112.6	125.9	139.2	152.4	165.7
42.5°	64.0	76.0	88.0	100.1	112.1	124.2	136.2	148.2





TEST NUMBER: P273346

CATALOG NUMBER: 0.03-1W-840-25-ID-STD-UNV-AN-3F0

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
45°	55.7	66.5	77.3	88.0	98.7	109.4	120.1	130.8
47.5°	48.3	57.9	67.4	76.8	85.9	95.0	104.2	113.3
50°	41.6	50.0	58.4	66.4	74.1	81.7	89.3	97.0
52.5°	35.6	42.8	50.0	56.8	63.1	69.4	75.8	82.1
55°	30.5	36.6	42.7	48.3	53.4	58.5	63.6	68.7
57.5°	25.8	30.9	35.9	40.5	44.5	48.5	52.5	56.5
60°	21.8	26.0	30.2	33.8	36.9	39.9	43.0	46.0
62.5°	18.4	21.8	25.1	27.9	30.2	32.4	34.7	37.0
65°	15.2	17.9	20.5	22.7	24.4	26.0	27.7	29.4
67.5°	12.5	14.5	16.5	18.1	19.3	20.6	21.8	23.0
70°	10.1	11.6	13.2	14.4	15.2	16.1	16.9	17.8
72.5°	8.0	9.1	10.2	11.1	11.7	12.4	13.0	13.7
75°	6.2	7.0	7.8	8.4	8.8	9.3	9.7	10.2
77.5°	4.7	5.2	5.8	6.2	6.5	6.8	7.0	7.3
80°	3.3	3.6	3.9	4.2	4.5	4.7	5.0	5.2
82.5°	2.1	2.3	2.5	2.7	2.8	2.9	3.1	3.2
85°	1.1	1.3	1.4	1.5	1.5	1.6	1.7	1.7
87.5°	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)