

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: P273341

Luminaire Tested: **0.03-1W-835-25-ID-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273341
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-835-25-ID-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES .75 LINEAR LED LUMINAIRE, 25 DEGREE OPTIC.
STANDARD OUTPUT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 290.5 lumens
Efficiency: N/A
Efficacy: 38.7 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

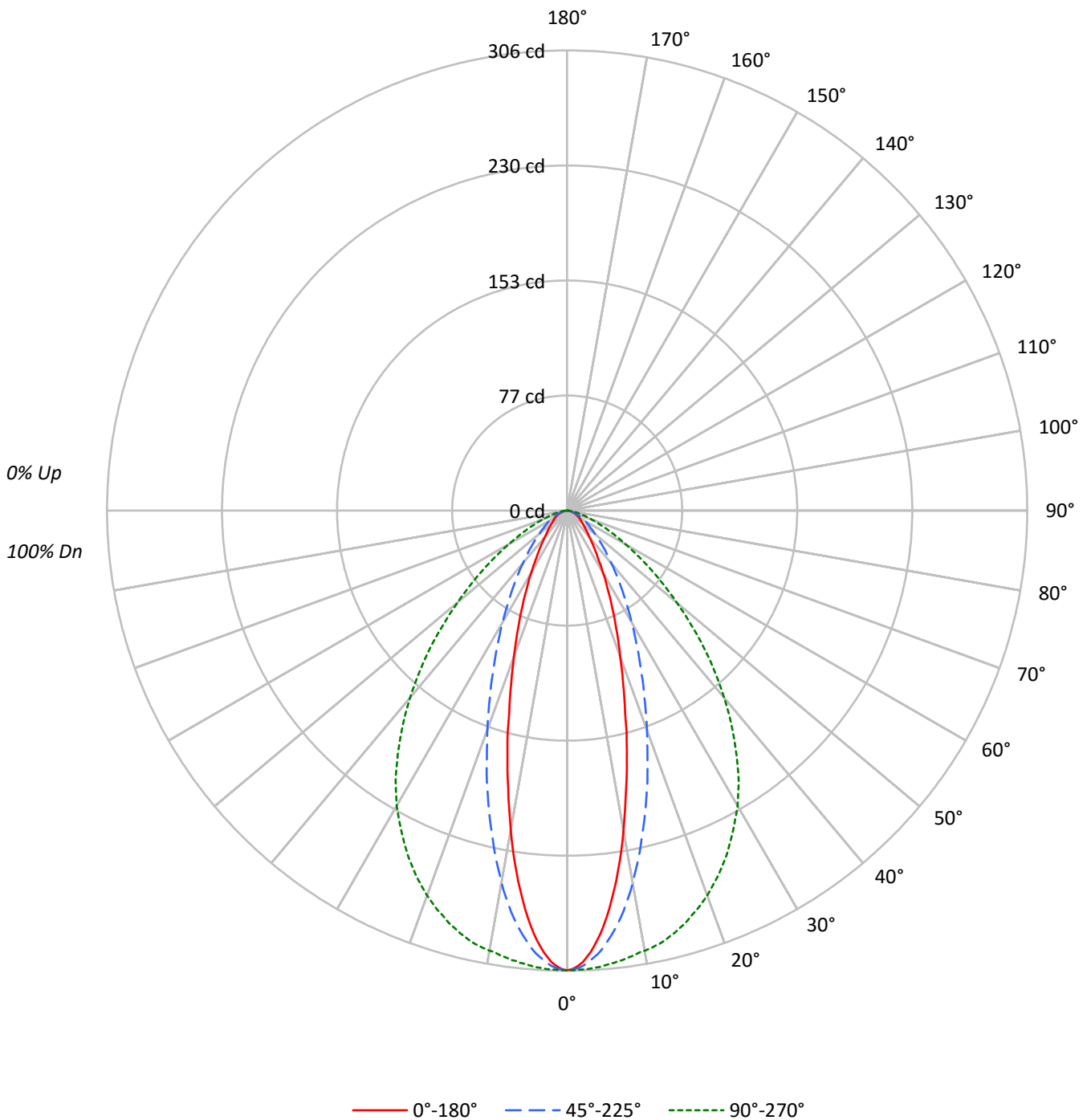
Input Watts (W): 7.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	24068	24068	24068
5°	21923	22919	23962
10°	17244	20082	23760
15°	12438	16489	23450
20°	8663	12978	22814
25°	6133	10051	21865
30°	4336	7791	20600
35°	3133	6045	18838
40°	2374	4697	16711
45°	1937	3719	14285
50°	1641	2976	11648
55°	1496	2471	9251
60°	1401	2063	7101
65°	1323	1807	5384
70°	1174	1588	4005
75°	1126	1399	3042
80°	907	1179	2312
85°	813	813	1536



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.5	9.1
10°-20°	58.7	20.2
20°-30°	63.4	21.8
30°-40°	54.4	18.7
40°-50°	40.2	13.8
50°-60°	25.7	8.8
60°-70°	14.2	4.9
70°-80°	6.2	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°	148.5	51.1
0°-40°	202.9	69.8
0°-60°	268.7	92.5
0°-90°	290.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	290.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	306	306	306	306	306	
5°	277	281	290	299	303	24
15°	153	166	202	256	288	42
25°	71	82	116	192	252	33
35°	33	39	63	131	196	21
45°	17	20	33	81	128	14
55°	11	12	18	45	67	10
65°	7	7	10	21	29	7
75°	4	4	5	8	10	4
85°	1	1	1	1	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	305.7	305.7	305.7	305.7	305.7	305.7	305.7	305.7	305.7	305.7	305.7
0.5°	305.2	305.2	305.3	305.4	305.4	305.4	305.4	305.4	305.4	305.4	305.5
1°	304.0	304.1	304.1	304.2	304.3	304.4	304.5	304.6	304.8	304.9	305.0
1.5°	302.3	302.4	302.6	302.7	302.8	303.0	303.2	303.5	303.8	304.0	304.2
2°	300.3	300.4	300.6	300.7	300.8	301.1	301.5	302.0	302.4	302.9	303.2
2.5°	297.4	297.7	298.0	298.2	298.5	298.9	299.5	300.2	300.8	301.4	302.0
3°	294.3	294.6	294.9	295.2	295.6	296.1	297.0	297.8	298.6	299.4	300.3
3.5°	290.6	291.0	291.5	291.9	292.4	293.1	294.2	295.3	296.4	297.4	298.5
4°	286.6	287.1	287.6	288.1	288.6	289.6	291.1	292.5	294.0	295.4	296.8
4.5°	282.3	282.9	283.4	284.0	284.6	285.8	287.5	289.3	291.1	292.9	294.5
5°	277.4	278.1	278.8	279.5	280.2	281.6	283.7	285.8	287.9	290.0	292.0
5.5°	272.3	273.1	274.0	274.8	275.6	277.2	279.6	282.0	284.5	286.9	289.4
6°	266.6	267.6	268.6	269.6	270.6	272.6	275.4	278.1	280.9	283.7	286.6
6.5°	260.9	262.0	263.0	264.1	265.2	267.4	270.6	273.8	277.1	280.3	283.6
7°	254.9	256.1	257.3	258.5	259.7	262.1	265.7	269.4	273.0	276.6	280.3
7.5°	248.9	250.2	251.5	252.9	254.2	256.9	260.9	264.9	268.9	272.9	277.1
8°	242.3	243.8	245.2	246.7	248.1	251.1	255.5	260.0	264.4	268.9	273.6
8.5°	236.0	237.5	239.1	240.6	242.1	245.3	250.1	254.9	259.8	264.6	269.8
9°	229.4	231.1	232.8	234.4	236.0	239.5	244.7	249.9	255.1	260.3	266.1
9.5°	222.6	224.4	226.3	228.1	230.0	233.7	239.2	244.8	250.4	256.0	262.3
10°	215.7	217.7	219.7	221.6	223.6	227.5	233.4	239.4	245.2	251.2	258.1
10.5°	208.9	210.9	212.9	215.0	217.0	221.2	227.4	233.7	240.0	246.3	253.8
11°	202.0	204.4	206.7	209.1	211.4	215.8	222.3	228.8	235.2	241.7	249.8
11.5°	195.4	197.8	200.3	202.7	205.1	209.7	216.5	223.3	230.1	236.9	245.5
12°	188.9	191.4	193.8	196.3	198.8	203.6	210.7	217.8	224.9	232.0	241.2
12.5°	182.6	185.1	187.5	190.0	192.5	197.4	204.7	212.0	219.3	226.6	236.5
13°	176.3	178.8	181.4	183.9	186.5	191.5	199.1	206.6	214.2	221.7	232.1
13.5°	170.0	172.6	175.2	177.8	180.4	185.6	193.4	201.2	209.1	216.9	227.8
14°	164.0	166.6	169.2	171.8	174.4	179.8	187.8	195.9	204.0	212.0	223.4
14.5°	158.3	160.8	163.4	165.9	168.5	173.9	182.2	190.5	198.8	207.2	219.0
15°	152.6	155.2	157.8	160.4	163.0	168.5	177.0	185.4	193.8	202.3	214.6
16°	140.0	142.9	145.8	148.8	151.7	157.5	166.3	175.1	183.8	192.6	205.7
17°	130.0	132.9	135.7	138.6	141.4	147.3	156.2	165.1	174.0	182.9	196.8
18°	120.3	123.1	125.9	128.7	131.5	137.3	146.2	155.1	164.0	172.9	187.7
19°	111.4	114.2	116.9	119.6	122.4	128.2	137.1	146.0	154.8	163.7	179.2
20°	103.4	106.0	108.6	111.2	113.8	119.6	128.4	137.2	146.0	154.9	170.8
22.5°	85.4	87.8	90.1	92.5	94.8	100.3	108.8	117.3	125.8	134.3	151.1
25°	70.6	72.7	74.9	77.1	79.2	84.2	92.1	100.0	107.8	115.7	133.0
27.5°	58.0	60.0	61.9	63.9	65.9	70.5	77.8	85.1	92.4	99.7	116.9
30°	47.7	49.4	51.1	52.9	54.6	58.8	65.5	72.3	79.0	85.7	102.4
32.5°	39.1	40.7	42.2	43.7	45.2	49.1	55.1	61.2	67.3	73.4	89.4
35°	32.6	33.8	35.1	36.4	37.7	41.0	46.5	51.9	57.4	62.9	78.0
37.5°	27.4	28.5	29.5	30.5	31.5	34.4	39.2	44.1	48.9	53.7	67.7
40°	23.1	24.0	24.9	25.8	26.7	29.2	33.3	37.5	41.6	45.7	58.7
42.5°	20.0	20.6	21.3	21.9	22.5	24.7	28.3	31.9	35.5	39.1	50.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
45°	17.4	17.9	18.5	18.9	19.5	21.2	24.3	27.3	30.4	33.4	44.0
47.5°	15.1	15.6	16.0	16.5	16.9	18.4	20.9	23.5	26.0	28.6	38.0
50°	13.4	13.7	14.1	14.4	14.7	15.9	18.0	20.1	22.2	24.3	32.5
52.5°	12.0	12.3	12.5	12.8	13.0	14.0	15.7	17.4	19.1	20.9	27.9
55°	10.9	11.1	11.2	11.4	11.6	12.4	13.8	15.2	16.6	18.0	24.0
57.5°	10.0	10.1	10.1	10.2	10.3	10.9	12.0	13.1	14.3	15.4	20.4
60°	8.9	8.9	9.0	9.1	9.1	9.6	10.5	11.4	12.3	13.1	17.3
62.5°	8.0	8.1	8.1	8.2	8.3	8.6	9.3	10.0	10.7	11.4	14.7
65°	7.1	7.1	7.1	7.1	7.1	7.4	8.0	8.6	9.1	9.7	12.3
67.5°	6.3	6.3	6.3	6.3	6.3	6.5	6.9	7.4	7.8	8.3	10.3
70°	5.1	5.2	5.3	5.3	5.4	5.6	5.9	6.2	6.5	6.9	8.4
72.5°	4.3	4.3	4.4	4.5	4.5	4.7	4.9	5.2	5.5	5.7	6.8
75°	3.7	3.7	3.7	3.7	3.7	3.8	4.0	4.2	4.4	4.6	5.3
77.5°	2.9	2.9	2.9	2.9	2.9	2.9	3.1	3.2	3.3	3.4	4.0
80°	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.3	2.5	2.6	2.9
82.5°	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.6	1.7	1.7	1.9
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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	305.7	305.7	305.7	305.7	305.7	305.7	305.7	305.7
0.5°	305.6	305.6	305.7	305.7	305.7	305.7	305.7	305.7
1°	305.1	305.2	305.4	305.5	305.5	305.6	305.7	305.7
1.5°	304.4	304.6	304.8	304.9	305.1	305.2	305.3	305.4
2°	303.5	303.8	304.1	304.4	304.7	304.9	305.2	305.4
2.5°	302.6	303.2	303.7	304.1	304.4	304.6	304.9	305.2
3°	301.1	301.9	302.8	303.4	303.7	304.1	304.5	304.9
3.5°	299.6	300.7	301.8	302.6	303.1	303.6	304.1	304.6
4°	298.1	299.4	300.8	301.8	302.4	303.0	303.7	304.3
4.5°	296.2	297.8	299.5	300.7	301.4	302.2	303.0	303.7
5°	294.1	296.1	298.1	299.6	300.5	301.4	302.3	303.2
5.5°	291.8	294.3	296.8	298.5	299.5	300.6	301.6	302.6
6°	289.4	292.3	295.2	297.2	298.5	299.8	301.0	302.3
6.5°	286.9	290.2	293.5	295.8	297.2	298.6	300.0	301.4
7°	284.1	287.8	291.6	294.3	296.0	297.7	299.4	301.2
7.5°	281.2	285.4	289.6	292.7	294.6	296.5	298.4	300.3
8°	278.3	283.0	287.7	291.1	293.2	295.4	297.6	299.7
8.5°	275.0	280.2	285.4	289.2	291.7	294.2	296.7	299.2
9°	271.8	277.6	283.4	287.6	290.3	293.0	295.6	298.3
9.5°	268.6	274.9	281.2	285.8	288.7	291.6	294.5	297.4
10°	265.0	271.9	278.8	284.0	287.2	290.6	293.8	297.2
10.5°	261.4	269.0	276.5	282.1	285.7	289.4	293.0	296.6
11°	257.8	265.9	274.0	280.0	284.0	288.0	292.0	296.0
11.5°	254.1	262.8	271.4	277.9	282.2	286.5	290.8	295.2
12°	250.4	259.6	268.8	275.8	280.5	285.2	289.9	294.6
12.5°	246.4	256.3	266.2	273.7	278.7	283.7	288.7	293.7
13°	242.6	253.0	263.4	271.2	276.6	281.9	287.2	292.6
13.5°	238.7	249.6	260.6	268.8	274.5	280.1	285.8	291.4
14°	234.8	246.1	257.5	266.2	272.2	278.2	284.3	290.3
14.5°	230.9	242.8	254.6	263.8	270.1	276.5	282.8	289.2
15°	226.9	239.2	251.6	261.1	267.7	274.4	281.1	287.7
16°	218.9	232.0	245.2	255.4	262.9	270.3	277.7	285.2
17°	210.8	224.8	238.8	249.8	257.8	265.9	274.0	282.0
18°	202.5	217.2	232.0	243.8	252.7	261.5	270.3	279.2
19°	194.6	210.0	225.4	237.9	247.4	256.8	266.3	275.7
20°	186.8	202.7	218.6	231.7	241.8	252.0	262.1	272.3
22.5°	168.0	184.8	201.6	215.8	227.5	239.2	250.9	262.6
25°	150.3	167.5	184.8	199.9	212.9	225.8	238.8	251.7
27.5°	134.0	151.2	168.3	183.8	197.6	211.5	225.3	239.2
30°	119.1	135.8	152.5	168.2	182.8	197.4	212.0	226.6
32.5°	105.4	121.4	137.4	152.9	167.7	182.6	197.4	212.3
35°	93.1	108.2	123.3	138.1	152.6	167.1	181.5	196.0
37.5°	81.8	95.8	109.8	123.8	137.7	151.6	165.5	179.4
40°	71.6	84.6	97.5	110.5	123.5	136.6	149.6	162.6
42.5°	62.8	74.6	86.4	98.2	110.0	121.8	133.6	145.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
45°	54.6	65.2	75.8	86.4	96.9	107.4	117.8	128.3
47.5°	47.4	56.8	66.2	75.3	84.3	93.2	102.2	111.2
50°	40.8	49.1	57.3	65.2	72.7	80.2	87.7	95.1
52.5°	34.9	42.0	49.1	55.7	61.9	68.1	74.3	80.6
55°	29.9	35.9	41.9	47.4	52.4	57.4	62.4	67.4
57.5°	25.3	30.3	35.2	39.7	43.6	47.5	51.5	55.4
60°	21.4	25.5	29.7	33.2	36.2	39.2	42.2	45.1
62.5°	18.0	21.3	24.6	27.4	29.6	31.8	34.1	36.3
65°	14.9	17.5	20.1	22.3	23.9	25.5	27.2	28.9
67.5°	12.2	14.2	16.2	17.7	18.9	20.2	21.4	22.6
70°	9.9	11.4	12.9	14.1	14.9	15.8	16.6	17.4
72.5°	7.9	8.9	10.0	10.9	11.5	12.2	12.8	13.4
75°	6.1	6.9	7.6	8.2	8.7	9.1	9.5	10.0
77.5°	4.6	5.1	5.7	6.1	6.4	6.6	6.9	7.1
80°	3.2	3.5	3.8	4.1	4.4	4.6	4.9	5.1
82.5°	2.1	2.3	2.5	2.6	2.8	2.9	3.0	3.1
85°	1.1	1.2	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)