

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: P273361

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273361
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: 0.03-3W-835-25-ID-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES .75 LINEAR LED LUMINAIRE, 25 DEGREE OPTIC.
HIGH OUTPUT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 698.8 lumens
Efficiency: N/A
Efficacy: 55.9 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

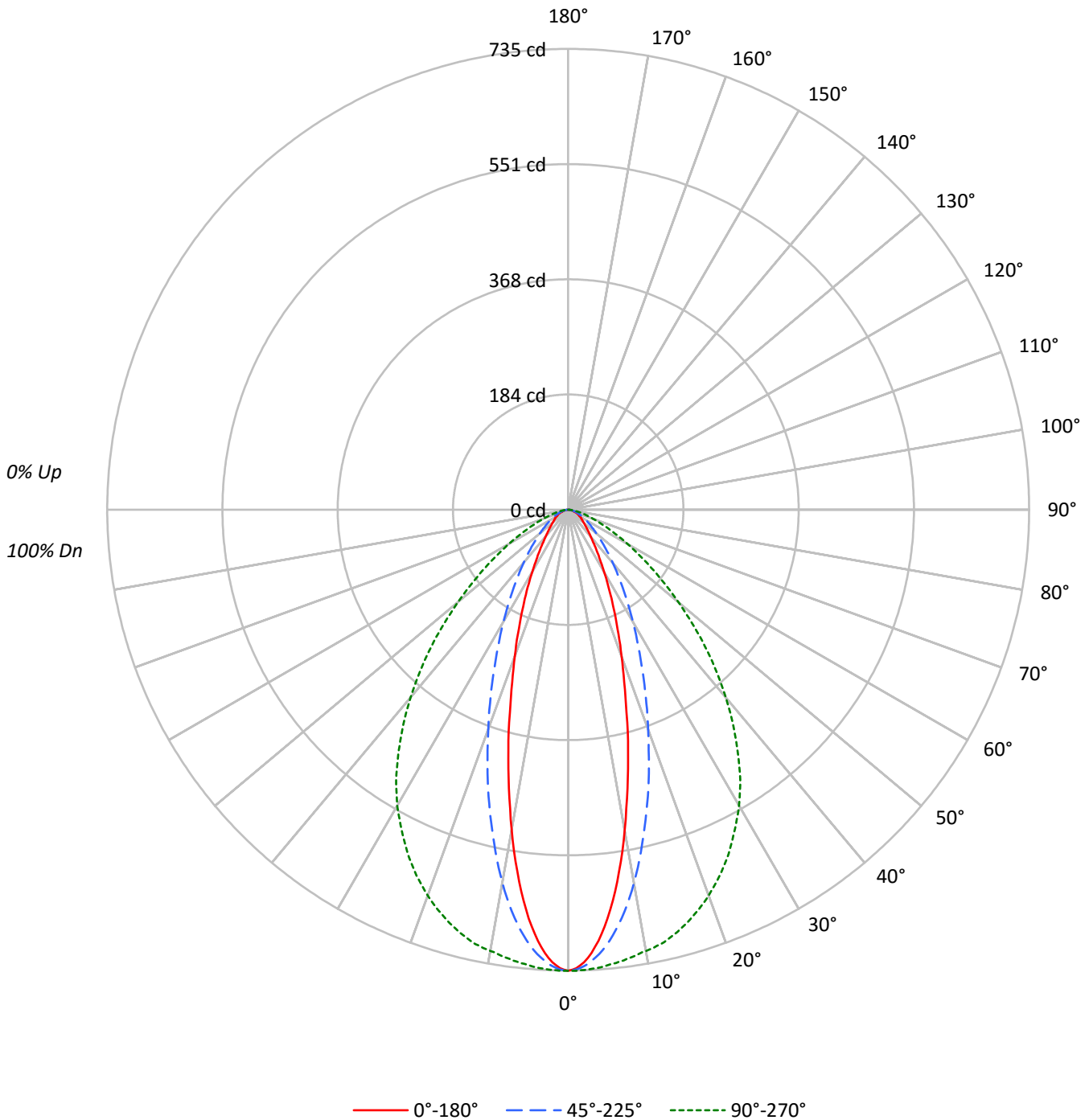
Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	57898	57898	57898
5°	52737	55132	57629
10°	41483	48295	57145
15°	29913	39662	56411
20°	20845	31209	54878
25°	14750	24176	52599
30°	10436	18746	49546
35°	7526	14532	45317
40°	5725	11305	40195
45°	4665	8952	34360
50°	3956	7153	28036
55°	3583	5943	22264
60°	3354	4976	17100
65°	3204	4359	12929
70°	2854	3798	9645
75°	2707	3346	7331
80°	2176	2811	5622
85°	1897	1897	3704



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.7	9.1
10°-20°	141.1	20.2
20°-30°	152.4	21.8
30°-40°	130.8	18.7
40°-50°	96.7	13.8
50°-60°	61.8	8.8
60°-70°	34.1	4.9
70°-80°	15.0	2.1
80°-90°	3.2	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°	357.3	51.1
0°-40°	488.0	69.8
0°-60°	646.4	92.5
0°-90°	698.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	698.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	735	735	735	735	735	
5°	667	676	698	719	729	59
15°	367	399	487	617	692	101
25°	170	197	278	463	606	79
35°	78	95	151	314	472	50
45°	42	49	80	195	309	33
55°	26	29	43	107	162	24
65°	17	18	23	51	69	17
75°	9	9	11	19	24	9
85°	2	2	2	3	4	2
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°	735.4	735.4	735.4	735.4	735.4	735.4	735.4	735.4	735.4	735.4	735.4
0.5°	734.0	734.1	734.3	734.5	734.6	734.7	734.7	734.7	734.7	734.7	734.8
1°	731.3	731.4	731.5	731.7	731.9	732.1	732.4	732.7	733.0	733.3	733.6
1.5°	727.1	727.4	727.8	728.0	728.4	728.8	729.4	730.0	730.6	731.3	731.7
2°	722.3	722.6	722.9	723.2	723.6	724.3	725.3	726.4	727.4	728.5	729.3
2.5°	715.5	716.1	716.7	717.3	717.9	719.0	720.5	722.1	723.6	725.1	726.5
3°	707.9	708.7	709.4	710.2	710.9	712.3	714.3	716.3	718.3	720.3	722.3
3.5°	699.0	700.1	701.1	702.2	703.2	705.1	707.7	710.2	712.8	715.5	718.1
4°	689.3	690.6	691.8	693.0	694.2	696.6	700.1	703.6	707.1	710.6	713.9
4.5°	679.0	680.4	681.8	683.2	684.5	687.3	691.6	695.9	700.2	704.5	708.4
5°	667.3	669.0	670.7	672.4	674.1	677.4	682.5	687.5	692.6	697.6	702.5
5.5°	655.0	657.0	659.0	661.0	662.9	666.8	672.6	678.4	684.3	690.0	696.0
6°	641.2	643.7	646.1	648.6	651.0	655.6	662.3	669.0	675.7	682.5	689.3
6.5°	627.5	630.1	632.7	635.2	637.9	643.1	650.9	658.6	666.5	674.2	682.2
7°	613.1	615.9	618.8	621.8	624.7	630.4	639.2	647.9	656.6	665.3	674.3
7.5°	598.6	601.8	605.0	608.2	611.5	617.9	627.5	637.1	646.7	656.3	666.5
8°	582.8	586.3	589.8	593.3	596.8	604.0	614.6	625.4	636.0	646.7	658.0
8.5°	567.7	571.3	575.0	578.7	582.3	590.0	601.6	613.2	624.8	636.4	648.9
9°	551.9	555.9	559.9	563.8	567.8	576.0	588.5	601.1	613.6	626.1	640.0
9.5°	535.4	539.8	544.3	548.7	553.1	562.1	575.5	588.9	602.3	615.8	630.9
10°	518.9	523.6	528.4	533.1	537.9	547.3	561.5	575.7	589.9	604.1	620.7
10.5°	502.4	507.3	512.2	517.0	521.9	532.0	547.1	562.2	577.3	592.4	610.6
11°	485.9	491.5	497.2	502.9	508.5	519.1	534.7	550.3	565.8	581.4	600.8
11.5°	470.1	475.9	481.7	487.5	493.3	504.4	520.7	537.0	553.4	569.8	590.5
12°	454.3	460.3	466.2	472.2	478.1	489.6	506.7	523.8	541.0	558.1	580.2
12.5°	439.2	445.1	451.1	457.0	463.0	474.8	492.3	509.9	527.4	545.0	568.9
13°	424.0	430.2	436.3	442.4	448.5	460.6	478.8	497.0	515.2	533.3	558.3
13.5°	408.9	415.2	421.4	427.7	433.9	446.5	465.3	484.0	502.9	521.6	547.9
14°	394.5	400.8	407.0	413.3	419.5	432.4	451.7	471.2	490.6	510.0	537.3
14.5°	380.8	386.9	393.0	399.1	405.2	418.3	438.3	458.3	478.3	498.3	526.9
15°	367.0	373.3	379.5	385.8	392.0	405.4	425.6	446.0	466.2	486.6	516.2
16°	336.8	343.8	350.8	357.9	364.9	378.9	400.0	421.1	442.1	463.2	494.8
17°	312.7	319.6	326.5	333.3	340.2	354.4	375.7	397.1	418.5	439.9	473.5
18°	289.3	296.1	302.8	309.5	316.2	330.3	351.7	373.1	394.4	415.8	451.4
19°	268.0	274.6	281.2	287.8	294.3	308.3	329.7	351.1	372.4	393.8	430.9
20°	248.8	255.0	261.3	267.6	273.8	287.6	308.8	330.0	351.3	372.5	410.9
22.5°	205.5	211.1	216.8	222.5	228.1	241.2	261.6	282.1	302.5	323.0	363.5
25°	169.8	175.0	180.1	185.4	190.5	202.6	221.5	240.5	259.4	278.3	319.9
27.5°	139.5	144.3	149.0	153.7	158.5	169.6	187.1	204.7	222.3	239.9	281.1
30°	114.8	118.9	123.0	127.1	131.3	141.4	157.6	173.8	190.0	206.2	246.3
32.5°	94.2	97.8	101.5	105.2	108.8	118.0	132.6	147.3	162.0	176.6	215.1
35°	78.3	81.4	84.5	87.5	90.6	98.7	111.8	124.9	138.1	151.2	187.6
37.5°	66.0	68.5	70.9	73.3	75.7	82.7	94.4	106.0	117.6	129.2	163.0
40°	55.7	57.8	59.9	62.1	64.2	70.2	80.2	90.1	100.1	110.0	141.1
42.5°	48.1	49.6	51.1	52.7	54.2	59.3	68.0	76.8	85.4	94.2	122.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
45°	41.9	43.2	44.4	45.6	46.8	51.1	58.4	65.8	73.1	80.4	105.9
47.5°	36.4	37.5	38.6	39.7	40.7	44.3	50.4	56.5	62.6	68.7	91.3
50°	32.3	33.1	33.8	34.6	35.3	38.3	43.3	48.3	53.4	58.4	78.3
52.5°	28.9	29.5	30.1	30.7	31.3	33.7	37.8	41.9	46.0	50.2	67.1
55°	26.1	26.6	27.0	27.5	28.0	29.8	33.2	36.6	39.9	43.3	57.7
57.5°	24.1	24.2	24.3	24.5	24.7	26.1	28.9	31.6	34.4	37.1	49.0
60°	21.3	21.4	21.6	21.8	21.9	23.1	25.2	27.4	29.5	31.6	41.5
62.5°	19.2	19.4	19.5	19.7	19.9	20.8	22.5	24.1	25.8	27.5	35.5
65°	17.2	17.2	17.2	17.2	17.2	17.9	19.2	20.6	22.0	23.4	29.6
67.5°	15.1	15.1	15.1	15.1	15.1	15.7	16.7	17.8	18.8	19.9	24.7
70°	12.4	12.5	12.6	12.9	13.0	13.5	14.2	15.0	15.7	16.5	20.1
72.5°	10.3	10.4	10.6	10.8	10.9	11.3	11.9	12.5	13.1	13.7	16.4
75°	8.9	8.9	8.9	8.9	8.9	9.1	9.6	10.1	10.5	11.0	12.9
77.5°	6.9	6.9	6.9	6.9	6.9	7.0	7.4	7.6	8.0	8.2	9.6
80°	4.8	4.8	4.8	4.8	4.8	4.9	5.3	5.6	5.9	6.2	6.9
82.5°	3.4	3.4	3.4	3.4	3.4	3.5	3.6	3.8	4.0	4.1	4.6
85°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3
87.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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°	735.4	735.4	735.4	735.4	735.4	735.4	735.4	735.4
0.5°	735.0	735.2	735.3	735.4	735.4	735.4	735.4	735.4
1°	733.9	734.2	734.6	734.8	734.9	735.1	735.2	735.4
1.5°	732.2	732.6	733.1	733.5	733.8	734.1	734.4	734.7
2°	730.0	730.8	731.5	732.2	732.8	733.5	734.1	734.7
2.5°	727.8	729.2	730.6	731.5	732.2	732.8	733.4	734.0
3°	724.3	726.2	728.2	729.7	730.6	731.5	732.4	733.3
3.5°	720.7	723.2	725.8	727.8	729.0	730.2	731.4	732.6
4°	717.0	720.3	723.5	725.8	727.3	728.9	730.4	731.9
4.5°	712.4	716.3	720.3	723.2	725.1	726.9	728.7	730.6
5°	707.3	712.2	717.1	720.7	722.8	724.9	727.1	729.2
5.5°	701.9	707.9	713.9	718.1	720.5	722.9	725.4	727.8
6°	696.2	703.1	710.0	714.9	718.0	721.0	724.1	727.1
6.5°	690.1	698.1	706.0	711.6	715.0	718.3	721.7	725.1
7°	683.3	692.3	701.3	707.9	712.0	716.1	720.3	724.4
7.5°	676.5	686.6	696.7	704.0	708.6	713.2	717.7	722.3
8°	669.3	680.6	691.9	700.2	705.4	710.6	715.7	721.0
8.5°	661.4	674.0	686.5	695.7	701.7	707.7	713.6	719.6
9°	653.9	667.8	681.7	691.9	698.3	704.7	711.1	717.5
9.5°	646.0	661.2	676.3	687.3	694.4	701.4	708.4	715.5
10°	637.4	654.1	670.7	683.0	690.9	698.9	706.8	714.8
10.5°	628.8	646.9	665.1	678.5	687.3	696.0	704.7	713.4
11°	620.2	639.6	659.0	673.5	683.2	692.8	702.4	712.0
11.5°	611.3	632.1	652.8	668.4	678.8	689.2	699.6	710.0
12°	602.3	624.5	646.7	663.4	674.7	686.0	697.3	708.6
12.5°	592.6	616.5	640.3	658.3	670.3	682.4	694.4	706.5
13°	583.4	608.4	633.5	652.4	665.3	678.1	690.9	703.8
13.5°	574.2	600.5	626.7	646.7	660.3	673.8	687.4	701.0
14°	564.7	592.0	619.3	640.3	654.8	669.3	683.8	698.3
14.5°	555.4	584.0	612.5	634.4	649.7	665.0	680.3	695.5
15°	545.8	575.5	605.1	628.0	644.0	660.0	676.1	692.1
16°	526.5	558.1	589.7	614.4	632.3	650.2	668.0	685.9
17°	507.1	540.7	574.3	600.7	620.1	639.6	659.0	678.3
18°	487.0	522.5	558.1	586.5	607.8	629.0	650.2	671.5
19°	468.0	505.1	542.3	572.2	595.0	617.7	640.5	663.2
20°	449.2	487.5	525.8	557.2	581.6	606.1	630.5	655.0
22.5°	404.0	444.5	484.9	519.2	547.3	575.4	603.5	631.6
25°	361.4	402.9	444.5	480.9	512.0	543.2	574.4	605.5
27.5°	322.3	363.6	404.8	442.1	475.4	508.7	542.0	575.2
30°	286.5	326.7	366.9	404.5	439.7	474.8	509.9	545.0
32.5°	253.6	292.1	330.6	367.7	403.4	439.2	474.9	510.6
35°	223.9	260.3	296.6	332.2	367.0	401.9	436.6	471.5
37.5°	196.7	230.4	264.2	297.8	331.3	364.7	398.1	431.6
40°	172.3	203.4	234.6	265.8	297.1	328.4	359.7	391.1
42.5°	151.0	179.4	207.8	236.2	264.6	293.0	321.4	349.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
45°	131.4	156.9	182.4	207.8	233.0	258.2	283.4	308.6
47.5°	114.0	136.6	159.2	181.2	202.7	224.3	245.8	267.4
50°	98.1	118.0	137.9	156.8	174.8	192.8	210.9	228.9
52.5°	84.1	101.0	118.0	134.0	148.9	163.8	178.8	193.8
55°	72.0	86.4	100.8	114.0	126.0	138.1	150.1	162.2
57.5°	61.0	72.9	84.7	95.5	104.9	114.4	123.8	133.3
60°	51.5	61.4	71.3	79.9	87.1	94.2	101.4	108.6
62.5°	43.4	51.3	59.2	65.9	71.3	76.6	81.9	87.3
65°	35.9	42.1	48.4	53.5	57.5	61.4	65.4	69.4
67.5°	29.4	34.2	38.9	42.7	45.6	48.5	51.4	54.3
70°	23.8	27.5	31.1	34.0	35.9	37.9	39.9	41.9
72.5°	19.0	21.5	24.1	26.2	27.7	29.3	30.8	32.3
75°	14.6	16.5	18.4	19.8	20.8	21.9	23.0	24.1
77.5°	11.0	12.4	13.7	14.7	15.3	15.9	16.6	17.2
80°	7.7	8.5	9.2	9.9	10.5	11.1	11.8	12.4
82.5°	5.0	5.5	6.0	6.3	6.7	6.9	7.3	7.6
85°	2.7	3.0	3.3	3.5	3.6	3.8	4.0	4.1
87.5°	0.7	0.7	0.7	0.8	0.9	1.1	1.2	1.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)