

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: P273351

Luminaire Tested: **0.03-3W-827-25-ID-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P273351  
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-827-25-ID-STD-UNV-AN-3F0  
Description: iO LIGHTING SERIES .75 LINEAR LED LUMINAIRE, 25 DEGREE OPTIC.  
HIGH OUTPUT  
Light Source: 2700K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 628.2 lumens  
Efficiency: N/A  
Efficacy: 50.3 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

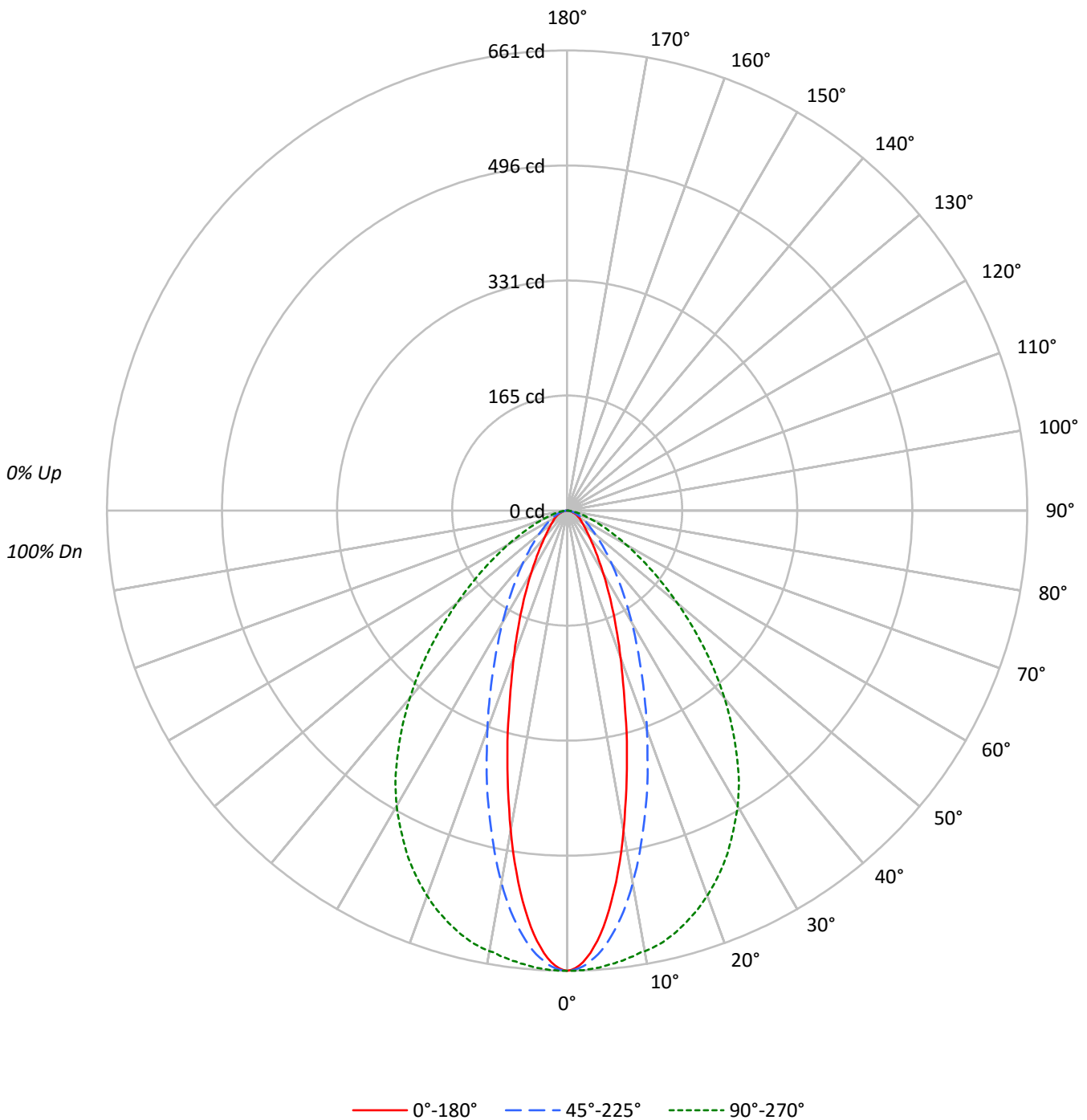
Input Watts (W): 12.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	52049	52049	52049
5°	47419	49568	51813
10°	37294	43418	51373
15°	26898	35660	50714
20°	18742	28059	49331
25°	13256	21735	47292
30°	9382	16855	44546
35°	6766	13062	40742
40°	5139	10164	36136
45°	4198	8050	30886
50°	3552	6430	25207
55°	3226	5339	20013
60°	3023	4472	15368
65°	2869	3912	11625
70°	2555	3407	8678
75°	2434	3011	6571
80°	1950	2539	5033
85°	1716	1716	3342



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.3	9.1
10°-20°	126.9	20.2
20°-30°	137.0	21.8
30°-40°	117.6	18.7
40°-50°	86.9	13.8
50°-60°	55.5	8.8
60°-70°	30.7	4.9
70°-80°	13.5	2.1
80°-90°	2.9	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°	321.2	51.1
0°-40°	438.7	69.8
0°-60°	581.2	92.5
0°-90°	628.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	628.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	661	661	661	661	661	
5°	600	608	627	646	656	53
15°	330	358	438	554	622	91
25°	153	177	250	416	544	71
35°	70	85	136	283	424	45
45°	38	44	72	175	277	29
55°	24	26	39	96	146	21
65°	15	16	21	46	62	15
75°	8	8	10	17	22	8
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°	661.1	661.1	661.1	661.1	661.1	661.1	661.1	661.1	661.1	661.1	661.1
0.5°	659.9	660.0	660.2	660.3	660.5	660.5	660.5	660.5	660.5	660.5	660.6
1°	657.4	657.6	657.7	657.9	658.0	658.2	658.5	658.7	659.0	659.3	659.5
1.5°	653.7	654.0	654.3	654.5	654.8	655.2	655.8	656.3	656.9	657.4	657.9
2°	649.4	649.6	650.0	650.2	650.5	651.1	652.1	653.0	654.0	655.0	655.6
2.5°	643.2	643.8	644.3	644.9	645.4	646.4	647.7	649.2	650.5	651.9	653.1
3°	636.4	637.1	637.8	638.5	639.1	640.4	642.2	644.0	645.8	647.5	649.3
3.5°	628.4	629.4	630.3	631.3	632.2	633.9	636.2	638.5	640.9	643.2	645.6
4°	619.7	620.9	622.0	623.0	624.1	626.3	629.4	632.6	635.7	638.9	641.8
4.5°	610.5	611.7	612.9	614.2	615.4	617.9	621.8	625.7	629.5	633.3	636.9
5°	600.0	601.5	603.0	604.5	606.0	609.1	613.6	618.1	622.6	627.2	631.5
5.5°	588.8	590.6	592.4	594.2	596.0	599.5	604.7	609.9	615.2	620.4	625.7
6°	576.5	578.7	580.9	583.1	585.3	589.4	595.5	601.5	607.5	613.6	619.7
6.5°	564.1	566.5	568.8	571.1	573.5	578.2	585.1	592.1	599.2	606.1	613.3
7°	551.2	553.8	556.3	559.0	561.6	566.8	574.6	582.5	590.3	598.1	606.2
7.5°	538.2	541.1	543.9	546.8	549.7	555.5	564.1	572.8	581.4	590.1	599.2
8°	524.0	527.1	530.3	533.4	536.6	543.0	552.6	562.2	571.8	581.4	591.6
8.5°	510.4	513.6	517.0	520.3	523.5	530.4	540.8	551.3	561.7	572.2	583.4
9°	496.2	499.7	503.3	506.9	510.4	517.9	529.1	540.4	551.6	562.9	575.4
9.5°	481.3	485.3	489.3	493.3	497.3	505.3	517.4	529.5	541.5	553.6	567.2
10°	466.5	470.8	475.0	479.3	483.6	492.0	504.8	517.6	530.3	543.1	558.1
10.5°	451.7	456.1	460.4	464.8	469.2	478.2	491.8	505.4	519.0	532.6	548.9
11°	436.8	441.9	447.0	452.1	457.2	466.7	480.7	494.7	508.7	522.7	540.2
11.5°	422.6	427.8	433.1	438.3	443.5	453.5	468.2	482.8	497.5	512.2	530.9
12°	408.4	413.8	419.1	424.5	429.9	440.2	455.6	471.0	486.3	501.7	521.6
12.5°	394.8	400.2	405.5	410.9	416.3	426.8	442.6	458.4	474.2	490.0	511.4
13°	381.2	386.7	392.2	397.7	403.2	414.1	430.5	446.8	463.2	479.5	502.0
13.5°	367.6	373.3	378.9	384.5	390.1	401.4	418.3	435.2	452.1	469.0	492.6
14°	354.7	360.3	365.9	371.5	377.2	388.7	406.1	423.6	441.0	458.5	483.1
14.5°	342.3	347.8	353.3	358.8	364.3	376.0	394.0	412.0	430.0	448.0	473.7
15°	330.0	335.6	341.2	346.8	352.4	364.4	382.7	400.9	419.2	437.5	464.1
16°	302.8	309.1	315.4	321.7	328.0	340.6	359.6	378.6	397.5	416.5	444.9
17°	281.1	287.3	293.5	299.7	305.9	318.6	337.8	357.0	376.2	395.4	425.7
18°	260.1	266.2	272.2	278.2	284.3	297.0	316.2	335.4	354.6	373.8	405.8
19°	241.0	246.9	252.8	258.7	264.6	277.2	296.4	315.6	334.8	354.0	387.4
20°	223.7	229.3	234.9	240.5	246.2	258.5	277.6	296.7	315.8	334.9	369.4
22.5°	184.7	189.8	194.9	200.0	205.1	216.8	235.2	253.6	272.0	290.4	326.8
25°	152.6	157.3	161.9	166.6	171.3	182.2	199.1	216.2	233.2	250.2	287.6
27.5°	125.4	129.7	134.0	138.2	142.5	152.5	168.3	184.1	199.8	215.6	252.7
30°	103.2	106.9	110.6	114.3	118.0	127.2	141.7	156.3	170.8	185.4	221.5
32.5°	84.7	87.9	91.3	94.5	97.8	106.1	119.3	132.4	145.6	158.8	193.4
35°	70.4	73.2	75.9	78.7	81.4	88.7	100.5	112.3	124.1	135.9	168.6
37.5°	59.3	61.5	63.7	65.9	68.1	74.4	84.8	95.3	105.7	116.2	146.5
40°	50.0	52.0	53.9	55.8	57.7	63.1	72.1	81.0	90.0	98.9	126.9
42.5°	43.3	44.6	46.0	47.4	48.8	53.3	61.2	69.0	76.8	84.7	110.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
45°	37.7	38.8	39.9	41.0	42.1	45.9	52.5	59.1	65.7	72.3	95.2
47.5°	32.7	33.7	34.7	35.7	36.6	39.8	45.3	50.8	56.3	61.8	82.1
50°	29.0	29.7	30.4	31.1	31.8	34.4	38.9	43.4	48.0	52.5	70.4
52.5°	26.0	26.5	27.1	27.6	28.2	30.3	34.0	37.7	41.4	45.1	60.4
55°	23.5	23.9	24.3	24.7	25.1	26.8	29.8	32.9	35.9	38.9	51.8
57.5°	21.6	21.7	21.9	22.1	22.2	23.5	26.0	28.4	30.9	33.4	44.1
60°	19.2	19.3	19.4	19.6	19.7	20.8	22.7	24.6	26.5	28.4	37.3
62.5°	17.3	17.4	17.5	17.7	17.9	18.7	20.2	21.7	23.2	24.7	31.9
65°	15.4	15.4	15.4	15.4	15.4	16.1	17.3	18.5	19.8	21.0	26.6
67.5°	13.6	13.6	13.6	13.6	13.6	14.1	15.0	16.0	16.9	17.9	22.2
70°	11.1	11.2	11.4	11.6	11.7	12.1	12.8	13.5	14.1	14.8	18.1
72.5°	9.3	9.4	9.5	9.7	9.8	10.1	10.7	11.2	11.8	12.4	14.7
75°	8.0	8.0	8.0	8.0	8.0	8.2	8.7	9.1	9.5	9.9	11.6
77.5°	6.2	6.2	6.2	6.2	6.2	6.3	6.6	6.9	7.2	7.4	8.7
80°	4.3	4.3	4.3	4.3	4.3	4.4	4.8	5.0	5.3	5.6	6.2
82.5°	3.1	3.1	3.1	3.1	3.1	3.2	3.3	3.5	3.6	3.7	4.1
85°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1
87.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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°	661.1	661.1	661.1	661.1	661.1	661.1	661.1	661.1
0.5°	660.8	661.0	661.1	661.1	661.1	661.1	661.1	661.1
1°	659.8	660.1	660.4	660.6	660.7	660.9	661.0	661.1
1.5°	658.2	658.7	659.1	659.4	659.7	660.0	660.3	660.5
2°	656.3	657.0	657.7	658.3	658.9	659.4	660.0	660.5
2.5°	654.3	655.6	656.8	657.7	658.2	658.8	659.3	659.9
3°	651.1	652.9	654.7	656.0	656.8	657.6	658.5	659.3
3.5°	647.9	650.2	652.6	654.3	655.4	656.4	657.6	658.7
4°	644.6	647.5	650.5	652.6	653.9	655.3	656.7	658.1
4.5°	640.5	644.0	647.6	650.2	651.9	653.5	655.1	656.8
5°	635.9	640.3	644.7	647.9	649.8	651.7	653.7	655.6
5.5°	631.0	636.4	641.8	645.6	647.7	650.0	652.1	654.3
6°	625.9	632.1	638.3	642.7	645.5	648.2	651.0	653.7
6.5°	620.4	627.6	634.7	639.8	642.8	645.8	648.8	651.9
7°	614.3	622.4	630.5	636.4	640.1	643.8	647.5	651.3
7.5°	608.2	617.3	626.4	632.9	637.0	641.2	645.3	649.4
8°	601.8	611.9	622.1	629.5	634.1	638.8	643.5	648.2
8.5°	594.7	606.0	617.2	625.5	630.9	636.2	641.6	646.9
9°	587.9	600.4	612.9	622.0	627.8	633.5	639.3	645.1
9.5°	580.8	594.4	608.0	617.9	624.3	630.6	636.9	643.2
10°	573.0	588.0	603.0	614.1	621.2	628.3	635.4	642.6
10.5°	565.3	581.6	598.0	610.0	617.9	625.7	633.5	641.4
11°	557.6	575.1	592.5	605.5	614.2	622.8	631.5	640.1
11.5°	549.5	568.3	586.9	601.0	610.3	619.6	628.9	638.3
12°	541.5	561.5	581.4	596.4	606.6	616.7	626.9	637.0
12.5°	532.8	554.2	575.7	591.8	602.6	613.5	624.3	635.2
13°	524.5	547.0	569.6	586.6	598.1	609.7	621.2	632.7
13.5°	516.2	539.8	563.5	581.4	593.6	605.8	618.0	630.2
14°	507.7	532.2	556.8	575.6	588.7	601.7	614.7	627.8
14.5°	499.3	525.0	550.7	570.4	584.1	597.9	611.6	625.3
15°	490.7	517.4	544.0	564.6	579.0	593.4	607.8	622.2
16°	473.3	501.7	530.1	552.4	568.5	584.5	600.6	616.7
17°	455.9	486.1	516.3	540.1	557.5	575.0	592.4	609.9
18°	437.8	469.8	501.8	527.3	546.4	565.5	584.6	603.7
19°	420.8	454.1	487.5	514.5	534.9	555.4	575.8	596.3
20°	403.9	438.3	472.7	501.0	522.9	544.9	566.8	588.8
22.5°	363.2	399.6	436.0	466.8	492.0	517.3	542.6	567.8
25°	324.9	362.3	399.6	432.3	460.3	488.3	516.4	544.4
27.5°	289.8	326.9	363.9	397.4	427.4	457.3	487.3	517.2
30°	257.6	293.7	329.8	363.7	395.3	426.8	458.4	490.0
32.5°	228.0	262.6	297.2	330.6	362.7	394.8	427.0	459.1
35°	201.3	234.0	266.7	298.6	330.0	361.3	392.5	423.9
37.5°	176.8	207.2	237.5	267.7	297.8	327.9	357.9	388.0
40°	154.9	182.9	210.9	239.0	267.1	295.3	323.4	351.6
42.5°	135.7	161.3	186.8	212.4	237.9	263.4	289.0	314.5





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
45°	118.1	141.1	164.0	186.8	209.5	232.1	254.8	277.4
47.5°	102.4	122.8	143.1	162.9	182.3	201.6	221.0	240.4
50°	88.2	106.1	123.9	140.9	157.1	173.4	189.6	205.8
52.5°	75.6	90.8	106.1	120.4	133.9	147.3	160.8	174.2
55°	64.8	77.7	90.6	102.4	113.3	124.1	134.9	145.8
57.5°	54.8	65.5	76.2	85.8	94.4	102.8	111.3	119.9
60°	46.3	55.2	64.1	71.8	78.3	84.7	91.2	97.6
62.5°	39.0	46.2	53.3	59.3	64.1	68.8	73.7	78.5
65°	32.3	37.9	43.5	48.1	51.7	55.2	58.8	62.4
67.5°	26.4	30.7	35.0	38.4	41.0	43.6	46.2	48.8
70°	21.4	24.7	28.0	30.5	32.3	34.1	35.9	37.7
72.5°	17.1	19.3	21.7	23.5	24.9	26.3	27.7	29.0
75°	13.2	14.8	16.5	17.8	18.7	19.7	20.6	21.6
77.5°	9.9	11.1	12.4	13.2	13.8	14.3	14.9	15.4
80°	6.9	7.6	8.3	8.9	9.5	10.0	10.6	11.1
82.5°	4.5	4.9	5.4	5.7	6.0	6.2	6.5	6.8
85°	2.4	2.7	3.0	3.2	3.3	3.5	3.6	3.7
87.5°	0.6	0.6	0.6	0.7	0.8	1.0	1.1	1.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)