

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: P273356

Luminaire Tested: **0.03-3W-830-25-ID-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273356
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-830-25-ID-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES .75 LINEAR LED LUMINAIRE, 25 DEGREE OPTIC.
HIGH OUTPUT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 671.9 lumens
Efficiency: N/A
Efficacy: 53.8 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

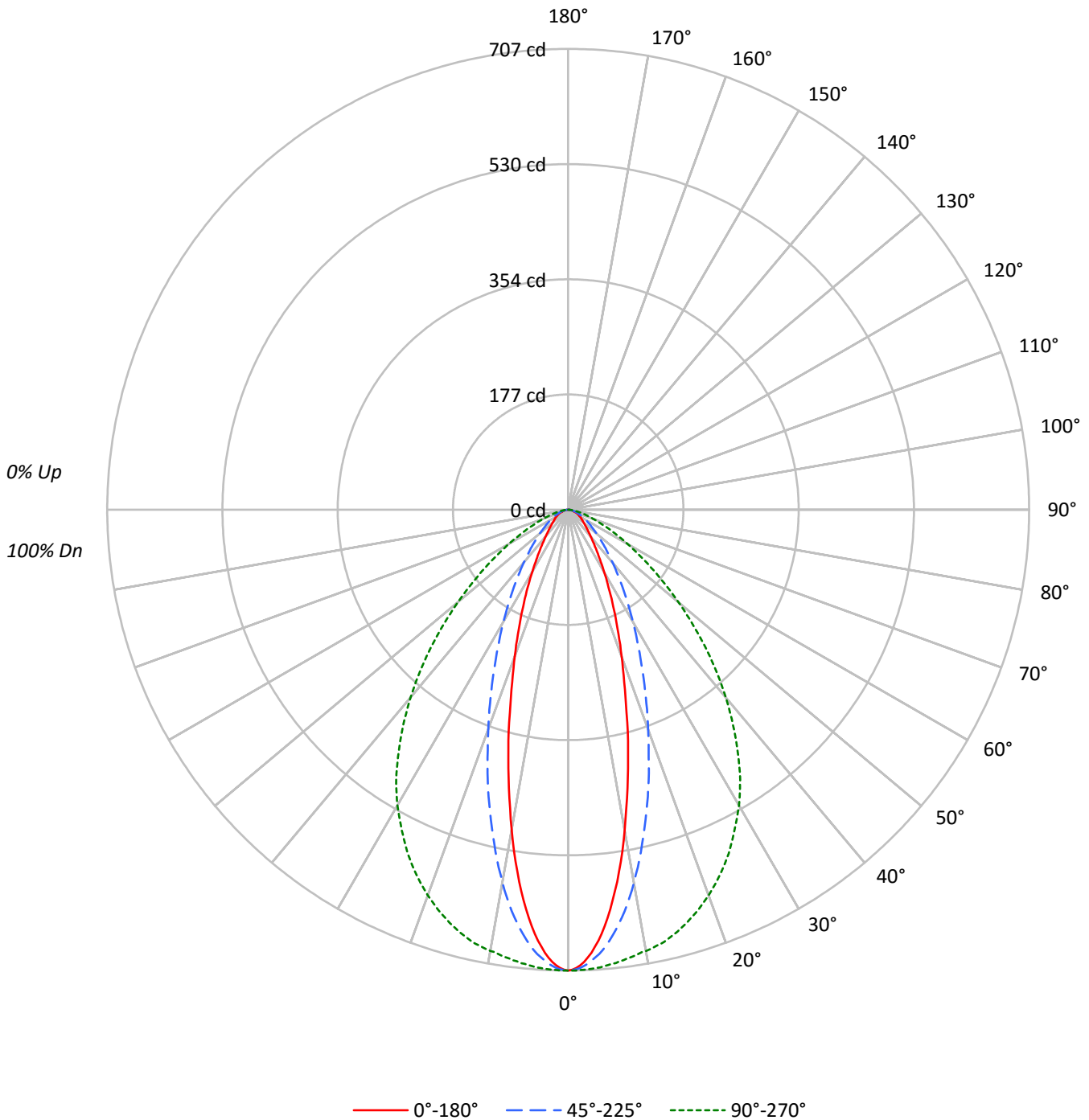
Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	55670	55670	55670
5°	50714	53014	55417
10°	39885	46440	54946
15°	28764	38137	54243
20°	20041	30011	52767
25°	14177	23246	50575
30°	10036	18027	47637
35°	7237	13975	43568
40°	5498	10863	38643
45°	4487	8607	33035
50°	3809	6884	26958
55°	3445	5710	21413
60°	3228	4787	16439
65°	3074	4192	12426
70°	2739	3660	9277
75°	2616	3224	7027
80°	2086	2675	5395
85°	1807	1807	3613



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.3	9.1
10°-20°	135.7	20.2
20°-30°	146.5	21.8
30°-40°	125.7	18.7
40°-50°	92.9	13.8
50°-60°	59.4	8.8
60°-70°	32.8	4.9
70°-80°	14.4	2.1
80°-90°	3.1	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°	343.5	51.1
0°-40°	469.2	69.8
0°-60°	621.6	92.5
0°-90°	671.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	671.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	707	707	707	707	707	
5°	642	650	671	691	701	57
15°	353	383	468	593	666	97
25°	163	189	268	445	582	76
35°	75	91	145	302	453	48
45°	40	47	77	188	297	31
55°	25	28	42	103	156	23
65°	16	17	22	49	67	16
75°	9	9	11	18	23	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°	707.1	707.1	707.1	707.1	707.1	707.1	707.1	707.1	707.1	707.1	707.1
0.5°	705.8	705.9	706.0	706.2	706.4	706.4	706.4	706.4	706.4	706.4	706.6
1°	703.1	703.3	703.4	703.6	703.7	703.9	704.3	704.5	704.9	705.1	705.4
1.5°	699.2	699.4	699.8	700.0	700.4	700.8	701.4	701.9	702.5	703.1	703.6
2°	694.5	694.8	695.1	695.4	695.7	696.4	697.4	698.4	699.4	700.5	701.2
2.5°	687.9	688.5	689.1	689.7	690.3	691.3	692.8	694.3	695.7	697.2	698.5
3°	680.7	681.4	682.1	682.8	683.6	684.9	686.8	688.7	690.6	692.6	694.5
3.5°	672.1	673.1	674.1	675.2	676.2	678.0	680.5	682.9	685.4	687.9	690.4
4°	662.8	664.0	665.2	666.3	667.5	669.8	673.2	676.6	679.9	683.3	686.4
4.5°	652.9	654.2	655.6	656.9	658.2	660.9	665.0	669.2	673.3	677.4	681.2
5°	641.7	643.3	644.9	646.5	648.2	651.4	656.2	661.0	665.9	670.8	675.4
5.5°	629.8	631.7	633.6	635.5	637.4	641.1	646.8	652.3	657.9	663.5	669.2
6°	616.6	618.9	621.3	623.6	625.9	630.4	636.9	643.3	649.7	656.2	662.8
6.5°	603.3	605.9	608.4	610.8	613.3	618.4	625.8	633.3	640.8	648.3	656.0
7°	589.5	592.2	595.0	597.9	600.6	606.2	614.6	623.0	631.3	639.7	648.4
7.5°	575.6	578.7	581.7	584.8	588.0	594.1	603.3	612.6	621.9	631.1	640.8
8°	560.4	563.8	567.1	570.5	573.9	580.7	591.0	601.3	611.5	621.9	632.7
8.5°	545.9	549.4	552.9	556.4	559.9	567.3	578.4	589.6	600.8	611.9	624.0
9°	530.7	534.5	538.3	542.1	545.9	553.9	565.9	578.0	590.0	602.0	615.4
9.5°	514.8	519.0	523.3	527.6	531.8	540.4	553.3	566.3	579.2	592.1	606.7
10°	498.9	503.5	508.1	512.6	517.2	526.2	539.9	553.6	567.2	580.9	596.9
10.5°	483.1	487.8	492.5	497.2	501.8	511.5	526.0	540.6	555.1	569.6	587.1
11°	467.2	472.6	478.1	483.5	489.0	499.1	514.1	529.1	544.1	559.1	577.7
11.5°	452.0	457.6	463.2	468.7	474.4	485.0	500.7	516.4	532.1	547.8	567.8
12°	436.8	442.6	448.2	454.0	459.7	470.8	487.2	503.7	520.1	536.6	557.9
12.5°	422.3	428.0	433.7	439.5	445.2	456.5	473.4	490.3	507.1	524.0	547.0
13°	407.7	413.6	419.5	425.4	431.3	442.9	460.4	477.9	495.4	512.8	536.9
13.5°	393.2	399.2	405.2	411.2	417.3	429.3	447.4	465.4	483.5	501.6	526.8
14°	379.3	385.3	391.4	397.4	403.4	415.7	434.4	453.1	471.7	490.3	516.6
14.5°	366.1	372.0	377.9	383.8	389.6	402.2	421.4	440.6	459.9	479.1	506.6
15°	352.9	358.9	364.9	370.9	376.9	389.8	409.3	428.8	448.3	467.9	496.4
16°	323.8	330.6	337.3	344.1	350.8	364.3	384.6	404.9	425.1	445.4	475.8
17°	300.7	307.3	313.9	320.5	327.1	340.7	361.3	381.8	402.4	422.9	455.3
18°	278.2	284.7	291.2	297.6	304.1	317.6	338.2	358.7	379.3	399.8	434.0
19°	257.7	264.1	270.4	276.7	283.0	296.5	317.0	337.6	358.1	378.7	414.3
20°	239.2	245.2	251.3	257.3	263.3	276.5	296.9	317.3	337.8	358.2	395.1
22.5°	197.6	203.0	208.4	213.9	219.3	231.9	251.6	271.2	290.9	310.6	349.5
25°	163.2	168.3	173.2	178.2	183.2	194.8	213.0	231.2	249.4	267.6	307.6
27.5°	134.2	138.7	143.3	147.8	152.4	163.1	179.9	196.9	213.7	230.6	270.3
30°	110.4	114.3	118.3	122.3	126.2	136.0	151.5	167.1	182.7	198.3	236.8
32.5°	90.5	94.0	97.6	101.1	104.6	113.5	127.5	141.6	155.8	169.8	206.8
35°	75.3	78.2	81.2	84.1	87.1	94.9	107.5	120.1	132.8	145.4	180.3
37.5°	63.4	65.8	68.1	70.5	72.8	79.6	90.7	101.9	113.1	124.2	156.7
40°	53.5	55.6	57.6	59.7	61.7	67.5	77.1	86.6	96.2	105.7	135.7
42.5°	46.3	47.7	49.2	50.7	52.1	57.0	65.4	73.8	82.1	90.5	117.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
45°	40.3	41.5	42.7	43.8	45.0	49.1	56.2	63.2	70.2	77.3	101.8
47.5°	35.0	36.1	37.1	38.1	39.1	42.6	48.4	54.3	60.2	66.1	87.8
50°	31.1	31.8	32.5	33.2	34.0	36.8	41.6	46.5	51.3	56.2	75.3
52.5°	27.8	28.4	28.9	29.5	30.1	32.4	36.3	40.3	44.3	48.2	64.6
55°	25.1	25.6	26.0	26.4	26.9	28.7	31.9	35.2	38.4	41.6	55.4
57.5°	23.1	23.3	23.4	23.6	23.7	25.1	27.8	30.4	33.0	35.7	47.1
60°	20.5	20.6	20.8	20.9	21.1	22.2	24.3	26.3	28.4	30.4	39.9
62.5°	18.5	18.6	18.8	19.0	19.1	20.0	21.6	23.2	24.8	26.4	34.1
65°	16.5	16.5	16.5	16.5	16.5	17.2	18.5	19.8	21.1	22.5	28.5
67.5°	14.5	14.5	14.5	14.5	14.5	15.1	16.1	17.1	18.1	19.2	23.7
70°	11.9	12.0	12.2	12.4	12.5	13.0	13.7	14.4	15.1	15.9	19.4
72.5°	9.9	10.0	10.2	10.4	10.5	10.8	11.4	12.0	12.6	13.2	15.7
75°	8.6	8.6	8.6	8.6	8.6	8.8	9.3	9.7	10.1	10.6	12.4
77.5°	6.6	6.6	6.6	6.6	6.6	6.7	7.1	7.3	7.7	7.9	9.3
80°	4.6	4.6	4.6	4.6	4.6	4.8	5.1	5.4	5.7	5.9	6.7
82.5°	3.3	3.3	3.3	3.3	3.3	3.4	3.5	3.7	3.8	4.0	4.4
85°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2
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°	707.1	707.1	707.1	707.1	707.1	707.1	707.1	707.1
0.5°	706.7	706.9	707.0	707.1	707.1	707.1	707.1	707.1
1°	705.7	706.0	706.3	706.5	706.6	706.8	707.0	707.1
1.5°	704.0	704.5	704.9	705.3	705.6	705.8	706.2	706.4
2°	701.9	702.7	703.4	704.1	704.7	705.3	705.8	706.4
2.5°	699.8	701.2	702.5	703.4	704.0	704.6	705.2	705.8
3°	696.4	698.3	700.2	701.6	702.5	703.3	704.3	705.1
3.5°	693.0	695.4	697.9	699.8	701.0	702.1	703.3	704.5
4°	689.5	692.6	695.7	697.9	699.4	700.9	702.3	703.8
4.5°	685.0	688.8	692.6	695.4	697.2	699.0	700.7	702.5
5°	680.1	684.8	689.5	693.0	695.0	697.1	699.1	701.2
5.5°	674.9	680.7	686.4	690.4	692.8	695.1	697.5	699.8
6°	669.4	676.0	682.6	687.4	690.4	693.3	696.3	699.2
6.5°	663.6	671.2	678.8	684.2	687.5	690.7	694.0	697.2
7°	657.0	665.7	674.3	680.7	684.6	688.6	692.6	696.5
7.5°	650.5	660.2	669.9	676.9	681.3	685.8	690.1	694.5
8°	643.6	654.4	665.3	673.3	678.2	683.2	688.2	693.2
8.5°	636.0	648.1	660.1	669.0	674.7	680.5	686.2	691.9
9°	628.7	642.1	655.5	665.3	671.4	677.6	683.8	689.9
9.5°	621.2	635.7	650.3	660.9	667.6	674.5	681.2	687.9
10°	612.9	628.9	644.9	656.7	664.3	672.0	679.6	687.3
10.5°	604.6	622.1	639.6	652.4	660.8	669.2	677.6	686.0
11°	596.3	615.0	633.7	647.6	656.9	666.1	675.4	684.6
11.5°	587.8	607.8	627.7	642.7	652.7	662.7	672.7	682.6
12°	579.2	600.5	621.8	637.8	648.7	659.6	670.5	681.3
12.5°	569.8	592.8	615.7	633.0	644.5	656.2	667.7	679.3
13°	561.0	585.0	609.2	627.3	639.7	652.1	664.3	676.7
13.5°	552.1	577.4	602.6	621.8	634.9	647.9	661.0	674.1
14°	542.9	569.2	595.5	615.6	629.6	643.5	657.5	671.4
14.5°	534.0	561.5	588.9	610.0	624.7	639.4	654.1	668.8
15°	524.8	553.3	581.8	603.8	619.2	634.6	650.1	665.5
16°	506.2	536.6	567.0	590.8	608.0	625.2	642.3	659.5
17°	487.6	519.9	552.2	577.6	596.3	615.0	633.6	652.3
18°	468.3	502.4	536.7	564.0	584.4	604.8	625.2	645.6
19°	450.0	485.7	521.4	550.2	572.1	594.0	615.8	637.7
20°	431.9	468.7	505.6	535.8	559.3	582.8	606.3	629.8
22.5°	388.4	427.4	466.3	499.2	526.2	553.3	580.3	607.3
25°	347.5	387.5	427.4	462.4	492.3	522.3	552.3	582.2
27.5°	309.9	349.6	389.2	425.1	457.1	489.1	521.1	553.1
30°	275.5	314.1	352.8	389.0	422.7	456.5	490.3	524.0
32.5°	243.9	280.9	317.9	353.6	387.9	422.3	456.6	491.0
35°	215.3	250.3	285.2	319.4	352.9	386.4	419.8	453.3
37.5°	189.1	221.6	254.0	286.3	318.5	350.7	382.8	415.0
40°	165.7	195.6	225.5	255.6	285.7	315.8	345.9	376.0
42.5°	145.2	172.5	199.8	227.1	254.4	281.7	309.1	336.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
45°	126.4	150.9	175.4	199.8	224.0	248.3	272.5	296.7
47.5°	109.6	131.3	153.1	174.3	194.9	215.6	236.4	257.1
50°	94.4	113.5	132.6	150.7	168.1	185.4	202.7	220.1
52.5°	80.8	97.1	113.5	128.8	143.2	157.5	172.0	186.4
55°	69.3	83.1	96.9	109.6	121.1	132.8	144.3	156.0
57.5°	58.6	70.0	81.5	91.8	100.9	110.0	119.1	128.2
60°	49.5	59.0	68.6	76.8	83.7	90.6	97.5	104.4
62.5°	41.7	49.4	57.0	63.4	68.5	73.6	78.8	83.9
65°	34.5	40.5	46.5	51.5	55.3	59.1	62.9	66.7
67.5°	28.3	32.8	37.4	41.0	43.8	46.7	49.4	52.2
70°	22.9	26.4	29.9	32.6	34.6	36.5	38.4	40.3
72.5°	18.2	20.7	23.2	25.2	26.6	28.2	29.6	31.1
75°	14.1	15.9	17.6	19.0	20.0	21.1	22.1	23.1
77.5°	10.6	11.9	13.2	14.1	14.7	15.3	15.9	16.5
80°	7.4	8.1	8.9	9.5	10.1	10.7	11.3	11.9
82.5°	4.8	5.3	5.7	6.1	6.4	6.7	7.0	7.3
85°	2.6	2.8	3.2	3.4	3.5	3.7	3.8	4.0
87.5°	0.7	0.7	0.7	0.7	0.9	1.1	1.2	1.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)