

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: P273355

Luminaire Tested: **0.03-3W-830-10-ID-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P273355  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (ITL89171-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-830-10-ID-STD-UNV-AN-3F0  
Description: iO LIGHTING SERIES .75 LINEAR LED LUMINAIRE, 10 DEGREE OPTIC.  
HIGH OUTPUT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 566.8 lumens  
Efficiency: N/A  
Efficacy: 45.3 lumens/watt  
Spacing Criteria (0/90/45): 0.37 / 0.89 / 0.57  
Luminous Opening: Rectangular (W 2.92' x L: 0.05' x H: 0')  
CIE Type: Direct

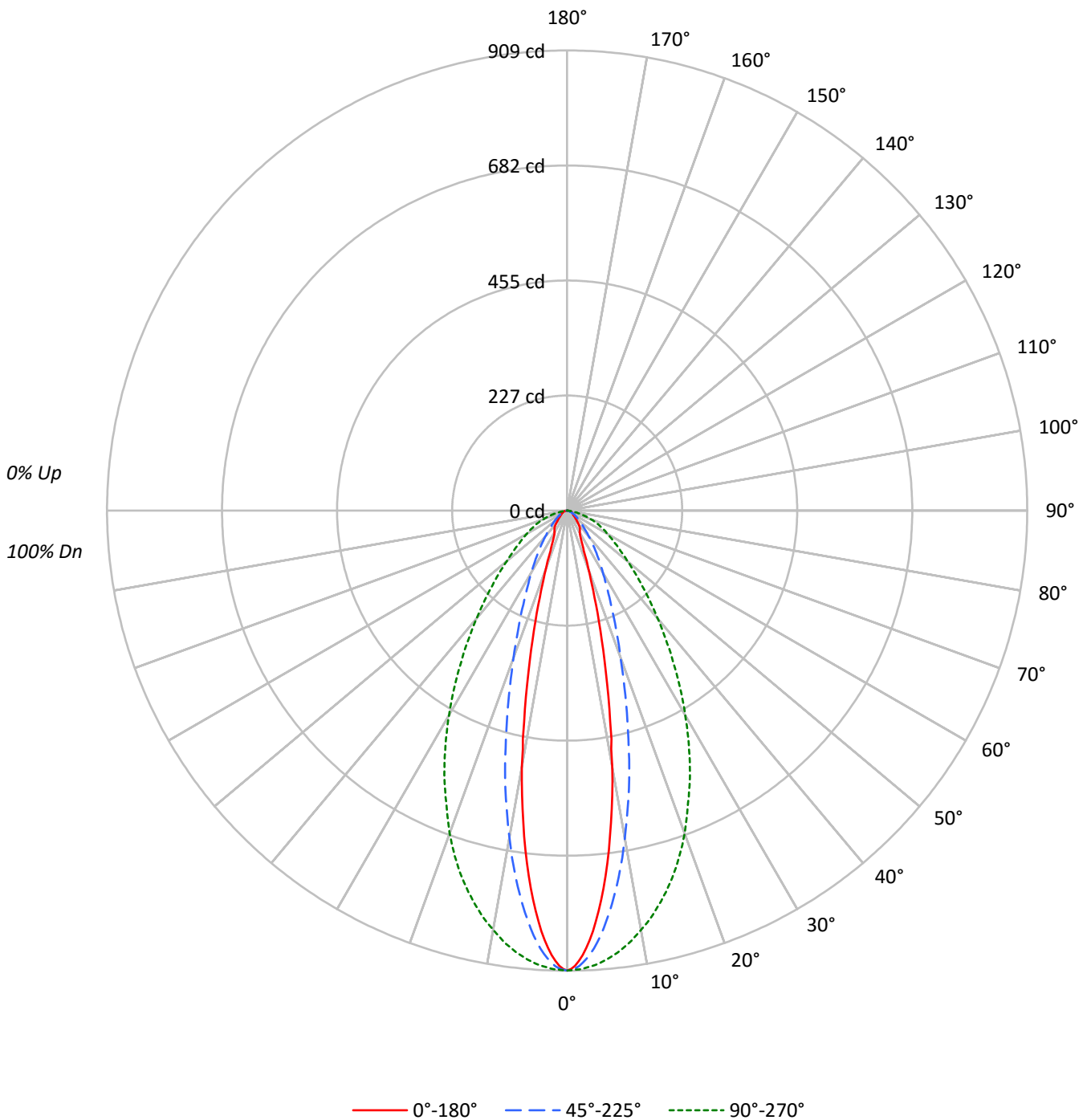
Input Watts (W): 12.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91					91			
2	105	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84	82					82			
3	99	92	86	81	97	90	85	80	87	83	79	85	81	78	83	79	77	75					75			
4	93	85	78	73	91	83	77	73	81	76	72	79	75	71	77	73	70	69					69			
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63					63			
6	83	73	66	62	82	72	66	61	71	65	61	69	64	61	68	64	60	59					59			
7	79	69	62	57	77	68	62	57	67	61	57	65	60	56	64	60	56	55					55			
8	75	64	58	53	74	64	58	53	63	57	53	62	56	53	61	56	53	51					51			
9	71	61	54	50	70	60	54	50	59	54	50	58	53	50	57	53	49	48					48			
10	68	58	51	47	67	57	51	47	56	51	47	55	50	47	55	50	47	45					45			

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

	0°	45°	90°
0°	71534	71534	71534
5°	61004	65414	70401
10°	41132	52484	67250
15°	21542	38056	62802
20°	10247	25855	56864
25°	5742	17800	49889
30°	4509	12800	42409
35°	4219	9467	35119
40°	3597	6896	28592
45°	2828	5111	23248
50°	2352	3968	19107
55°	2086	3171	16334
60°	1984	2504	14471
65°	2086	1975	13171
70°	2141	1519	11556
75°	2008	1308	8852
80°	1950	1043	5713
85°	1536	903	2981



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.9	13.0
10°-20°	136.1	24.0
20°-30°	120.1	21.2
30°-40°	93.9	16.6
40°-50°	64.7	11.4
50°-60°	41.1	7.3
60°-70°	24.3	4.3
70°-80°	10.7	1.9
80°-90°	2.1	0.4
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°	330.1	58.2
0°-40°	424.0	74.8
0°-60°	529.8	93.5
0°-90°	566.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	566.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	909	909	909	909	909	
5°	772	789	828	870	891	65
15°	264	322	467	657	770	74
25°	66	93	205	419	574	33
35°	44	48	98	248	365	27
45°	25	29	46	139	209	20
55°	15	16	23	75	119	14
65°	11	10	11	36	71	11
75°	7	6	4	12	29	7
85°	2	2	1	1	3	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°	908.6	908.6	908.6	908.6	908.6	908.6	908.6	908.6	908.6	908.6	908.6
0.5°	905.3	905.1	904.7	904.5	904.2	904.4	905.0	905.7	906.3	907.0	907.1
1°	899.4	899.3	899.3	899.2	899.1	899.7	900.8	902.0	903.2	904.4	904.8
1.5°	889.8	890.2	890.5	890.9	891.3	892.4	894.3	896.2	898.1	900.1	901.0
2°	878.6	879.2	879.9	880.6	881.2	882.9	885.5	888.2	890.8	893.4	895.3
2.5°	864.7	866.0	867.3	868.7	870.0	872.3	875.6	878.9	882.2	885.5	888.4
3°	849.8	851.4	852.9	854.5	856.0	859.0	863.4	867.8	872.2	876.6	880.6
3.5°	832.3	834.3	836.3	838.3	840.3	844.0	849.6	855.2	860.8	866.4	871.2
4°	813.5	815.9	818.3	820.8	823.2	827.8	834.4	841.1	847.8	854.5	860.9
4.5°	793.0	796.0	799.0	802.1	805.0	810.4	818.3	826.2	834.0	841.9	849.9
5°	771.9	775.4	778.9	782.4	785.9	792.1	801.1	809.9	818.8	827.7	837.4
5.5°	749.4	753.4	757.4	761.5	765.5	772.6	782.6	792.7	802.8	812.8	824.3
6°	725.9	730.6	735.2	739.8	744.4	752.4	763.8	775.2	786.6	798.0	811.0
6.5°	701.1	706.4	711.7	717.0	722.3	731.3	744.0	756.7	769.4	782.1	796.8
7°	675.4	681.3	687.1	693.0	698.9	708.9	723.1	737.2	751.4	765.6	782.2
7.5°	649.3	655.7	662.0	668.4	674.8	685.9	701.6	717.3	733.0	748.7	767.0
8°	623.2	630.0	636.8	643.7	650.5	662.5	679.7	696.9	714.0	731.2	751.2
8.5°	596.4	603.7	611.1	618.4	625.7	638.8	657.3	675.9	694.5	713.0	734.8
9°	570.0	577.8	585.7	593.6	601.4	615.2	635.1	654.9	674.7	694.5	718.1
9.5°	542.5	550.2	557.8	565.5	573.1	587.9	609.8	631.8	653.8	675.7	701.1
10°	514.5	522.8	531.0	539.4	547.6	563.4	586.7	610.0	633.3	656.5	683.8
10.5°	479.1	489.6	500.1	510.6	521.1	538.7	563.5	588.2	613.0	637.7	666.7
11°	459.9	469.0	478.0	487.0	496.1	513.7	539.9	566.1	592.3	618.5	649.3
11.5°	426.2	437.2	448.1	459.1	470.0	489.3	517.0	544.7	572.3	600.0	632.3
12°	400.5	411.7	422.9	434.2	445.4	465.5	494.5	523.5	552.5	581.5	615.2
12.5°	375.7	387.1	398.6	410.0	421.5	442.3	472.5	502.7	532.8	563.0	598.3
13°	351.2	362.9	374.4	386.1	397.6	419.1	450.4	481.6	512.9	544.2	581.1
13.5°	327.8	339.5	351.3	363.0	374.8	396.7	428.9	461.1	493.2	525.4	563.7
14°	305.6	317.5	329.3	341.1	353.0	375.2	407.9	440.7	473.4	506.2	546.2
14.5°	284.8	296.5	308.1	319.8	331.5	353.8	386.7	419.6	452.5	485.4	527.2
15°	264.3	276.0	287.5	299.2	310.7	333.3	366.6	400.1	433.4	466.9	510.2
16°	227.7	239.0	250.4	261.8	273.2	295.9	330.0	364.1	398.1	432.2	477.6
17°	194.6	205.7	216.6	227.7	238.7	261.4	295.7	330.1	364.5	398.8	445.9
18°	166.2	176.7	187.2	197.7	208.2	230.4	264.1	297.9	331.7	365.4	414.3
19°	142.7	152.1	161.4	170.7	180.0	201.5	235.1	268.8	302.4	336.0	385.8
20°	122.3	131.4	140.5	149.5	158.7	179.4	211.7	244.0	276.3	308.6	359.0
22.5°	85.9	92.8	99.7	106.6	113.5	131.9	161.7	191.5	221.3	251.1	301.3
25°	66.1	70.8	75.5	80.2	84.9	100.3	126.4	152.6	178.7	204.9	253.2
27.5°	55.5	58.4	61.3	64.1	66.9	79.5	101.8	124.0	146.2	168.5	213.5
30°	49.6	51.1	52.8	54.4	56.0	66.1	84.8	103.5	122.1	140.8	181.8
32.5°	46.6	47.2	47.9	48.6	49.2	57.1	72.2	87.4	102.5	117.6	154.8
35°	43.9	44.2	44.5	44.8	45.1	51.1	63.0	74.8	86.6	98.5	132.0
37.5°	40.3	40.7	41.0	41.4	41.8	46.3	55.0	63.8	72.6	81.3	111.5
40°	35.0	35.7	36.3	37.0	37.7	41.2	47.7	54.1	60.6	67.1	94.0
42.5°	29.7	30.5	31.2	31.9	32.6	35.5	40.4	45.3	50.3	55.2	79.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
45°	25.4	26.0	26.5	27.0	27.5	29.8	33.8	37.9	41.9	45.9	66.9
47.5°	21.8	22.3	22.7	23.1	23.6	25.4	28.6	31.9	35.1	38.3	56.6
50°	19.2	19.6	19.9	20.3	20.6	22.1	24.6	27.2	29.8	32.4	48.2
52.5°	17.2	17.4	17.6	17.8	18.0	19.2	21.3	23.3	25.4	27.4	41.0
55°	15.2	15.3	15.5	15.7	15.8	16.7	18.3	19.9	21.5	23.1	34.8
57.5°	13.9	13.9	13.9	13.9	13.9	14.5	15.7	16.8	18.0	19.2	29.1
60°	12.6	12.5	12.4	12.4	12.3	12.6	13.4	14.3	15.1	15.9	24.3
62.5°	11.9	11.7	11.4	11.2	11.0	11.1	11.6	12.0	12.4	12.9	19.9
65°	11.2	11.0	10.6	10.4	10.0	10.0	10.1	10.3	10.4	10.6	16.1
67.5°	10.2	10.0	9.6	9.4	9.1	8.9	8.8	8.7	8.7	8.6	12.8
70°	9.3	9.0	8.7	8.4	8.1	7.8	7.5	7.2	6.9	6.6	9.9
72.5°	8.3	7.9	7.5	7.1	6.8	6.5	6.1	5.9	5.6	5.3	7.7
75°	6.6	6.5	6.3	6.1	6.0	5.7	5.4	5.0	4.7	4.3	5.9
77.5°	5.3	5.2	5.0	4.8	4.7	4.5	4.2	3.9	3.6	3.3	4.4
80°	4.3	4.2	4.0	3.8	3.7	3.5	3.2	2.9	2.6	2.3	2.8
82.5°	3.0	2.9	2.8	2.8	2.7	2.5	2.3	2.1	1.9	1.7	1.9
85°	1.7	1.7	1.7	1.7	1.7	1.6	1.5	1.3	1.1	1.0	1.1
87.5°	1.0	0.9	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.7	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°	908.6	908.6	908.6	908.6	908.6	908.6	908.6	908.6
0.5°	907.3	907.5	907.6	907.7	907.8	907.9	907.9	908.0
1°	905.2	905.7	906.1	906.5	906.7	906.9	907.1	907.3
1.5°	902.0	902.9	903.9	904.6	905.1	905.6	906.1	906.7
2°	897.1	898.9	900.8	902.1	902.9	903.8	904.6	905.3
2.5°	891.4	894.3	897.3	899.3	900.3	901.3	902.3	903.4
3°	884.7	888.7	892.7	895.5	897.0	898.5	899.9	901.4
3.5°	876.2	881.1	886.0	889.7	892.1	894.6	897.0	899.4
4°	867.4	873.8	880.3	885.0	888.0	890.9	893.8	896.8
4.5°	857.9	865.9	873.9	879.6	883.1	886.6	890.0	893.4
5°	847.1	856.8	866.5	873.5	877.8	882.1	886.4	890.8
5.5°	835.8	847.2	858.6	866.9	871.8	876.9	881.8	886.8
6°	824.1	837.1	850.2	859.7	865.5	871.2	877.1	882.9
6.5°	811.4	826.2	840.8	851.6	858.4	865.2	872.1	878.9
7°	798.8	815.3	831.9	844.0	851.6	859.2	866.8	874.3
7.5°	785.1	803.4	821.5	834.9	843.4	851.9	860.5	869.0
8°	771.1	791.2	811.1	825.9	835.5	845.1	854.7	864.4
8.5°	756.7	778.5	800.3	816.5	827.2	837.8	848.4	859.1
9°	741.7	765.2	788.8	806.4	818.1	829.8	841.4	853.1
9.5°	726.5	751.9	777.3	796.4	809.1	821.8	834.5	847.2
10°	711.0	738.3	765.5	786.0	799.8	813.6	827.4	841.2
10.5°	695.7	724.7	753.7	775.7	790.6	805.5	820.4	835.3
11°	680.1	710.9	741.6	765.0	781.1	797.2	813.3	829.3
11.5°	664.5	696.7	729.0	753.7	771.0	788.2	805.5	822.7
12°	648.9	682.6	716.3	742.3	760.6	778.9	797.2	815.5
12.5°	633.5	668.8	704.0	731.3	750.5	769.7	789.0	808.2
13°	617.9	654.8	691.6	720.2	740.3	760.6	780.7	800.9
13.5°	602.0	640.3	678.7	708.5	729.8	751.1	772.4	793.7
14°	586.2	626.3	666.3	697.3	719.5	741.5	763.7	785.7
14.5°	569.1	610.9	652.8	685.4	708.6	731.9	755.2	778.5
15°	553.5	596.9	640.2	673.9	698.0	722.2	746.3	770.5
16°	522.9	568.3	613.7	649.5	675.6	701.7	727.8	754.0
17°	493.1	540.2	587.3	624.9	652.7	680.5	708.3	736.2
18°	463.1	511.9	560.8	599.9	629.3	658.8	688.2	717.7
19°	435.6	485.4	535.1	575.5	606.2	637.0	667.7	698.5
20°	409.5	459.9	510.4	551.5	583.3	615.1	646.9	678.7
22.5°	351.4	401.6	451.7	493.2	526.0	558.9	591.6	624.5
25°	301.5	349.8	398.1	439.2	473.0	506.7	540.5	574.3
27.5°	258.5	303.5	348.5	387.6	420.8	453.9	487.0	520.1
30°	222.8	263.9	304.9	341.1	372.5	403.8	435.2	466.5
32.5°	192.1	229.3	266.5	299.6	328.4	357.3	386.1	415.0
35°	165.6	199.1	232.7	262.4	288.1	313.9	339.7	365.4
37.5°	141.8	172.0	202.3	228.8	251.6	274.3	297.1	319.8
40°	121.0	147.9	174.9	198.3	218.3	238.3	258.3	278.2
42.5°	102.9	126.7	150.6	171.3	188.8	206.2	223.8	241.2





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
45°	87.8	108.7	129.7	147.8	163.0	178.3	193.6	208.8
47.5°	74.7	93.0	111.2	126.9	140.3	153.7	167.1	180.4
50°	64.0	79.8	95.6	109.2	120.9	132.6	144.3	156.0
52.5°	54.6	68.2	81.7	93.8	104.2	114.6	125.0	135.5
55°	46.5	58.2	69.9	80.5	90.1	99.7	109.3	119.0
57.5°	39.1	49.1	59.1	68.6	77.5	86.5	95.4	104.4
60°	32.6	41.0	49.4	57.8	66.3	74.8	83.3	91.9
62.5°	26.8	33.8	40.8	48.4	56.6	64.8	73.1	81.3
65°	21.7	27.3	32.9	39.6	47.4	55.1	62.9	70.7
67.5°	17.1	21.3	25.6	31.5	38.8	46.1	53.5	60.8
70°	13.2	16.5	19.8	24.6	31.1	37.5	43.8	50.2
72.5°	10.1	12.6	15.0	18.7	23.8	28.9	33.9	39.0
75°	7.5	9.1	10.8	13.5	17.4	21.3	25.2	29.1
77.5°	5.4	6.4	7.4	9.3	11.9	14.5	17.2	19.8
80°	3.4	3.8	4.4	5.5	7.3	9.1	10.8	12.6
82.5°	2.1	2.3	2.5	3.1	4.0	4.8	5.7	6.6
85°	1.1	1.2	1.3	1.5	2.0	2.4	2.8	3.3
87.5°	0.5	0.5	0.4	0.4	0.5	0.5	0.6	0.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)