

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: P273350

Luminaire Tested: **0.03-3W-827-10-ID-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P273350  
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-827-10-ID-STD-UNV-AN-3F0  
Description: iO LIGHTING SERIES .75 LINEAR LED LUMINAIRE, 10 DEGREE OPTIC.  
HIGH OUTPUT  
Light Source: 2700K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 529.9 lumens  
Efficiency: N/A  
Efficacy: 42.4 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

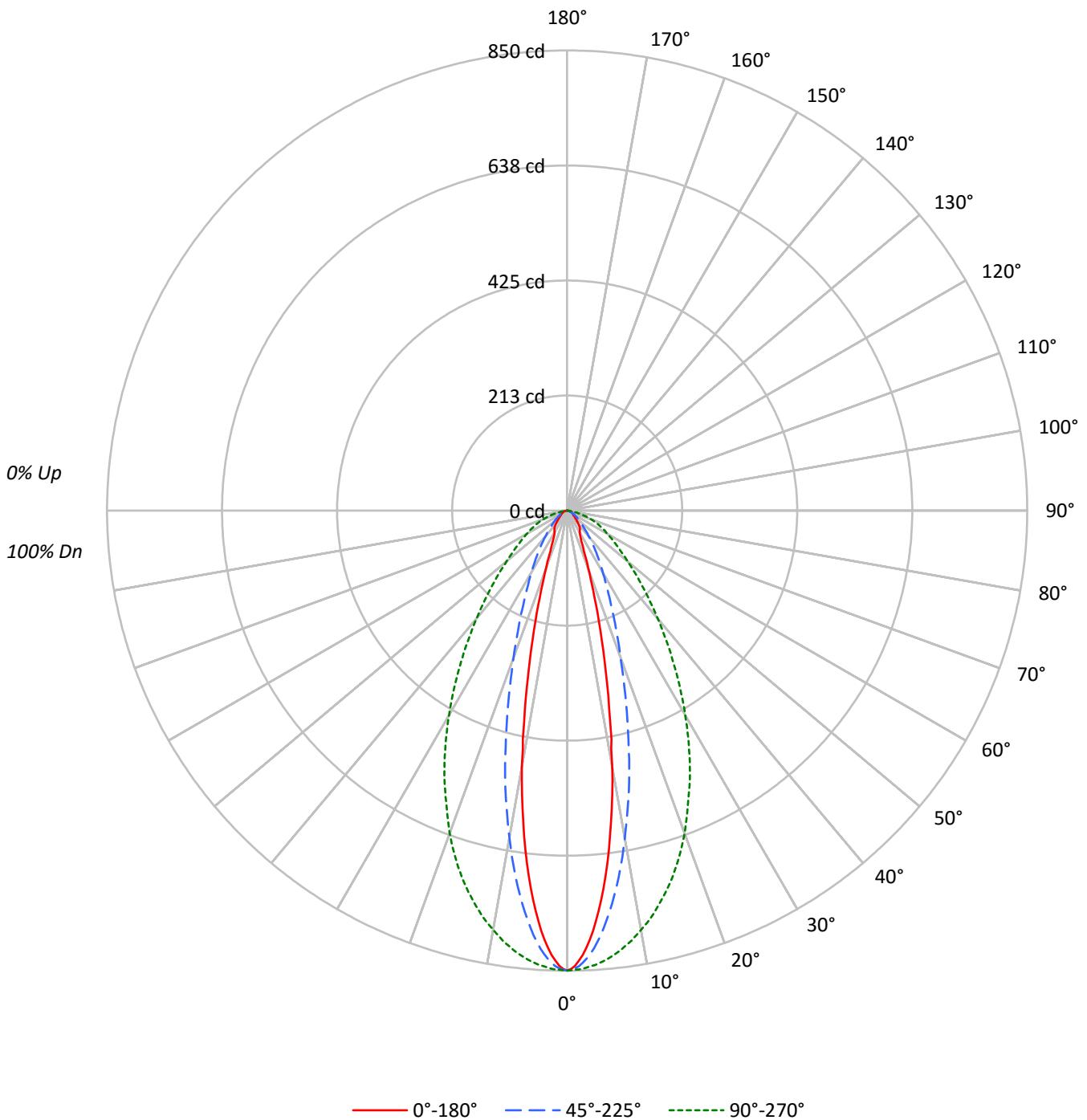
Input Watts (W): 12.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	66889	66889	66889
5°	57037	61162	65825
10°	38453	49078	62885
15°	20149	35578	58718
20°	9576	24180	53169
25°	5369	16635	46640
30°	4209	11964	39655
35°	3950	8852	32841
40°	3361	6444	26732
45°	2650	4777	21745
50°	2192	3711	17858
55°	1949	2965	15264
60°	1842	2330	13526
65°	1956	1844	12314
70°	2003	1427	10819
75°	1886	1217	8274
80°	1814	997	5305
85°	1355	813	2800



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.1	13.0
10°-20°	127.2	24.0
20°-30°	112.3	21.2
30°-40°	87.8	16.6
40°-50°	60.5	11.4
50°-60°	38.4	7.3
60°-70°	22.7	4.3
70°-80°	10.0	1.9
80°-90°	1.9	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°	308.6	58.2
0°-40°	396.4	74.8
0°-60°	495.4	93.5
0°-90°	529.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	529.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	850	850	850	850	850	
5°	722	738	774	813	833	61
15°	247	301	436	614	720	69
25°	62	87	192	391	537	31
35°	41	45	92	231	342	25
45°	24	27	43	130	195	19
55°	14	15	22	70	111	13
65°	10	9	10	34	66	10
75°	6	6	4	11	27	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°	849.6	849.6	849.6	849.6	849.6	849.6	849.6	849.6	849.6	849.6	849.6
0.5°	846.5	846.2	845.9	845.7	845.4	845.6	846.2	846.8	847.4	848.0	848.2
1°	840.9	840.9	840.8	840.7	840.7	841.2	842.3	843.3	844.5	845.6	846.0
1.5°	832.0	832.3	832.7	833.0	833.3	834.4	836.2	838.0	839.8	841.6	842.4
2°	821.5	822.1	822.7	823.3	823.9	825.5	828.0	830.4	832.9	835.4	837.1
2.5°	808.5	809.7	811.0	812.2	813.4	815.6	818.7	821.8	824.9	828.0	830.7
3°	794.6	796.0	797.5	798.9	800.3	803.1	807.3	811.4	815.5	819.6	823.4
3.5°	778.2	780.1	781.9	783.8	785.6	789.2	794.4	799.6	804.9	810.0	814.6
4°	760.6	762.9	765.1	767.4	769.7	774.0	780.2	786.4	792.7	798.9	805.0
4.5°	741.5	744.3	747.1	749.9	752.7	757.8	765.1	772.5	779.8	787.2	794.7
5°	721.7	725.0	728.3	731.6	734.8	740.7	749.0	757.3	765.6	773.9	783.0
5.5°	700.7	704.4	708.2	712.0	715.8	722.4	731.8	741.2	750.6	760.0	770.7
6°	678.7	683.1	687.4	691.7	696.0	703.5	714.1	724.8	735.5	746.1	758.3
6.5°	655.6	660.5	665.5	670.4	675.3	683.7	695.6	707.5	719.4	731.3	745.0
7°	631.5	637.0	642.5	648.0	653.5	662.8	676.1	689.3	702.6	715.8	731.3
7.5°	607.1	613.1	619.0	625.0	631.0	641.3	656.0	670.6	685.4	700.1	717.1
8°	582.7	589.0	595.5	601.8	608.2	619.4	635.5	651.6	667.6	683.7	702.3
8.5°	557.6	564.5	571.4	578.2	585.1	597.2	614.6	632.0	649.3	666.7	687.1
9°	532.9	540.3	547.6	555.0	562.3	575.2	593.8	612.3	630.9	649.4	671.5
9.5°	507.3	514.4	521.6	528.7	535.8	549.7	570.2	590.8	611.3	631.8	655.5
10°	481.0	488.8	496.5	504.3	512.0	526.8	548.6	570.4	592.1	613.9	639.3
10.5°	448.0	457.8	467.6	477.4	487.3	503.7	526.9	550.0	573.1	596.3	623.4
11°	430.0	438.5	446.9	455.4	463.8	480.3	504.8	529.3	553.8	578.3	607.1
11.5°	398.5	408.8	419.0	429.2	439.4	457.5	483.4	509.3	535.1	561.0	591.2
12°	374.4	384.9	395.4	405.9	416.5	435.2	462.4	489.5	516.6	543.7	575.2
12.5°	351.3	362.0	372.7	383.4	394.1	413.5	441.8	470.0	498.2	526.4	559.4
13°	328.4	339.3	350.1	361.0	371.8	391.9	421.1	450.3	479.6	508.8	543.3
13.5°	306.5	317.5	328.5	339.4	350.4	370.9	401.0	431.1	461.1	491.2	527.1
14°	285.8	296.8	307.9	318.9	330.0	350.8	381.4	412.1	442.6	473.3	510.7
14.5°	266.3	277.2	288.1	299.1	310.0	330.8	361.6	392.3	423.1	453.8	492.9
15°	247.2	258.0	268.8	279.7	290.5	311.6	342.8	374.1	405.3	436.5	477.1
16°	212.9	223.5	234.1	244.8	255.4	276.7	308.5	340.4	372.2	404.1	446.5
17°	182.0	192.3	202.5	212.9	223.2	244.4	276.5	308.6	340.8	372.9	416.9
18°	155.4	165.2	175.0	184.9	194.7	215.4	247.0	278.5	310.1	341.7	387.3
19°	133.5	142.2	150.9	159.6	168.3	188.4	219.8	251.3	282.7	314.2	360.7
20°	114.3	122.8	131.4	139.8	148.4	167.7	197.9	228.1	258.3	288.6	335.7
22.5°	80.3	86.8	93.2	99.7	106.2	123.3	151.2	179.1	206.9	234.8	281.7
25°	61.8	66.2	70.6	74.9	79.3	93.8	118.2	142.7	167.1	191.5	236.7
27.5°	51.9	54.6	57.3	59.9	62.6	74.3	95.2	116.0	136.7	157.6	199.6
30°	46.3	47.8	49.4	50.9	52.4	61.8	79.3	96.8	114.2	131.6	170.0
32.5°	43.6	44.2	44.8	45.4	46.0	53.4	67.5	81.7	95.8	110.0	144.8
35°	41.1	41.3	41.6	41.9	42.2	47.8	58.9	69.9	81.0	92.1	123.5
37.5°	37.7	38.1	38.4	38.7	39.1	43.3	51.5	59.7	67.8	76.0	104.3
40°	32.7	33.4	34.0	34.6	35.2	38.6	44.6	50.6	56.7	62.7	87.9
42.5°	27.8	28.5	29.2	29.8	30.5	33.2	37.8	42.4	47.0	51.6	73.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
45°	23.8	24.3	24.8	25.2	25.7	27.9	31.6	35.4	39.2	42.9	62.5
47.5°	20.4	20.8	21.2	21.6	22.1	23.7	26.8	29.8	32.8	35.8	52.9
50°	17.9	18.3	18.6	19.0	19.3	20.6	23.0	25.5	27.9	30.3	45.0
52.5°	16.1	16.3	16.5	16.7	16.9	18.0	19.9	21.8	23.7	25.6	38.4
55°	14.2	14.3	14.5	14.6	14.8	15.6	17.1	18.6	20.1	21.6	32.6
57.5°	13.0	13.0	13.0	13.0	13.0	13.5	14.6	15.7	16.8	17.9	27.2
60°	11.7	11.7	11.6	11.6	11.5	11.8	12.5	13.3	14.1	14.8	22.7
62.5°	11.1	10.9	10.7	10.5	10.3	10.4	10.8	11.2	11.6	12.0	18.6
65°	10.5	10.3	9.9	9.7	9.4	9.3	9.5	9.6	9.8	9.9	15.1
67.5°	9.6	9.3	9.0	8.8	8.5	8.3	8.2	8.2	8.1	8.0	12.0
70°	8.7	8.4	8.1	7.8	7.5	7.3	7.0	6.7	6.4	6.2	9.3
72.5°	7.7	7.4	7.0	6.7	6.4	6.1	5.7	5.5	5.2	4.9	7.2
75°	6.2	6.1	5.9	5.7	5.6	5.4	5.1	4.7	4.4	4.0	5.5
77.5°	4.9	4.8	4.7	4.5	4.4	4.2	3.9	3.6	3.3	3.1	4.1
80°	4.0	3.9	3.8	3.6	3.5	3.3	3.0	2.7	2.4	2.2	2.7
82.5°	2.8	2.7	2.7	2.6	2.5	2.3	2.2	2.0	1.7	1.5	1.7
85°	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.2	1.1	0.9	1.0
87.5°	0.9	0.9	0.8	0.7	0.7	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°	849.6	849.6	849.6	849.6	849.6	849.6	849.6	849.6
0.5°	848.3	848.5	848.6	848.7	848.8	848.8	848.9	849.0
1°	846.4	846.8	847.2	847.5	847.7	847.9	848.2	848.3
1.5°	843.3	844.2	845.1	845.8	846.3	846.7	847.2	847.7
2°	838.8	840.5	842.2	843.5	844.2	845.0	845.8	846.5
2.5°	833.5	836.2	839.0	840.8	841.7	842.7	843.7	844.6
3°	827.2	830.9	834.7	837.3	838.6	840.1	841.4	842.8
3.5°	819.2	823.8	828.5	831.9	834.1	836.4	838.6	840.9
4°	811.0	817.0	823.1	827.5	830.2	833.0	835.7	838.5
4.5°	802.1	809.6	817.1	822.5	825.7	828.9	832.2	835.4
5°	792.0	801.1	810.2	816.7	820.7	824.8	828.8	832.9
5.5°	781.4	792.1	802.8	810.5	815.2	819.9	824.5	829.2
6°	770.6	782.7	795.0	803.8	809.2	814.6	820.1	825.5
6.5°	758.7	772.5	786.2	796.3	802.6	809.0	815.4	821.8
7°	746.8	762.3	777.8	789.2	796.3	803.3	810.4	817.5
7.5°	734.1	751.2	768.1	780.6	788.6	796.6	804.5	812.5
8°	721.0	739.7	758.4	772.2	781.2	790.2	799.2	808.2
8.5°	707.5	727.9	748.3	763.5	773.4	783.3	793.3	803.2
9°	693.4	715.5	737.6	754.0	764.9	775.9	786.7	797.7
9.5°	679.3	703.0	726.8	744.6	756.5	768.4	780.3	792.1
10°	664.8	690.3	715.8	734.9	747.8	760.7	773.6	786.6
10.5°	650.5	677.6	704.8	725.3	739.2	753.1	767.0	781.0
11°	635.9	664.7	693.4	715.3	730.3	745.3	760.4	775.4
11.5°	621.3	651.4	681.6	704.8	720.9	737.0	753.1	769.3
12°	606.8	638.3	669.8	694.1	711.2	728.3	745.3	762.5
12.5°	592.4	625.3	658.2	683.7	701.7	719.7	737.7	755.7
13°	577.8	612.2	646.7	673.4	692.2	711.1	730.0	748.9
13.5°	562.9	598.7	634.6	662.4	682.3	702.3	722.2	742.1
14°	548.1	585.6	622.9	652.0	672.7	693.3	714.0	734.7
14.5°	532.1	571.2	610.3	640.8	662.6	684.4	706.1	727.9
15°	517.5	558.1	598.5	630.1	652.7	675.3	697.8	720.4
16°	488.9	531.4	573.8	607.3	631.7	656.1	680.5	705.0
17°	461.1	505.1	549.2	584.3	610.3	636.3	662.3	688.3
18°	433.0	478.7	524.3	560.9	588.4	616.0	643.5	671.0
19°	407.3	453.8	500.4	538.1	566.8	595.6	624.3	653.1
20°	382.9	430.0	477.2	515.7	545.4	575.1	604.8	634.6
22.5°	328.6	375.5	422.4	461.1	491.8	522.5	553.2	583.9
25°	281.9	327.0	372.2	410.6	442.2	473.8	505.4	536.9
27.5°	241.7	283.8	325.9	362.4	393.4	424.4	455.3	486.3
30°	208.3	246.7	285.1	318.9	348.3	377.6	406.9	436.2
32.5°	179.6	214.4	249.2	280.1	307.1	334.1	361.0	388.0
35°	154.8	186.2	217.6	245.3	269.4	293.5	317.6	341.7
37.5°	132.6	160.8	189.1	213.9	235.2	256.5	277.8	299.1
40°	113.1	138.3	163.5	185.4	204.1	222.8	241.5	260.1
42.5°	96.2	118.5	140.8	160.2	176.5	192.8	209.2	225.5





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
45°	82.1	101.6	121.2	138.2	152.4	166.7	181.0	195.3
47.5°	69.9	86.9	103.9	118.7	131.2	143.7	156.2	168.7
50°	59.8	74.6	89.3	102.1	113.1	124.0	134.9	145.8
52.5°	51.0	63.8	76.4	87.7	97.4	107.1	116.9	126.7
55°	43.4	54.4	65.3	75.3	84.2	93.2	102.2	111.2
57.5°	36.6	45.9	55.2	64.1	72.5	80.9	89.2	97.6
60°	30.5	38.3	46.2	54.0	62.0	69.9	77.9	85.9
62.5°	25.1	31.6	38.1	45.2	53.0	60.6	68.3	76.0
65°	20.3	25.5	30.8	37.0	44.3	51.5	58.8	66.1
67.5°	16.0	20.0	24.0	29.4	36.3	43.1	50.0	56.8
70°	12.4	15.4	18.5	23.0	29.0	35.0	41.0	47.0
72.5°	9.5	11.7	14.0	17.5	22.2	27.0	31.7	36.5
75°	7.0	8.5	10.1	12.6	16.3	19.9	23.5	27.2
77.5°	5.0	6.0	6.9	8.7	11.1	13.6	16.1	18.5
80°	3.2	3.6	4.1	5.1	6.8	8.5	10.1	11.7
82.5°	2.0	2.2	2.3	2.9	3.7	4.5	5.4	6.2
85°	1.1	1.1	1.2	1.4	1.9	2.3	2.7	3.1
87.5°	0.5	0.4	0.4	0.4	0.4	0.5	0.6	0.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)