

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: P273371

Luminaire Tested: **0.03-5W-827-25-ID-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273371
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: 0.03-5W-827-25-ID-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES .75 LINEAR LED LUMINAIRE, 25 DEGREE OPTIC.
VERY HIGH OUTPUT
Light Source: 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 950.6 lumens
Efficiency: N/A
Efficacy: 51.9 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

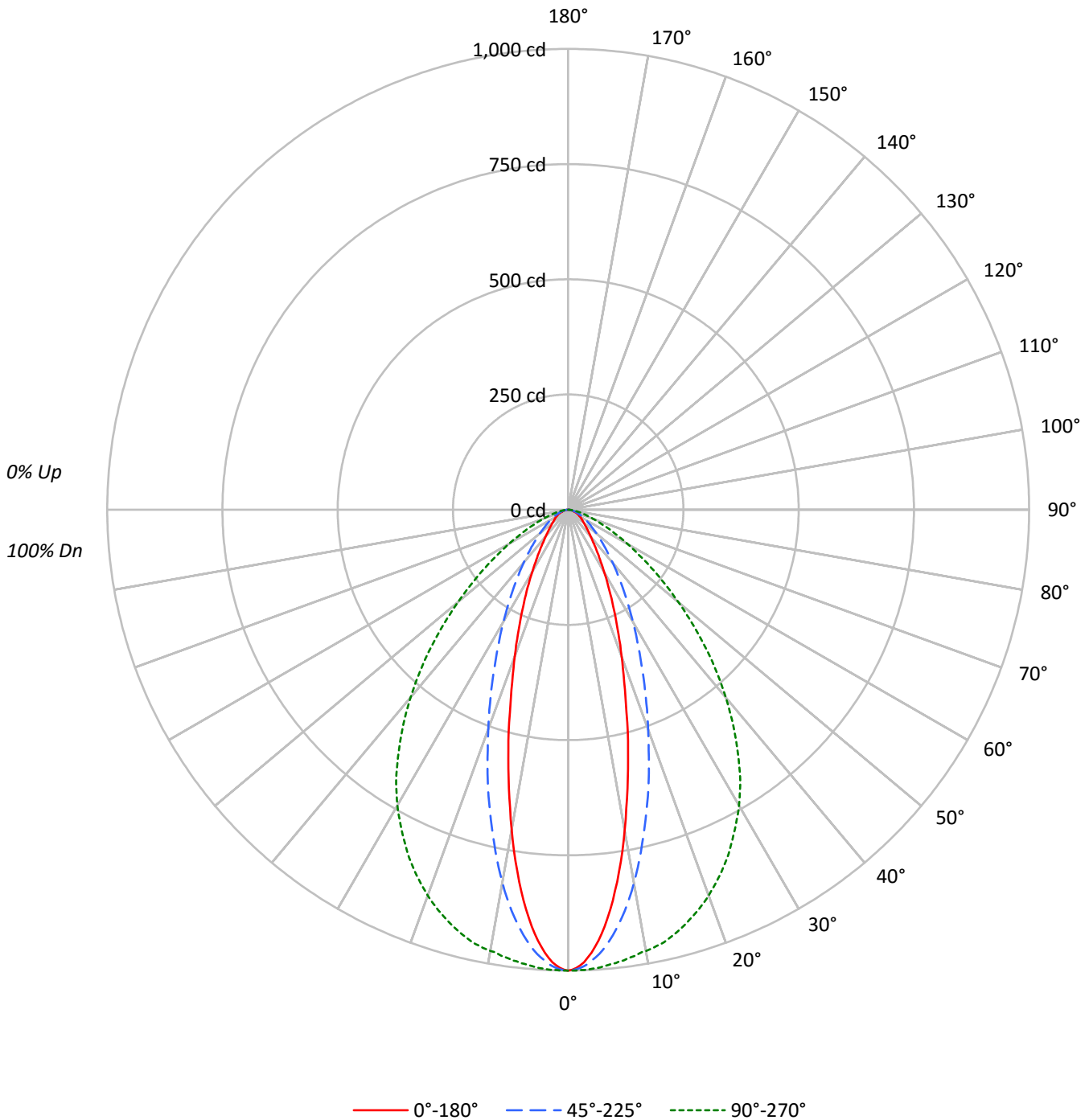
Input Watts (W): 18.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P273371

CATALOG NUMBER: 0.03-5W-827-25-ID-STD-UNV-AN-3F0

Luminous Intensity Polar Plot





TEST NUMBER: P273371

CATALOG NUMBER: 0.03-5W-827-25-ID-STD-UNV-AN-3F0

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°	78754	78754	78754
5°	71744	74993	78391
10°	56433	65699	77730
15°	40689	53950	76739
20°	28352	42453	74651
25°	20058	32889	71554
30°	14191	25500	67401
35°	10246	19770	61637
40°	7780	15375	54676
45°	6346	12181	46741
50°	5377	9737	38129
55°	4873	8085	30280
60°	4566	6771	23257
65°	4359	5924	17586
70°	3867	5156	13121
75°	3711	4563	9947
80°	2947	3808	7617
85°	2529	2529	5059



TEST NUMBER: P273371

CATALOG NUMBER: 0.03-5W-827-25-ID-STD-UNV-AN-3F0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.7	9.1
10°-20°	192.0	20.2
20°-30°	207.3	21.8
30°-40°	177.9	18.7
40°-50°	131.5	13.8
50°-60°	84.0	8.8
60°-70°	46.4	4.9
70°-80°	20.4	2.1
80°-90°	4.4	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°	486.0	51.1
0°-40°	663.9	69.8
0°-60°	879.3	92.5
0°-90°	950.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	950.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1000	1000	1000	1000	1000	
5°	908	919	949	978	992	80
15°	499	542	662	839	942	138
25°	231	267	379	629	824	107
35°	107	129	206	428	641	68
45°	57	67	109	265	420	45
55°	36	39	59	146	221	32
65°	23	24	32	69	94	23
75°	12	12	15	26	33	12
85°	3	3	3	5	6	3
90°	0	0	0	0	0	



TEST NUMBER: P273371

CATALOG NUMBER: 0.03-5W-827-25-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1000.3	1000.3	1000.3	1000.3	1000.3	1000.3	1000.3	1000.3	1000.3	1000.3	1000.3
0.5°	998.5	998.7	998.9	999.1	999.3	999.4	999.4	999.4	999.4	999.4	999.6
1°	994.7	994.9	995.1	995.4	995.6	995.9	996.3	996.7	997.2	997.5	997.9
1.5°	989.1	989.5	990.0	990.3	990.8	991.4	992.2	993.1	993.9	994.7	995.4
2°	982.6	983.0	983.4	983.8	984.3	985.2	986.6	988.1	989.5	991.0	992.0
2.5°	973.2	974.1	974.9	975.8	976.6	978.0	980.1	982.2	984.3	986.3	988.2
3°	963.0	964.0	965.0	966.0	967.1	968.9	971.6	974.4	977.1	979.8	982.5
3.5°	950.8	952.3	953.7	955.2	956.6	959.1	962.7	966.1	969.7	973.2	976.8
4°	937.7	939.4	941.1	942.7	944.3	947.6	952.4	957.2	961.9	966.7	971.1
4.5°	923.7	925.6	927.4	929.3	931.2	935.0	940.8	946.7	952.5	958.3	963.7
5°	907.8	910.0	912.4	914.6	917.0	921.5	928.4	935.2	942.1	948.9	955.6
5.5°	891.0	893.7	896.4	899.1	901.8	907.0	915.0	922.8	930.8	938.6	946.8
6°	872.3	875.6	878.9	882.3	885.5	891.8	901.0	910.0	919.2	928.4	937.7
6.5°	853.6	857.1	860.7	864.1	867.7	874.8	885.4	895.9	906.6	917.1	928.0
7°	833.9	837.9	841.8	845.8	849.7	857.6	869.5	881.3	893.1	905.0	917.2
7.5°	814.3	818.7	823.0	827.4	831.8	840.5	853.6	866.7	879.7	892.8	906.6
8°	792.8	797.6	802.3	807.1	811.9	821.6	836.1	850.7	865.2	879.7	895.1
8.5°	772.2	777.2	782.2	787.2	792.1	802.5	818.3	834.1	849.9	865.7	882.7
9°	750.7	756.2	761.6	766.9	772.3	783.5	800.6	817.7	834.7	851.7	870.6
9.5°	728.3	734.3	740.4	746.3	752.4	764.6	782.8	801.1	819.4	837.7	858.2
10°	705.9	712.3	718.8	725.2	731.7	744.5	763.8	783.2	802.4	821.8	844.4
10.5°	683.4	690.1	696.7	703.3	710.0	723.6	744.2	764.8	785.3	805.9	830.6
11°	661.0	668.6	676.3	684.1	691.7	706.1	727.4	748.6	769.7	790.9	817.3
11.5°	639.5	647.3	655.3	663.1	671.1	686.1	708.4	730.5	752.8	775.0	803.3
12°	618.0	626.1	634.1	642.3	650.4	666.0	689.3	712.6	735.9	759.1	789.2
12.5°	597.4	605.5	613.6	621.7	629.8	645.8	669.7	693.6	717.4	741.4	773.8
13°	576.8	585.2	593.5	601.8	610.1	626.6	651.3	676.0	700.8	725.5	759.5
13.5°	556.3	564.8	573.3	581.8	590.3	607.4	632.9	658.5	684.1	709.6	745.3
14°	536.6	545.1	553.7	562.2	570.7	588.1	614.5	641.0	667.3	693.7	730.9
14.5°	517.9	526.3	534.6	542.9	551.2	569.0	596.2	623.4	650.6	677.8	716.7
15°	499.2	507.7	516.3	524.8	533.3	551.4	579.0	606.7	634.2	661.9	702.2
16°	458.1	467.6	477.2	486.8	496.3	515.4	544.1	572.8	601.4	630.1	673.1
17°	425.4	434.7	444.1	453.4	462.8	482.0	511.1	540.2	569.3	598.3	644.1
18°	393.6	402.8	411.9	421.0	430.2	449.3	478.4	507.5	536.5	565.6	614.0
19°	364.6	373.6	382.5	391.4	400.3	419.4	448.5	477.6	506.6	535.7	586.2
20°	338.4	346.9	355.5	364.0	372.5	391.2	420.1	448.9	477.8	506.7	558.9
22.5°	279.5	287.2	294.9	302.6	310.3	328.1	355.9	383.7	411.5	439.4	494.5
25°	230.9	238.0	245.0	252.1	259.2	275.6	301.3	327.1	352.8	378.6	435.1
27.5°	189.8	196.2	202.7	209.1	215.6	230.7	254.6	278.5	302.3	326.3	382.4
30°	156.1	161.7	167.3	173.0	178.6	192.4	214.4	236.4	258.4	280.5	335.1
32.5°	128.1	133.0	138.1	143.0	148.0	160.5	180.4	200.4	220.4	240.3	292.6
35°	106.6	110.7	114.9	119.0	123.2	134.3	152.1	170.0	187.8	205.7	255.1
37.5°	89.8	93.1	96.4	99.8	103.0	112.6	128.4	144.2	160.0	175.8	221.7
40°	75.7	78.6	81.5	84.4	87.3	95.5	109.1	122.6	136.1	149.6	191.9
42.5°	65.4	67.5	69.6	71.7	73.8	80.7	92.6	104.4	116.2	128.1	166.7



TEST NUMBER: P273371

CATALOG NUMBER: 0.03-5W-827-25-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
45°	57.0	58.7	60.4	62.0	63.7	69.5	79.5	89.5	99.4	109.4	144.1
47.5°	49.6	51.0	52.4	53.9	55.3	60.2	68.5	76.8	85.2	93.5	124.2
50°	43.9	45.0	46.0	47.0	48.1	52.1	58.9	65.7	72.6	79.5	106.5
52.5°	39.3	40.1	40.9	41.8	42.6	45.8	51.4	57.0	62.6	68.2	91.3
55°	35.5	36.2	36.7	37.4	38.1	40.6	45.2	49.7	54.3	58.9	78.4
57.5°	32.7	32.9	33.1	33.4	33.6	35.5	39.3	43.0	46.7	50.5	66.7
60°	29.0	29.2	29.4	29.6	29.8	31.4	34.3	37.2	40.1	43.0	56.5
62.5°	26.2	26.4	26.6	26.8	27.0	28.2	30.6	32.8	35.2	37.4	48.2
65°	23.4	23.4	23.4	23.4	23.4	24.3	26.2	28.0	29.9	31.8	40.3
67.5°	20.6	20.6	20.6	20.6	20.6	21.3	22.7	24.2	25.6	27.1	33.6
70°	16.8	17.0	17.2	17.5	17.7	18.3	19.4	20.4	21.4	22.4	27.4
72.5°	14.0	14.2	14.4	14.7	14.9	15.3	16.2	17.0	17.9	18.7	22.3
75°	12.2	12.2	12.2	12.2	12.2	12.4	13.1	13.7	14.3	15.0	17.5
77.5°	9.3	9.3	9.3	9.3	9.3	9.5	10.0	10.4	10.8	11.2	13.1
80°	6.5	6.5	6.5	6.5	6.5	6.7	7.2	7.6	8.0	8.4	9.4
82.5°	4.7	4.7	4.7	4.7	4.7	4.8	5.0	5.2	5.4	5.6	6.3
85°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	3.2
87.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P273371

CATALOG NUMBER: 0.03-5W-827-25-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1000.3	1000.3	1000.3	1000.3	1000.3	1000.3	1000.3	1000.3
0.5°	999.8	1000.1	1000.3	1000.3	1000.3	1000.3	1000.3	1000.3
1°	998.4	998.8	999.2	999.5	999.7	1000.0	1000.2	1000.3
1.5°	996.0	996.6	997.3	997.7	998.2	998.6	999.0	999.4
2°	993.1	994.1	995.1	996.0	996.9	997.7	998.6	999.4
2.5°	990.1	991.9	993.8	995.1	996.0	996.8	997.6	998.5
3°	985.2	987.9	990.6	992.6	993.8	995.0	996.3	997.5
3.5°	980.3	983.8	987.4	990.0	991.7	993.2	994.9	996.6
4°	975.4	979.8	984.2	987.4	989.4	991.6	993.6	995.7
4.5°	969.1	974.5	979.9	983.8	986.3	988.9	991.3	993.8
5°	962.2	968.8	975.5	980.3	983.2	986.1	989.0	991.9
5.5°	954.8	963.0	971.1	976.8	980.1	983.4	986.7	990.1
6°	947.1	956.4	965.8	972.5	976.7	980.8	985.0	989.1
6.5°	938.7	949.6	960.3	968.0	972.6	977.2	981.7	986.3
7°	929.5	941.7	954.0	963.0	968.6	974.2	979.8	985.4
7.5°	920.2	934.0	947.7	957.6	963.9	970.2	976.3	982.6
8°	910.5	925.8	941.3	952.5	959.5	966.6	973.6	980.7
8.5°	899.8	916.9	933.9	946.4	954.5	962.7	970.7	978.8
9°	889.5	908.4	927.3	941.2	949.9	958.6	967.3	976.0
9.5°	878.8	899.4	919.9	935.0	944.5	954.2	963.7	973.2
10°	867.0	889.8	912.4	929.1	939.9	950.7	961.5	972.3
10.5°	855.3	880.0	904.8	923.0	934.9	946.8	958.6	970.4
11°	843.7	870.1	896.5	916.2	929.3	942.4	955.5	968.6
11.5°	831.5	859.8	888.1	909.3	923.4	937.5	951.6	965.8
12°	819.4	849.5	879.7	902.4	917.8	933.1	948.6	963.9
12.5°	806.2	838.6	871.1	895.5	911.8	928.3	944.6	961.1
13°	793.6	827.7	861.8	887.5	905.0	922.5	939.9	957.3
13.5°	781.0	816.8	852.5	879.7	898.2	916.6	935.1	953.6
14°	768.1	805.2	842.4	871.0	890.7	910.4	930.1	949.9
14.5°	755.5	794.4	833.2	863.0	883.8	904.6	925.4	946.1
15°	742.5	782.8	823.1	854.2	876.0	897.8	919.7	941.5
16°	716.1	759.1	802.1	835.8	860.1	884.4	908.7	933.0
17°	689.8	735.5	781.2	817.2	843.6	870.0	896.4	922.8
18°	662.5	710.8	759.2	797.8	826.7	855.6	884.5	913.4
19°	636.7	687.2	737.6	778.4	809.3	840.3	871.2	902.2
20°	611.1	663.1	715.3	758.0	791.2	824.5	857.7	891.0
22.5°	549.5	604.6	659.7	706.2	744.5	782.7	820.9	859.2
25°	491.7	548.1	604.7	654.2	696.5	738.9	781.3	823.7
27.5°	438.5	494.6	550.7	601.3	646.7	691.9	737.3	782.5
30°	389.8	444.4	499.1	550.3	598.1	645.8	693.6	741.4
32.5°	345.0	397.3	449.7	500.2	548.8	597.4	646.0	694.6
35°	304.6	354.0	403.5	451.8	499.2	546.6	593.9	641.3
37.5°	267.6	313.5	359.4	405.1	450.6	496.2	541.6	587.1
40°	234.4	276.7	319.1	361.6	404.2	446.8	489.3	532.0
42.5°	205.4	244.0	282.6	321.3	359.9	398.6	437.3	475.9



TEST NUMBER: P273371

CATALOG NUMBER: 0.03-5W-827-25-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
45°	178.8	213.4	248.1	282.6	316.9	351.2	385.5	419.8
47.5°	155.0	185.8	216.5	246.5	275.8	305.1	334.4	363.7
50°	133.5	160.5	187.5	213.3	237.7	262.3	286.8	311.3
52.5°	114.3	137.4	160.5	182.2	202.6	222.9	243.3	263.6
55°	98.0	117.5	137.1	155.0	171.4	187.8	204.2	220.6
57.5°	82.9	99.1	115.3	129.9	142.8	155.6	168.5	181.4
60°	70.0	83.5	97.0	108.6	118.5	128.2	138.0	147.7
62.5°	59.0	69.8	80.6	89.7	96.9	104.1	111.4	118.7
65°	48.8	57.3	65.8	72.8	78.3	83.6	89.0	94.4
67.5°	40.0	46.5	52.9	58.1	62.0	66.0	69.9	73.9
70°	32.4	37.4	42.4	46.2	48.9	51.6	54.3	57.0
72.5°	25.8	29.3	32.8	35.6	37.7	39.8	41.9	43.9
75°	19.9	22.4	25.0	26.9	28.3	29.8	31.2	32.7
77.5°	15.0	16.8	18.7	20.0	20.8	21.7	22.5	23.4
80°	10.5	11.5	12.5	13.5	14.3	15.1	16.0	16.8
82.5°	6.8	7.5	8.1	8.6	9.1	9.4	9.9	10.3
85°	3.6	4.0	4.5	4.8	5.0	5.2	5.4	5.6
87.5°	0.9	0.9	0.9	1.0	1.2	1.5	1.7	1.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)