

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: STREETWORKS

Report Number: P798663

Luminaire Tested: **ARCH1-20-750-U-T3**

Issue Date: 4/4/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P798663  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/4/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH1-20-750-U-T3  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 700mA LIGHTSQUARE WITH 10 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

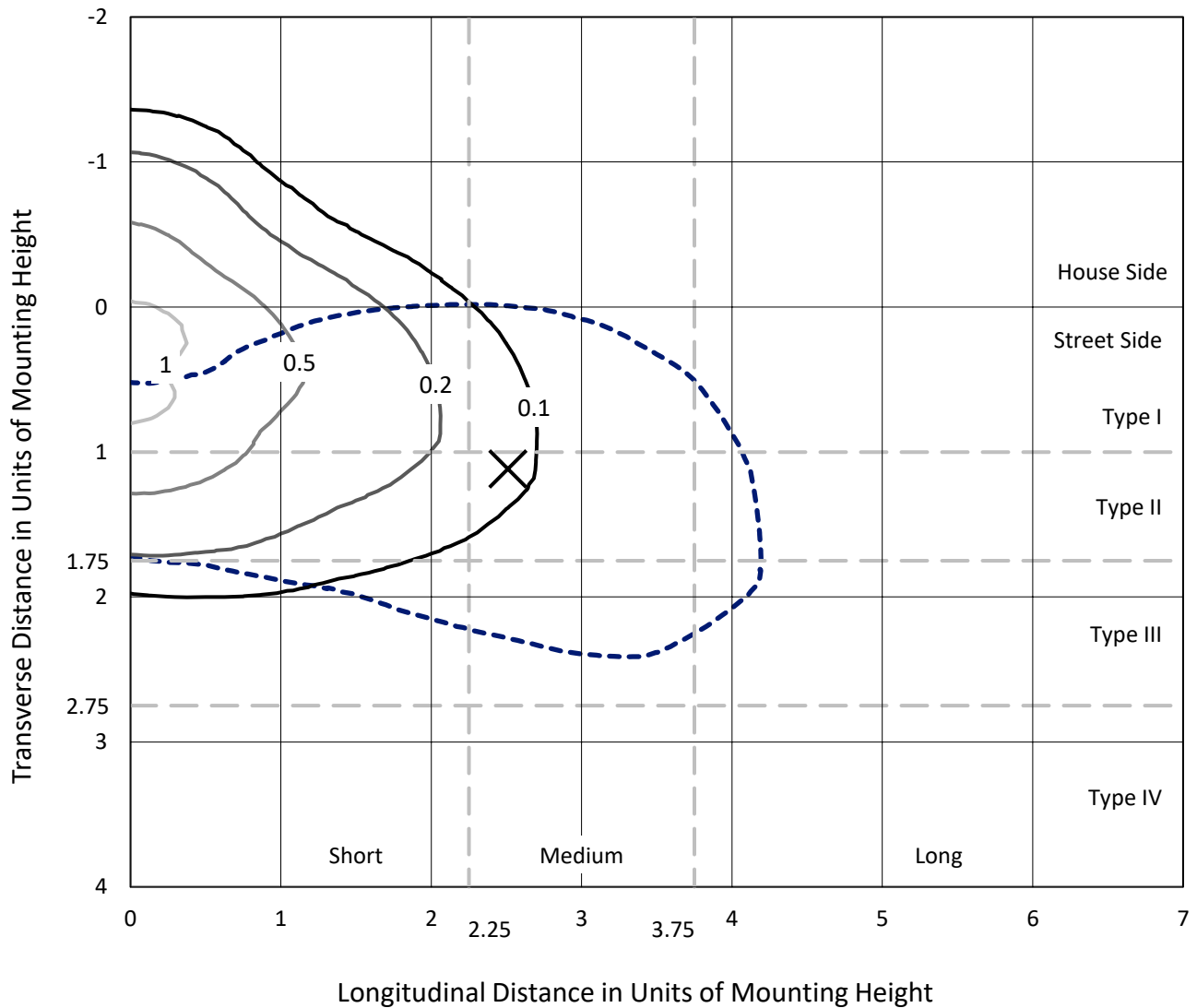
Lumens per Lamp: N/A  
Luminaire Lumens: 3589 lumens  
Efficiency: N/A  
Efficacy: 152.7 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 23.5  
Input Voltage (V): NR  
Input Current (Ain): 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: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

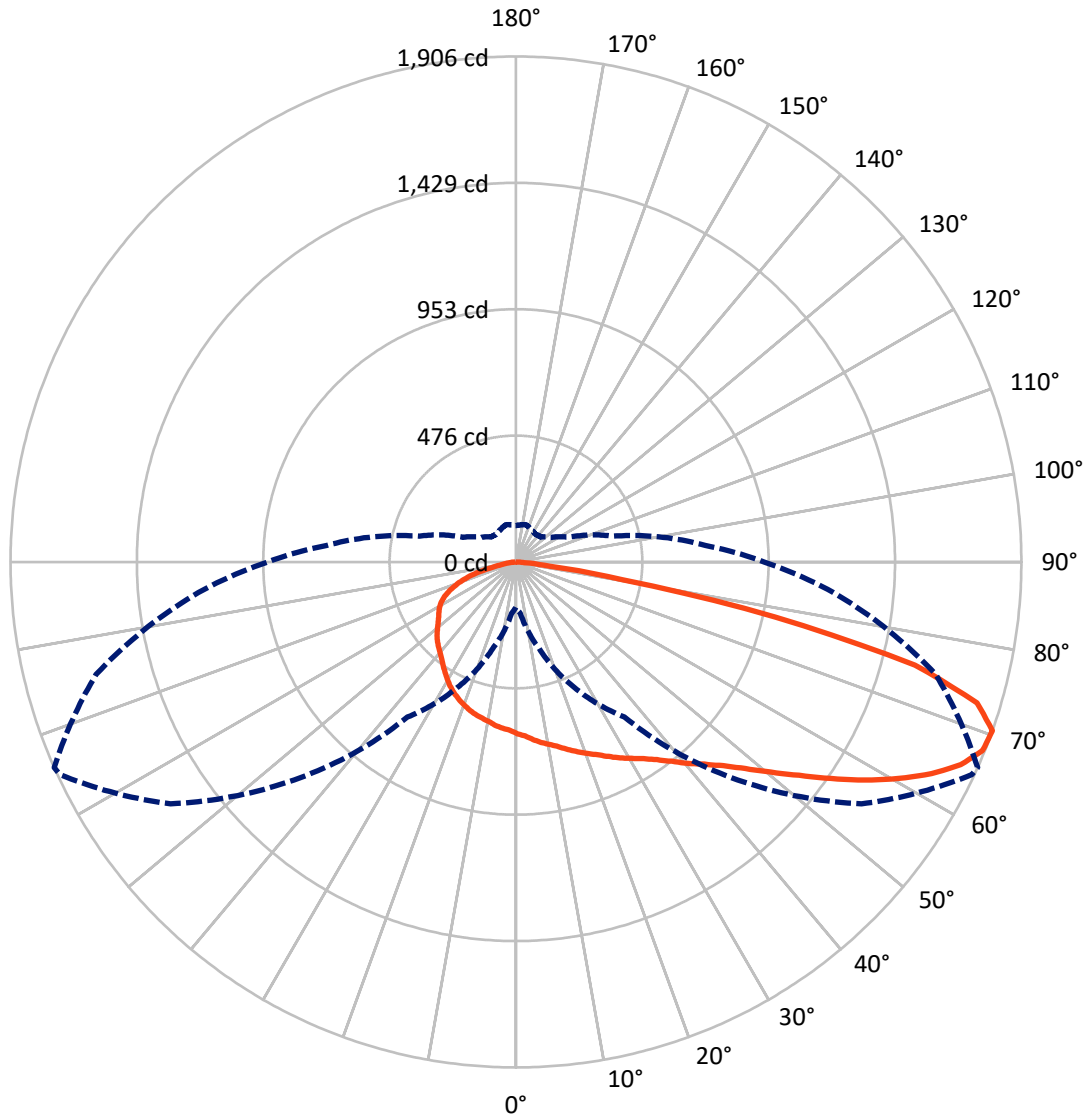
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	951.0	0.0	951.0
	% Fixture	26.5	0.0	26.5
<b>Street Side</b>	Lumens	2638.0	0.0	2638.0
	% Fixture	73.5	0.0	73.5
<b>Total</b>	Lumens	3589.0	0.0	3589.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.2	1.7
10°-20°	186.7	5.2
20°-30°	313.0	8.7
30°-40°	468.6	13.1
40°-50°	626.5	17.5
50°-60°	731.5	20.4
60°-70°	727.4	20.3
70°-80°	430.6	12.0
80°-90°	42.4	1.2
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°-90°	3589.0	100.0
0°-180°	3589.0	100.0

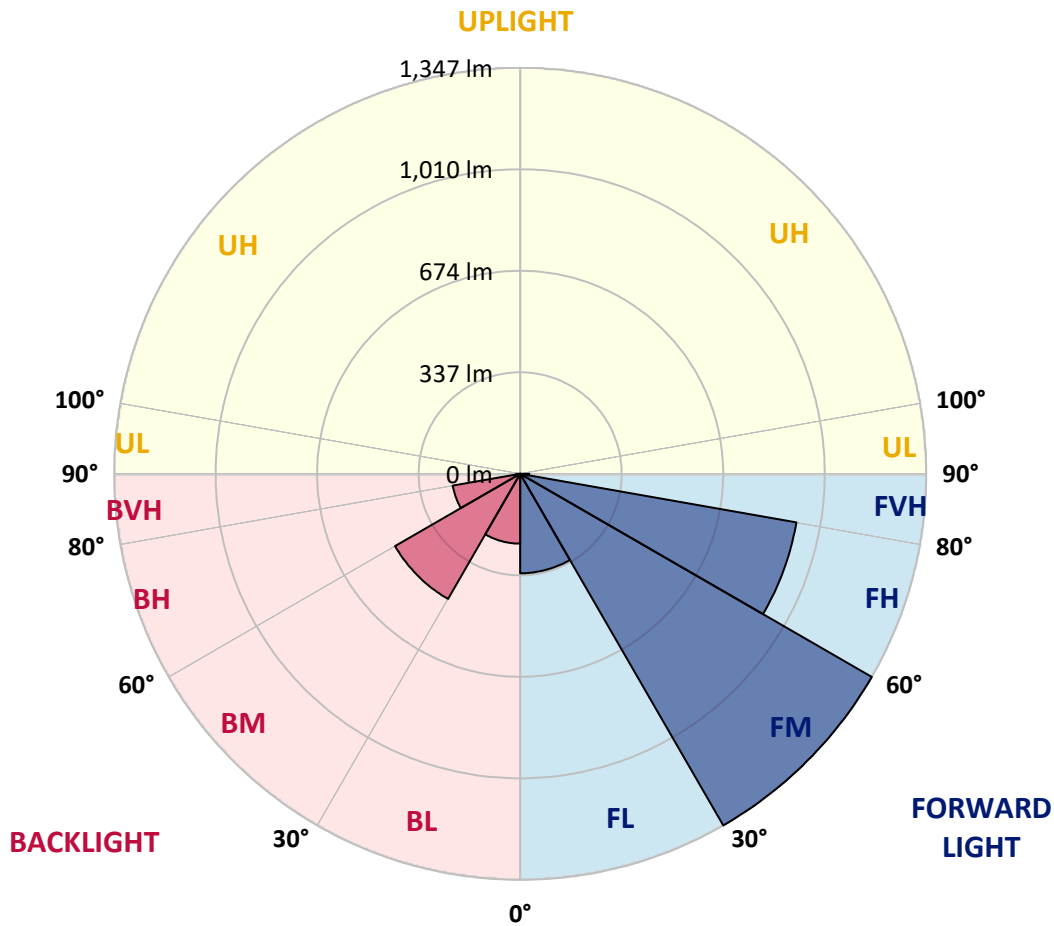


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	330.1	9.2			
FM (30°-60°)	1347.3	37.5			
FH (60°-80°)	930.8	25.9			G1/1800
FVH (80°-90°)	29.8	0.8			G1/100
BL (0°-30°)	231.8	6.5	B1/500		
BM (30°-60°)	479.4	13.4	B1/1000		
BH (60°-80°)	227.2	6.3	B1/500		G1/500
BVH (80°-90°)	12.6	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**  
 Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	647.7	647.7	647.7	647.7	647.7	647.7	647.7	647.7	647.7	647.7	647.7
2.5°	671.5	670.5	670.0	667.8	663.1	665.2	660.4	657.3	656.7	649.3	645.1
5°	699.1	698.5	697.5	694.3	686.9	688.0	680.0	674.2	672.6	661.0	652.0
7.5°	722.3	721.3	720.8	716.5	708.6	708.1	698.5	690.1	687.4	671.5	657.8
10°	740.3	738.8	739.8	735.6	727.1	725.5	713.4	702.2	699.6	679.5	660.4
12.5°	755.7	754.6	756.2	752.5	745.6	744.0	731.9	717.6	714.4	691.1	666.3
15°	772.6	768.9	772.1	770.5	765.7	765.2	754.1	738.2	734.0	705.9	675.3
17.5°	781.6	779.5	783.2	783.7	781.6	785.3	774.7	755.7	752.0	719.7	683.2
20°	788.0	784.8	789.0	792.2	793.8	801.2	792.7	774.2	770.0	732.9	690.6
22.5°	809.7	802.8	803.3	805.4	806.5	817.1	811.8	793.8	789.6	749.3	699.6
25°	864.2	850.4	841.4	835.1	827.7	836.7	833.5	816.0	812.3	768.9	710.7
27.5°	948.8	931.4	913.4	894.9	865.8	862.1	856.8	840.9	836.7	788.5	721.8
30°	1045.2	1027.7	1006.5	976.9	922.4	893.8	881.6	864.2	859.4	806.0	732.4
32.5°	1140.9	1125.6	1104.4	1068.4	990.7	932.4	906.5	888.5	883.8	825.0	745.1
35°	1215.6	1206.0	1192.3	1147.3	1058.4	977.9	942.5	920.8	915.5	855.2	768.4
37.5°	1275.9	1269.0	1257.4	1210.3	1107.6	1023.5	983.8	958.9	953.1	888.0	793.3
40°	1364.8	1346.8	1337.3	1269.0	1150.5	1064.7	1030.3	1004.4	998.1	922.9	813.4
42.5°	1440.5	1427.2	1415.6	1321.4	1191.2	1100.2	1074.3	1050.4	1042.0	957.3	835.1
45°	1453.2	1458.5	1452.6	1347.3	1255.8	1135.1	1118.7	1103.4	1095.4	1003.9	867.9
47.5°	1453.7	1453.7	1419.3	1362.1	1335.7	1174.3	1166.3	1171.6	1163.2	1063.1	907.0
50°	1415.6	1422.5	1404.5	1365.8	1356.9	1213.4	1224.6	1253.1	1244.7	1126.1	949.4
52.5°	1336.7	1359.5	1359.0	1360.0	1326.2	1246.8	1285.9	1351.0	1336.7	1197.0	994.4
55°	1197.6	1243.1	1283.8	1318.8	1299.7	1266.9	1361.1	1455.3	1440.5	1276.4	1039.9
57.5°	1078.5	1107.6	1158.4	1257.4	1268.5	1284.4	1431.5	1564.3	1551.1	1364.3	1087.5
60°	942.5	982.7	1033.5	1174.3	1230.4	1307.1	1508.7	1670.7	1658.0	1453.2	1133.5
62.5°	733.5	785.3	886.9	1046.7	1174.8	1321.4	1569.6	1764.3	1758.5	1537.3	1174.8
65°	511.2	557.2	699.6	890.1	1086.4	1315.0	1618.3	1847.9	1842.7	1606.1	1203.9
67.5°	298.5	351.9	512.8	716.5	930.3	1271.1	1634.1	1897.2	1897.2	1647.9	1211.9
70°	170.4	195.3	338.2	522.3	713.4	1149.9	1589.7	1896.6	1905.6	1638.4	1179.0
72.5°	119.1	130.2	227.6	351.4	483.7	930.3	1473.3	1805.1	1817.3	1548.4	1066.9
75°	92.6	100.5	160.3	239.7	304.8	631.9	1218.7	1522.0	1554.2	1319.8	862.6
77.5°	70.4	76.2	93.7	149.8	195.3	363.0	804.4	998.1	1000.2	808.1	462.5
80°	51.3	57.2	62.4	91.6	103.7	169.9	303.8	417.0	405.4	391.1	250.3
82.5°	30.7	36.5	38.1	49.7	50.8	72.5	106.4	134.4	129.1	172.0	117.5
85°	13.2	18.5	19.6	22.8	21.7	29.6	42.3	35.5	31.8	36.5	25.4
87.5°	3.2	5.3	5.3	5.8	4.8	7.4	7.9	5.8	5.3	6.4	6.4
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	647.7	647.7	647.7	647.7	647.7	647.7	647.7	647.7	647.7	647.7	647.7
2.5°	644.0	642.4	643.0	634.0	631.3	628.7	627.1	626.0	625.0	626.6	628.2
5°	648.8	645.1	640.9	627.6	622.3	616.5	612.3	608.6	607.0	607.0	608.6
7.5°	652.5	646.1	637.1	619.7	610.2	602.2	595.3	590.6	587.9	587.9	589.5
10°	653.0	644.0	629.7	608.6	595.9	584.2	576.3	571.0	567.3	567.3	568.4
12.5°	656.2	644.0	625.5	600.1	584.2	569.9	560.4	552.5	550.9	550.9	551.9
15°	661.5	646.7	622.9	592.7	573.6	557.2	546.7	538.2	535.0	537.1	537.7
17.5°	666.3	648.3	618.1	583.2	560.4	542.4	530.8	523.4	519.1	523.9	523.9
20°	669.4	648.3	611.2	571.0	546.1	526.0	514.9	505.9	502.7	508.6	509.1
22.5°	674.2	647.7	603.8	558.8	530.8	509.6	498.5	491.6	490.0	496.4	498.5
25°	679.5	648.8	595.9	545.1	513.8	493.2	484.7	481.6	482.6	490.6	493.2
27.5°	685.3	650.9	587.9	529.7	495.3	476.8	472.0	473.6	477.9	487.9	491.1
30°	690.6	651.4	576.8	511.7	474.2	456.7	458.8	465.7	472.0	482.1	485.8
32.5°	697.5	652.0	565.2	492.1	451.4	438.7	448.2	459.3	465.7	475.2	479.4
35°	714.4	661.0	556.2	473.1	430.2	423.4	439.2	453.5	457.2	465.7	469.4
37.5°	734.0	675.8	551.4	453.5	409.6	408.0	428.1	442.4	443.5	448.8	452.5
40°	746.2	682.1	546.1	437.1	391.1	392.1	412.8	423.9	421.8	425.5	428.1
42.5°	758.3	684.2	535.0	423.4	373.6	374.7	390.5	398.5	399.5	407.5	411.2
45°	779.0	690.1	522.8	410.7	357.7	354.0	363.6	374.1	387.9	403.2	407.5
47.5°	806.5	702.2	510.1	395.3	342.4	330.2	333.9	352.4	366.7	381.0	383.7
50°	834.5	714.4	498.5	376.8	327.0	304.8	306.4	323.3	335.0	346.1	347.7
52.5°	862.1	725.0	488.4	359.3	309.6	274.7	281.0	298.5	306.4	311.7	313.3
55°	889.6	734.0	479.4	344.5	289.5	250.8	256.7	273.1	281.0	283.6	284.7
57.5°	918.2	744.6	472.6	331.8	266.7	229.7	233.4	245.0	252.4	255.6	254.5
60°	942.0	753.6	468.9	318.6	244.0	210.1	209.0	219.6	230.2	233.4	232.3
62.5°	960.5	759.4	463.0	301.6	223.8	190.5	185.2	199.0	210.1	212.2	213.8
65°	970.5	759.9	448.8	279.9	203.2	169.3	165.6	179.4	186.3	188.4	188.4
67.5°	969.0	751.5	420.7	250.8	184.2	150.3	147.1	155.6	165.6	167.2	165.6
70°	936.1	716.5	375.7	220.1	161.4	133.4	127.5	136.0	145.5	139.7	137.1
72.5°	843.0	626.0	309.6	186.3	136.0	112.2	109.5	118.0	118.5	119.6	117.0
75°	665.2	466.2	231.8	145.0	110.1	94.2	93.7	92.1	94.2	98.4	95.3
77.5°	349.3	232.8	125.4	88.9	79.9	75.7	72.0	71.4	77.8	80.4	77.3
80°	189.5	130.7	72.0	53.4	48.7	49.2	54.0	52.9	59.8	61.4	58.7
82.5°	82.6	61.9	35.5	32.3	32.3	31.8	33.3	37.0	44.5	44.5	35.5
85°	18.0	15.3	13.8	15.9	18.0	18.0	18.0	18.0	12.7	6.9	4.8
87.5°	5.8	5.8	5.8	6.4	6.9	6.9	5.8	4.2	2.6	0.5	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)