

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: P214573

Luminaire Tested: **ARCH-AF24-20-D-U-T2R-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214573
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-20-D-U-T2R-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 260mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2531 lumens
Efficiency: N/A
Efficacy: 120.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G1

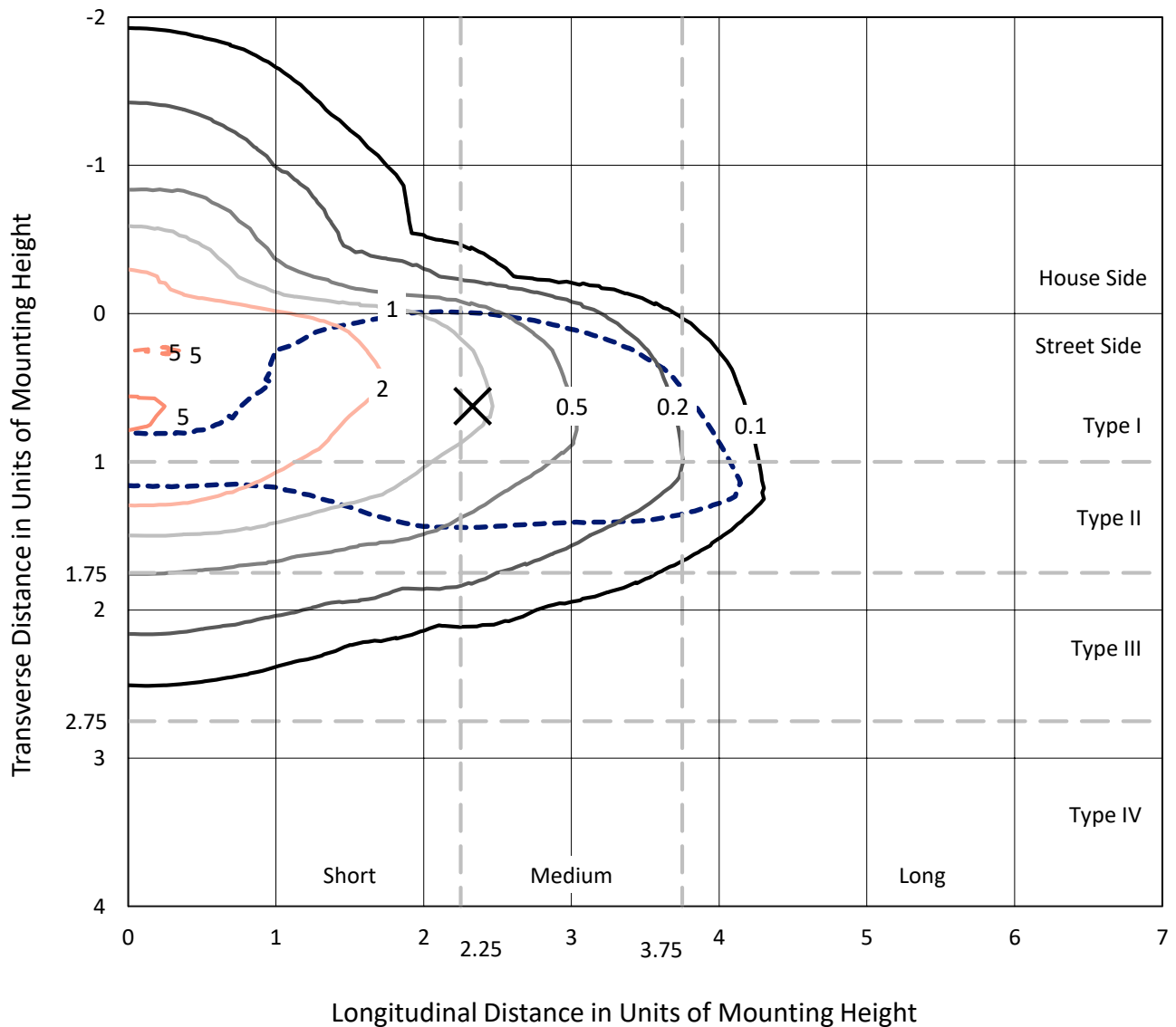
Input Watts (W): 21
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P214573
 CATALOG NUMBER: ARCH-AF24-20-D-U-T2R-7030

Iso-Footcandle Lines of Horizontal Illumination

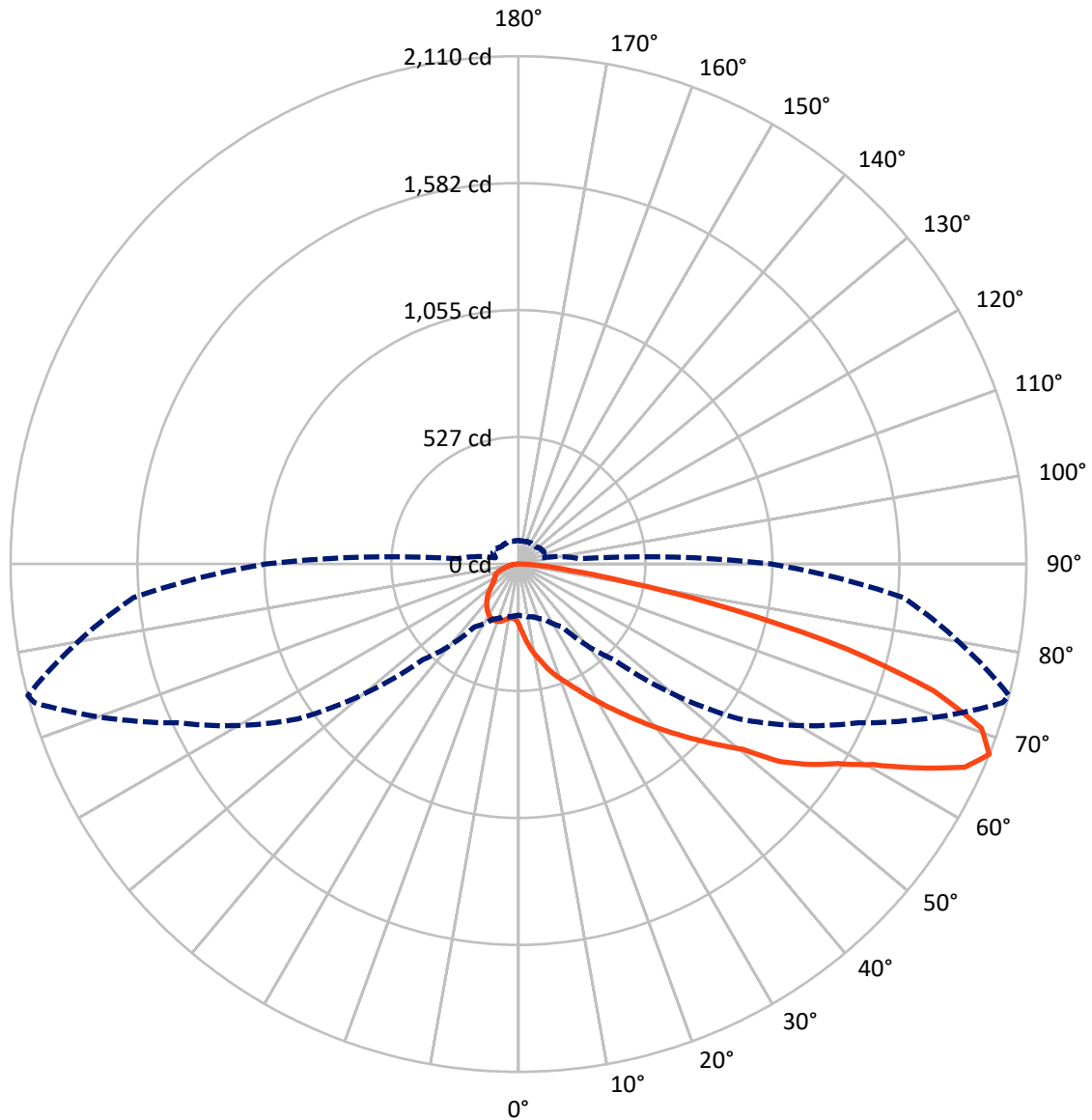
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.3 fc
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P214573
CATALOG NUMBER: ARCH-AF24-20-D-U-T2R-7030

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P214573

CATALOG NUMBER: ARCH-AF24-20-D-U-T2R-7030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	432.2	0.0	432.2
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	2098.8	0.0	2098.8
	% Fixture	82.9	0.0	82.9
Total	Lumens	2531.0	0.0	2531.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.5	1.2
10°-20°	106.5	4.2
20°-30°	194.2	7.7
30°-40°	318.8	12.6
40°-50°	461.0	18.2
50°-60°	543.3	21.5
60°-70°	527.9	20.9
70°-80°	293.5	11.6
80°-90°	56.4	2.2
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°	2531.0	100.0
0°-180°	2531.0	100.0



REPORT NUMBER: P214573

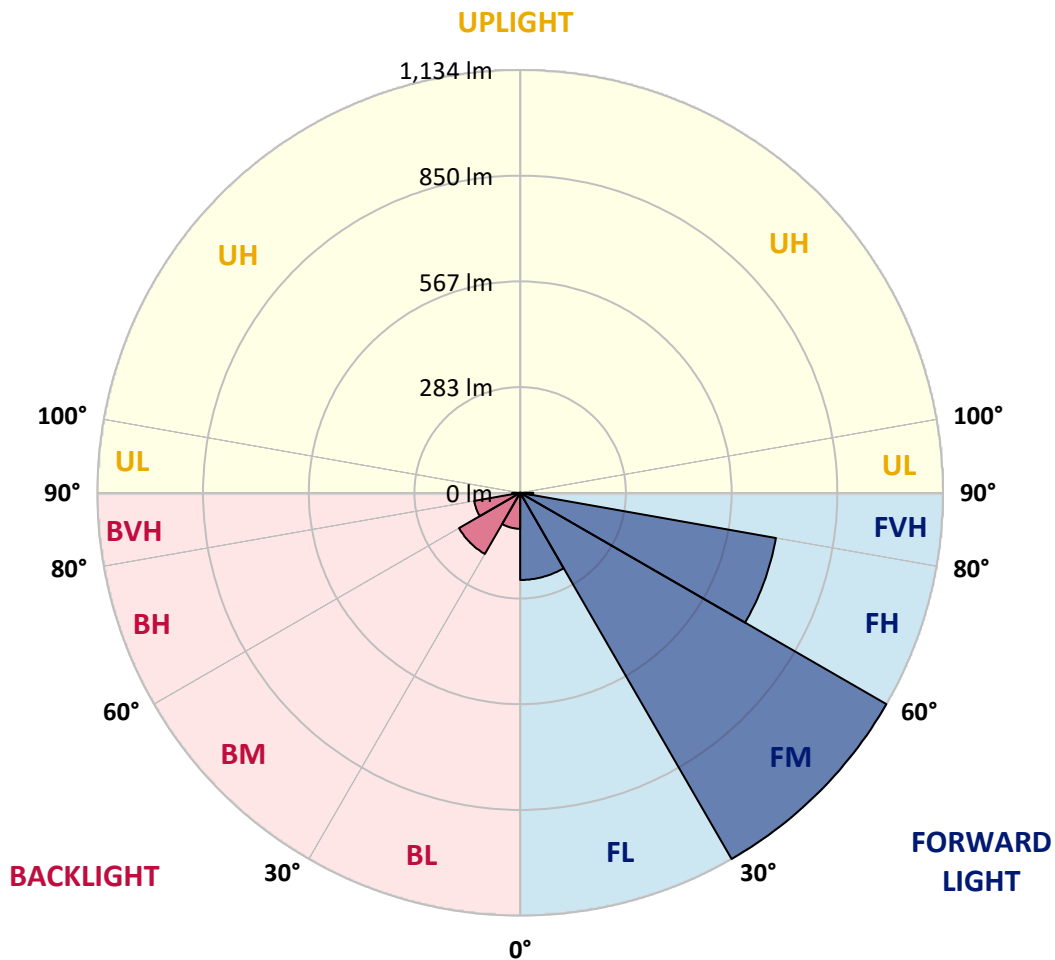
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	233.7	9.2			
FM (30°-60°)	1133.8	44.8			
FH (60°-80°)	696.2	27.5			G1/1800
FVH (80°-90°)	35.1	1.4			G1/100
BL (0°-30°)	96.5	3.8	B0/110		
BM (30°-60°)	189.3	7.5	B0/220		
BH (60°-80°)	125.1	4.9	B1/500		G1/500
BVH (80°-90°)	21.3	0.8			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 II Medium





REPORT NUMBER: P214573

CATALOG NUMBER: ARCH-AF24-20-D-U-T2R-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	250.8	250.8	250.8	250.8	250.8	250.8	250.8	250.8	250.8	250.8	250.8
2.5°	355.6	356.6	354.5	349.7	342.9	330.2	319.1	299.5	282.0	279.9	261.4
5°	418.0	419.1	416.4	410.6	403.2	389.4	374.1	348.7	320.6	315.3	276.2
7.5°	460.9	461.4	458.2	452.4	446.6	432.8	417.5	388.9	354.5	350.3	295.2
10°	497.4	498.4	494.2	490.5	484.1	470.4	454.5	424.3	388.9	383.1	314.8
12.5°	531.2	532.3	529.6	526.5	524.3	511.6	494.2	458.2	420.1	413.8	338.1
15°	554.0	555.0	555.6	559.8	562.4	553.4	536.0	496.8	454.0	448.2	365.6
17.5°	547.6	550.3	558.2	573.6	590.0	590.5	576.2	534.9	487.3	481.0	393.7
20°	529.1	531.2	540.7	564.0	596.3	614.8	613.8	573.6	518.5	511.6	419.6
22.5°	544.5	547.1	547.1	561.4	593.1	627.5	641.3	611.6	549.7	543.4	445.5
25°	610.1	611.6	600.5	594.7	606.4	638.1	664.0	652.9	587.8	580.4	473.6
27.5°	701.6	699.0	685.2	661.9	649.2	657.7	684.1	692.1	631.8	622.8	502.7
30°	792.6	791.0	775.1	743.9	715.4	697.4	706.4	727.0	679.4	668.8	530.7
32.5°	877.8	875.1	857.7	821.2	788.9	755.6	738.1	758.7	730.2	718.0	561.9
35°	956.1	949.2	931.8	893.7	860.3	828.6	785.7	788.9	785.2	772.5	596.3
37.5°	1019.6	1014.3	995.3	959.8	924.4	894.2	849.2	823.3	844.5	832.3	636.0
40°	1075.7	1069.9	1050.3	1014.8	982.0	953.5	918.0	865.1	911.1	897.4	680.4
42.5°	1118.0	1113.8	1097.9	1063.0	1031.2	1005.3	987.8	918.0	980.4	967.2	729.1
45°	1140.8	1136.5	1128.1	1100.0	1070.9	1050.8	1052.4	981.0	1052.9	1041.8	786.8
47.5°	1112.7	1115.9	1123.3	1118.0	1100.0	1090.5	1110.1	1046.0	1133.9	1123.3	849.2
50°	1037.6	1040.8	1070.4	1106.9	1113.2	1124.9	1161.9	1121.2	1219.6	1211.1	926.5
52.5°	852.9	870.4	952.4	1039.7	1099.5	1147.6	1219.6	1232.8	1364.0	1364.0	1063.0
55°	644.5	659.8	753.5	905.8	1046.0	1149.8	1261.9	1308.5	1468.3	1470.4	1134.4
57.5°	522.2	531.8	577.8	733.9	933.9	1123.3	1312.2	1373.6	1555.0	1564.6	1226.5
60°	423.8	429.1	459.3	567.7	778.8	1051.9	1348.2	1466.7	1678.9	1692.1	1343.9
62.5°	340.7	346.0	366.1	431.2	611.1	918.0	1341.8	1563.5	1843.9	1865.6	1497.9
65°	272.0	277.8	291.0	331.2	452.9	751.9	1276.7	1613.3	2014.8	2036.0	1600.0
67.5°	212.2	217.5	226.5	252.9	319.1	562.4	1122.8	1560.9	2091.6	2109.6	1605.3
70°	160.3	163.0	170.4	187.3	228.0	373.6	878.8	1385.2	2022.8	2039.2	1499.5
72.5°	124.3	123.8	128.0	136.5	159.3	257.1	582.5	1126.5	1788.4	1805.3	1279.4
75°	101.6	101.1	103.7	106.4	115.3	172.5	343.9	848.2	1443.4	1411.1	959.8
77.5°	85.7	85.2	87.8	88.4	92.1	119.0	195.8	558.2	963.0	907.4	540.7
80°	72.5	72.0	75.1	76.2	78.8	87.3	112.7	302.1	483.6	458.2	258.2
82.5°	54.5	56.6	62.4	65.1	68.3	64.6	69.8	133.3	224.3	214.3	112.2
85°	26.5	31.2	47.1	52.4	56.1	40.7	47.6	63.0	101.1	96.3	45.5
87.5°	9.0	7.9	28.0	33.3	36.5	18.5	26.5	34.9	41.8	38.1	14.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P214573

CATALOG NUMBER: ARCH-AF24-20-D-U-T2R-7030

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	250.8	250.8	250.8	250.8	250.8	250.8	250.8	250.8	250.8	250.8	250.8
2.5°	253.4	245.5	233.9	224.9	219.1	214.3	212.2	211.6	210.6	210.1	210.1
5°	258.7	244.4	226.5	216.9	214.3	212.2	213.2	213.8	213.8	213.8	213.8
7.5°	266.7	246.6	224.9	218.5	218.0	218.0	221.2	222.8	223.8	223.8	223.8
10°	277.3	250.3	227.5	222.2	223.8	224.9	228.6	230.7	231.7	232.3	232.8
12.5°	291.5	258.2	232.8	228.6	230.7	231.2	233.9	234.9	236.0	236.5	236.5
15°	310.6	269.8	241.3	236.0	236.5	236.0	236.0	234.9	234.4	234.4	235.5
17.5°	330.2	281.0	248.7	241.3	239.2	234.9	231.7	229.1	227.5	226.5	227.0
20°	349.7	291.0	252.9	242.3	236.5	229.6	223.8	220.1	218.0	215.9	216.9
22.5°	369.3	300.5	254.5	239.2	230.7	220.6	214.3	208.5	203.7	200.5	201.1
25°	391.0	311.1	254.5	235.5	222.8	212.2	204.2	194.7	187.8	185.2	186.2
27.5°	412.7	320.1	251.9	228.6	213.8	203.2	191.5	180.4	176.2	174.6	175.1
30°	434.4	327.0	246.0	220.1	204.2	192.6	177.3	169.8	164.6	160.3	160.8
32.5°	456.1	331.8	238.1	209.5	194.2	179.4	166.7	158.2	148.7	143.4	143.9
35°	481.0	335.5	228.6	198.9	183.1	167.7	158.2	144.4	134.4	130.2	129.1
37.5°	506.9	338.1	218.5	187.3	172.0	159.3	149.7	132.8	123.3	117.5	116.9
40°	534.9	339.2	206.4	175.1	161.4	154.0	138.6	125.9	109.5	105.8	105.8
42.5°	568.3	338.6	194.2	163.0	149.7	141.8	130.7	124.9	110.6	106.9	104.8
45°	606.4	338.6	181.0	148.7	138.1	126.5	121.7	118.0	108.5	110.1	111.1
47.5°	649.7	337.6	165.1	137.0	128.6	118.5	115.9	107.9	104.2	105.3	106.4
50°	709.5	339.2	150.8	127.5	121.7	113.2	110.1	105.8	104.2	104.8	104.2
52.5°	792.6	333.9	137.0	121.7	116.4	105.3	105.3	104.8	105.3	104.8	104.8
55°	838.1	322.2	127.0	118.5	112.7	101.6	103.7	104.8	105.8	105.3	105.3
57.5°	902.7	314.3	119.0	116.4	110.6	100.5	102.6	104.8	105.3	104.8	104.8
60°	978.9	309.0	113.8	116.9	109.0	100.5	103.2	104.8	104.2	103.7	103.7
62.5°	1067.2	306.9	110.1	118.5	107.4	101.1	103.2	104.8	102.6	102.1	102.1
65°	1100.5	287.8	105.3	119.6	108.5	101.1	102.6	103.2	100.5	100.0	99.5
67.5°	1049.2	255.0	98.4	117.5	111.6	101.1	101.1	100.5	97.4	96.8	95.8
70°	934.4	211.6	87.8	110.6	113.8	101.6	98.9	96.3	93.1	93.1	91.0
72.5°	765.1	166.7	74.1	98.4	112.2	103.2	94.7	91.0	87.3	87.3	85.2
75°	551.3	124.3	59.3	82.0	105.3	102.6	89.4	84.7	80.4	79.9	77.2
77.5°	314.3	87.3	48.1	64.0	93.7	100.0	84.7	77.2	72.5	70.9	69.3
80°	161.4	58.7	39.2	50.3	77.8	92.6	81.0	68.8	63.5	60.8	58.2
82.5°	76.7	39.2	30.2	37.0	58.7	81.0	76.2	59.3	53.4	50.3	47.1
85°	34.4	23.3	20.1	23.8	41.8	63.0	67.2	48.7	41.8	52.4	38.6
87.5°	11.1	10.6	10.6	11.1	20.1	27.5	49.2	36.0	33.3	27.5	23.3
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)