

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: P265927

Luminaire Tested: **ARCH-AF24-30-D-U-T3-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265927
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-30-D-U-T3-7027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3457.8 lumens
Efficiency: N/A
Efficacy: 111.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G1

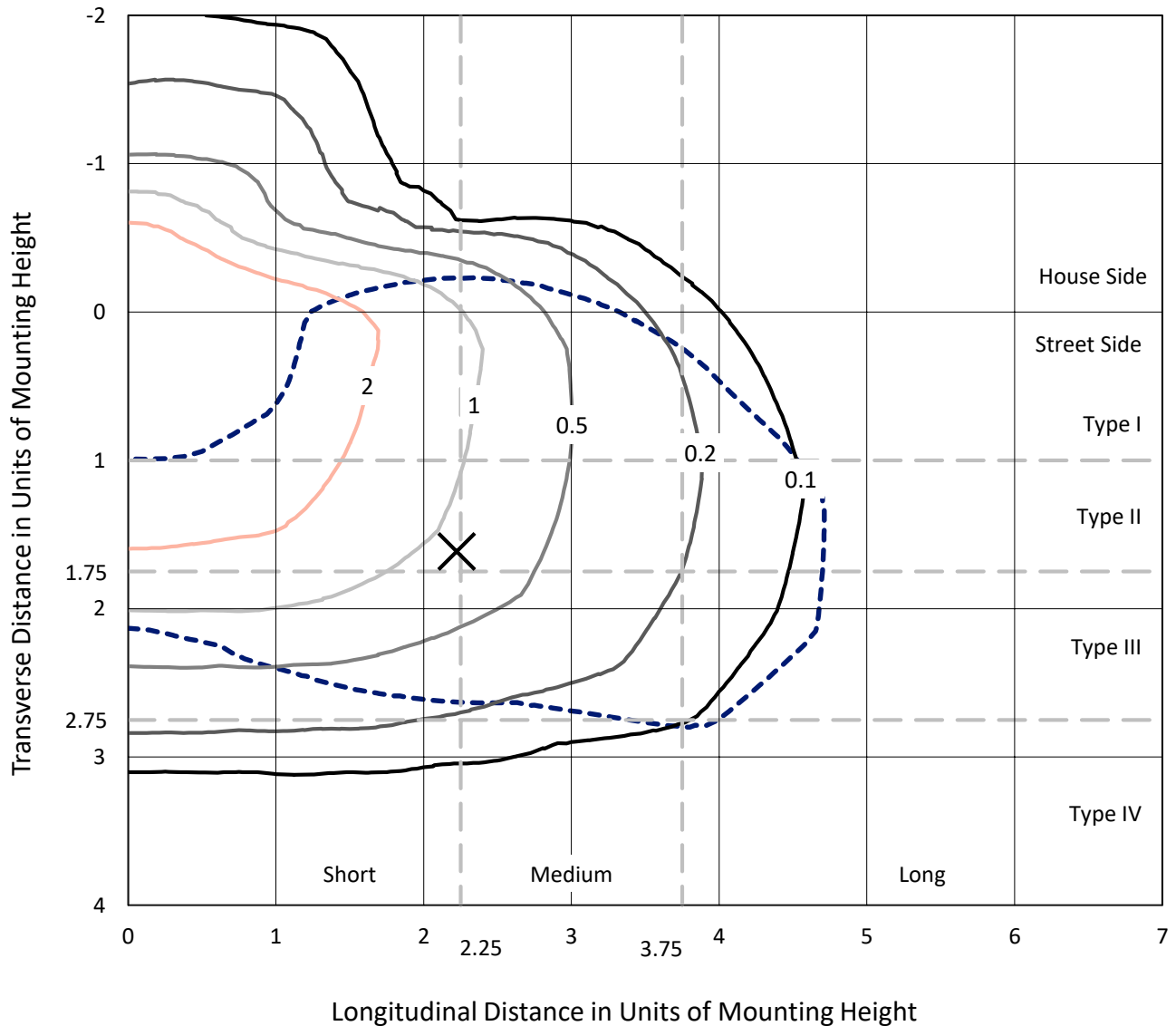
Input Watts (W): 31
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P265927
 CATALOG NUMBER: ARCH-AF24-30-D-U-T3-7027

Iso-Footcandle Lines of Horizontal Illumination

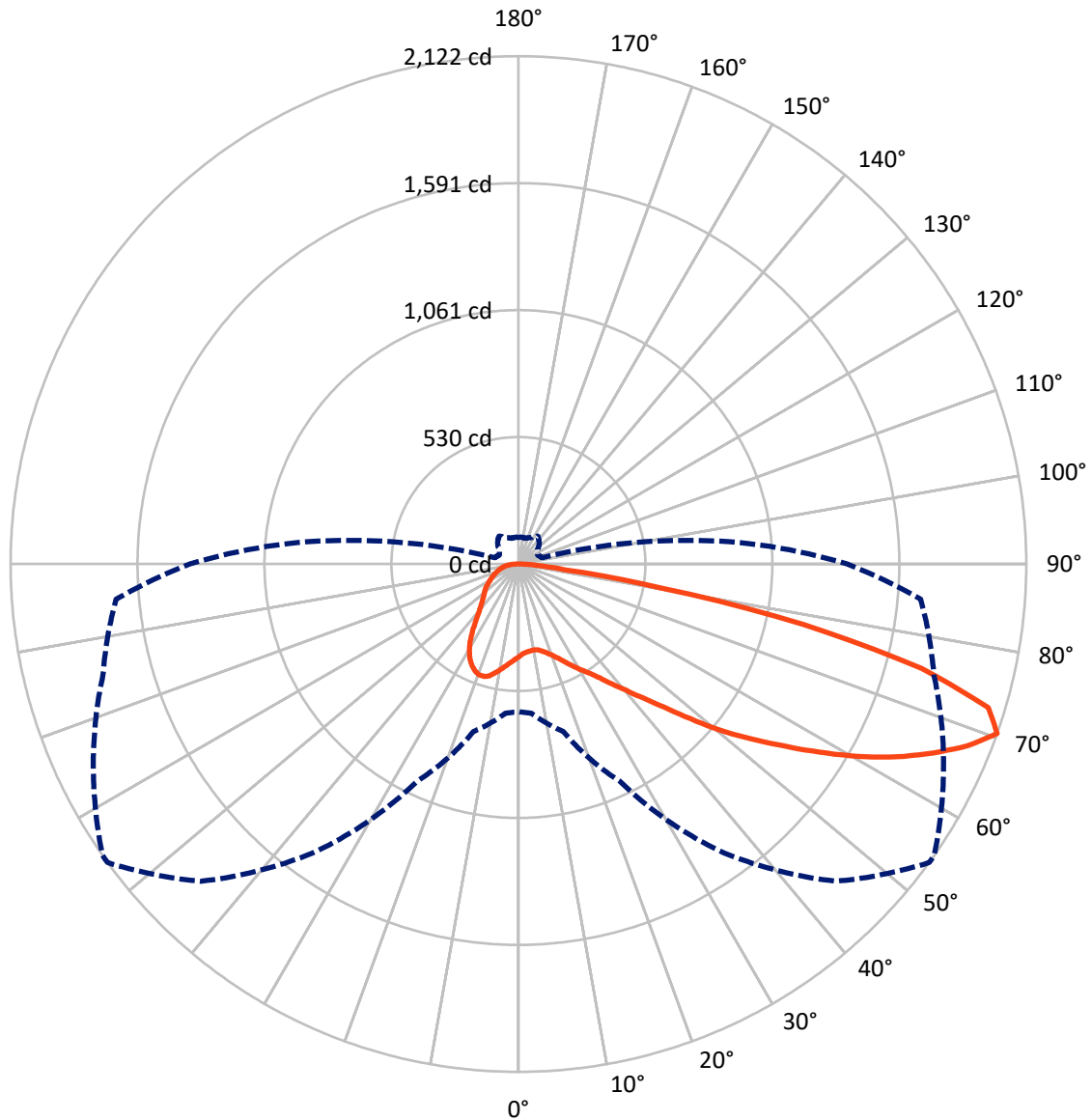
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.5 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P265927
CATALOG NUMBER: ARCH-AF24-30-D-U-T3-7027

Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P265927

CATALOG NUMBER: ARCH-AF24-30-D-U-T3-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	784.2	0.0	784.2
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	2673.5	0.0	2673.5
	% Fixture	77.3	0.0	77.3
Total	Lumens	3457.8	0.0	3457.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.0	1.1
10°-20°	121.3	3.5
20°-30°	210.8	6.1
30°-40°	308.0	8.9
40°-50°	483.4	14.0
50°-60°	743.3	21.5
60°-70°	908.2	26.3
70°-80°	563.1	16.3
80°-90°	81.8	2.4
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°-90°	3457.8	100.0
0°-180°	3457.8	100.0

Coefficient of Utilization



REPORT NUMBER: P265927

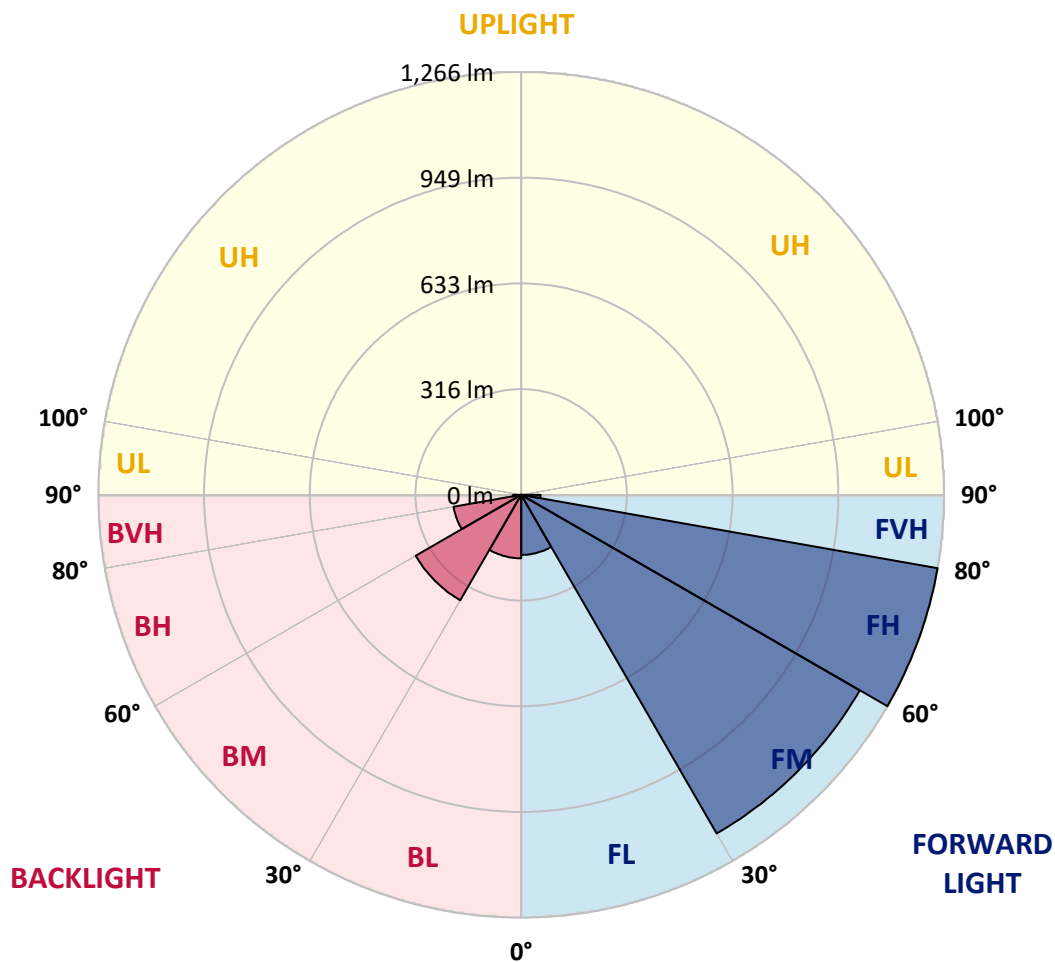
CATALOG NUMBER: ARCH-AF24-30-D-U-T3-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	179.9	5.2			
FM	(30°-60°)	1170.3	33.8			
FH	(60°-80°)	1265.6	36.6			G1/1800
FVH	(80°-90°)	57.8	1.7			G1/100
BL	(0°-30°)	190.1	5.5	B1/500		
BM	(30°-60°)	364.4	10.5	B1/1000		
BH	(60°-80°)	205.6	5.9	B1/500		G1/500
BVH	(80°-90°)	24.0	0.7			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 Short





REPORT NUMBER: P265927

CATALOG NUMBER: ARCH-AF24-30-D-U-T3-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9
2.5°	371.7	370.5	370.5	372.3	372.9	374.9	374.9	375.4	377.4	380.5	384.4
5°	360.3	359.6	360.3	362.7	364.1	367.9	369.2	369.7	373.5	378.6	384.4
7.5°	348.8	348.3	349.5	353.4	357.0	362.7	366.0	366.6	372.3	379.3	386.9
10°	345.0	344.4	346.3	349.5	353.4	359.6	364.7	365.3	373.5	381.8	392.6
12.5°	350.1	349.5	351.3	354.7	358.3	362.7	368.5	369.2	380.0	390.7	402.0
15°	362.7	362.7	363.5	365.3	369.2	372.9	377.9	378.6	390.0	402.7	414.1
17.5°	382.4	381.2	381.2	380.5	383.0	385.0	391.3	391.9	404.0	415.3	426.8
20°	406.6	405.9	403.2	400.1	399.6	400.7	407.1	407.7	419.8	429.3	440.0
22.5°	435.6	436.2	430.6	423.6	420.3	422.4	428.0	428.6	437.6	445.6	455.3
25°	474.2	472.2	464.2	454.0	447.6	447.6	453.4	453.4	461.5	466.6	473.0
27.5°	511.0	507.2	499.5	484.9	474.8	476.8	482.5	482.5	490.0	491.9	495.1
30°	550.8	547.1	537.5	519.2	505.8	504.6	511.6	511.0	521.0	520.5	518.0
32.5°	599.6	597.7	581.8	558.4	540.7	536.3	542.5	543.3	549.6	547.6	539.4
35°	668.0	667.4	652.8	611.7	588.2	579.9	583.8	583.8	588.2	583.1	569.2
37.5°	754.0	755.4	742.7	682.0	648.9	635.0	635.7	635.0	636.3	630.6	616.1
40°	840.2	843.4	842.7	769.3	727.4	703.5	694.6	693.3	696.5	693.9	679.9
42.5°	953.6	961.1	943.4	876.9	830.0	789.5	765.4	762.3	769.3	772.5	759.2
45°	1071.3	1068.8	1040.9	992.7	950.3	898.5	852.9	847.8	852.9	862.4	848.4
47.5°	1132.8	1130.7	1123.8	1099.7	1093.4	1033.9	964.9	960.5	950.9	964.3	947.8
50°	1234.0	1235.9	1207.4	1204.8	1231.4	1198.6	1091.5	1081.4	1064.3	1075.1	1061.2
52.5°	1307.5	1299.2	1281.5	1303.6	1386.7	1368.8	1210.6	1206.2	1190.3	1187.7	1181.5
55°	1337.1	1337.1	1340.5	1391.7	1510.1	1486.7	1339.7	1344.1	1322.7	1304.9	1313.1
57.5°	1346.1	1349.9	1377.1	1461.9	1655.0	1578.4	1482.3	1488.5	1457.5	1422.0	1448.0
60°	1302.5	1313.9	1379.0	1501.8	1736.8	1676.0	1632.3	1634.1	1589.2	1537.3	1582.9
62.5°	1190.3	1204.3	1320.8	1518.2	1723.4	1775.9	1774.2	1778.6	1717.1	1652.5	1709.6
65°	1053.0	1066.8	1191.0	1472.1	1713.2	1847.5	1903.9	1915.9	1836.8	1750.0	1788.6
67.5°	851.0	869.3	987.1	1316.3	1663.9	1906.5	2025.5	2038.2	1929.2	1800.7	1781.7
70°	616.6	625.6	724.4	1000.4	1462.6	1874.1	2121.6	2121.1	1959.7	1796.9	1686.7
72.5°	296.9	303.8	389.3	621.1	1045.9	1590.4	2052.1	2064.0	1917.8	1741.9	1469.5
75°	122.2	129.1	157.7	262.1	549.0	1051.0	1739.3	1767.8	1741.9	1563.2	1149.8
77.5°	75.9	78.5	92.4	135.6	250.7	490.7	1217.6	1256.2	1380.2	1252.3	759.2
80°	57.0	58.8	69.0	95.0	158.3	181.1	604.6	653.3	836.4	718.6	343.8
82.5°	47.5	48.1	55.1	69.0	107.6	103.8	193.8	216.0	390.0	274.2	118.3
85°	44.3	45.5	49.3	49.3	68.5	65.1	80.4	84.3	113.4	93.8	41.1
87.5°	22.7	21.5	43.7	38.6	35.5	31.7	34.1	36.7	42.4	44.9	18.3
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: P265927

CATALOG NUMBER: ARCH-AF24-30-D-U-T3-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9	386.9
2.5°	385.6	387.4	390.7	393.7	397.6	402.0	404.5	407.7	410.3	409.0	408.4
5°	387.4	390.7	397.6	404.0	411.6	420.3	426.1	432.4	437.6	438.8	436.8
7.5°	390.7	396.3	405.9	417.3	427.4	438.8	447.6	456.5	462.8	464.2	464.2
10°	398.3	404.5	417.3	432.4	444.5	456.5	466.6	473.5	479.2	481.9	481.9
12.5°	409.0	416.6	431.8	450.2	463.4	474.8	480.6	483.7	486.3	488.8	489.4
15°	421.7	429.8	448.3	467.8	481.9	487.5	487.5	486.9	486.9	488.1	489.4
17.5°	434.3	443.3	462.2	483.1	491.9	488.8	484.4	482.5	481.2	480.6	482.5
20°	447.6	456.5	475.6	495.1	492.6	479.2	473.0	468.6	464.8	462.8	465.3
22.5°	462.2	470.4	490.0	503.3	484.4	464.2	452.0	445.1	438.8	435.0	437.6
25°	479.2	487.5	506.6	505.8	469.9	441.2	422.4	411.0	404.0	400.1	400.1
27.5°	499.5	506.6	524.9	499.5	449.5	411.0	383.0	372.3	370.5	367.2	367.2
30°	520.5	526.1	541.9	484.9	421.7	371.0	340.6	335.5	336.1	333.0	333.7
32.5°	541.9	547.6	552.1	463.4	385.6	326.1	305.9	302.0	301.4	298.9	296.4
35°	572.4	580.7	553.4	434.3	342.0	288.7	274.2	270.4	266.5	257.8	257.8
37.5°	618.7	627.5	550.2	398.3	296.9	259.6	246.2	241.3	234.8	226.1	222.9
40°	682.0	682.0	543.3	357.7	260.9	236.2	223.5	217.2	210.3	201.3	199.5
42.5°	756.6	738.9	532.4	316.6	234.3	220.4	208.9	201.9	193.8	183.7	182.4
45°	844.0	795.9	517.2	279.8	214.7	210.8	203.8	191.9	178.0	167.2	165.3
47.5°	928.8	847.1	502.7	254.0	198.2	207.0	201.3	181.1	162.1	147.0	144.9
50°	1021.9	892.7	485.7	232.3	185.5	204.5	198.2	165.3	144.4	133.6	132.3
52.5°	1114.9	939.0	467.3	209.6	174.7	199.5	190.6	153.9	143.6	129.1	127.3
55°	1213.2	992.7	445.6	184.2	162.1	189.4	180.5	153.3	148.2	129.1	124.8
57.5°	1308.7	1052.3	411.0	159.5	148.2	174.1	176.6	149.4	138.7	127.9	122.8
60°	1414.4	1115.7	353.4	138.7	136.2	161.4	171.5	141.3	127.9	124.1	121.6
62.5°	1499.4	1172.6	276.0	124.1	126.0	151.4	165.3	136.2	123.4	120.4	119.7
65°	1536.0	1173.8	198.2	111.4	115.9	141.8	158.9	131.7	119.7	118.3	117.8
67.5°	1497.4	1109.2	139.2	99.4	105.1	132.9	150.6	127.3	115.9	116.5	115.3
70°	1372.7	973.1	102.0	88.0	95.0	123.4	141.8	121.6	111.4	112.6	110.9
72.5°	1148.6	758.4	81.7	78.5	86.7	113.4	132.9	115.3	104.5	105.1	101.2
75°	848.4	502.7	68.5	70.2	77.3	103.8	121.6	107.0	96.8	94.3	91.7
77.5°	504.6	258.4	56.4	61.4	69.0	92.4	109.0	96.8	88.7	84.3	82.4
80°	208.2	104.5	46.3	51.9	60.1	82.4	96.3	84.8	79.1	74.6	72.1
82.5°	83.0	51.4	36.7	42.4	50.7	71.5	84.3	74.6	69.0	65.8	58.8
85°	31.7	25.3	24.8	29.7	38.0	55.1	69.7	62.7	58.2	50.0	48.1
87.5°	12.7	11.4	11.4	14.6	21.5	34.9	50.0	43.7	45.5	36.1	36.7
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)