

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: P214882

Luminaire Tested: **ARCH-AF24-30-D-U-T4W-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214882
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
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-T4W-7050
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3955 lumens
Efficiency: N/A
Efficacy: 127.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

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

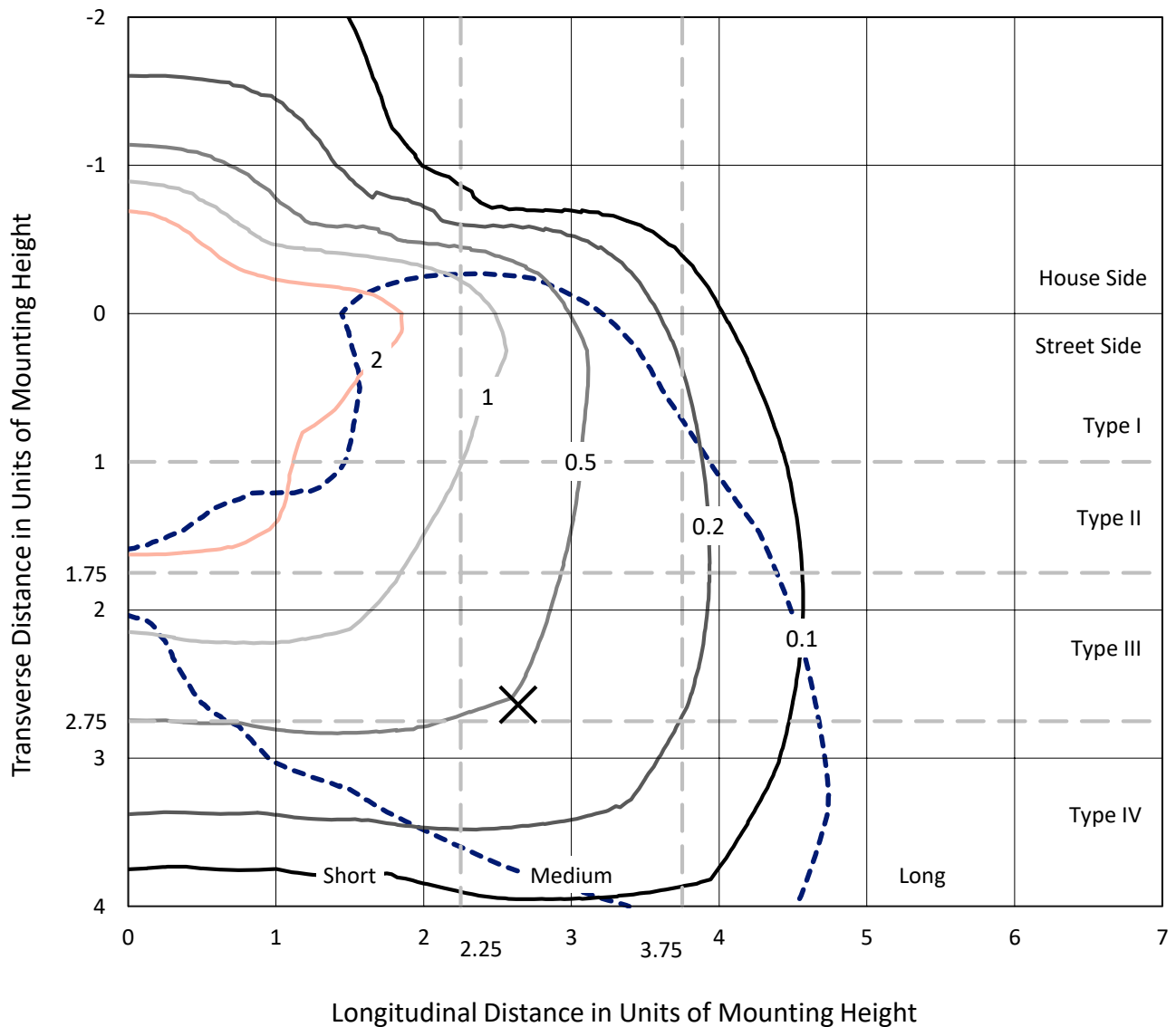


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

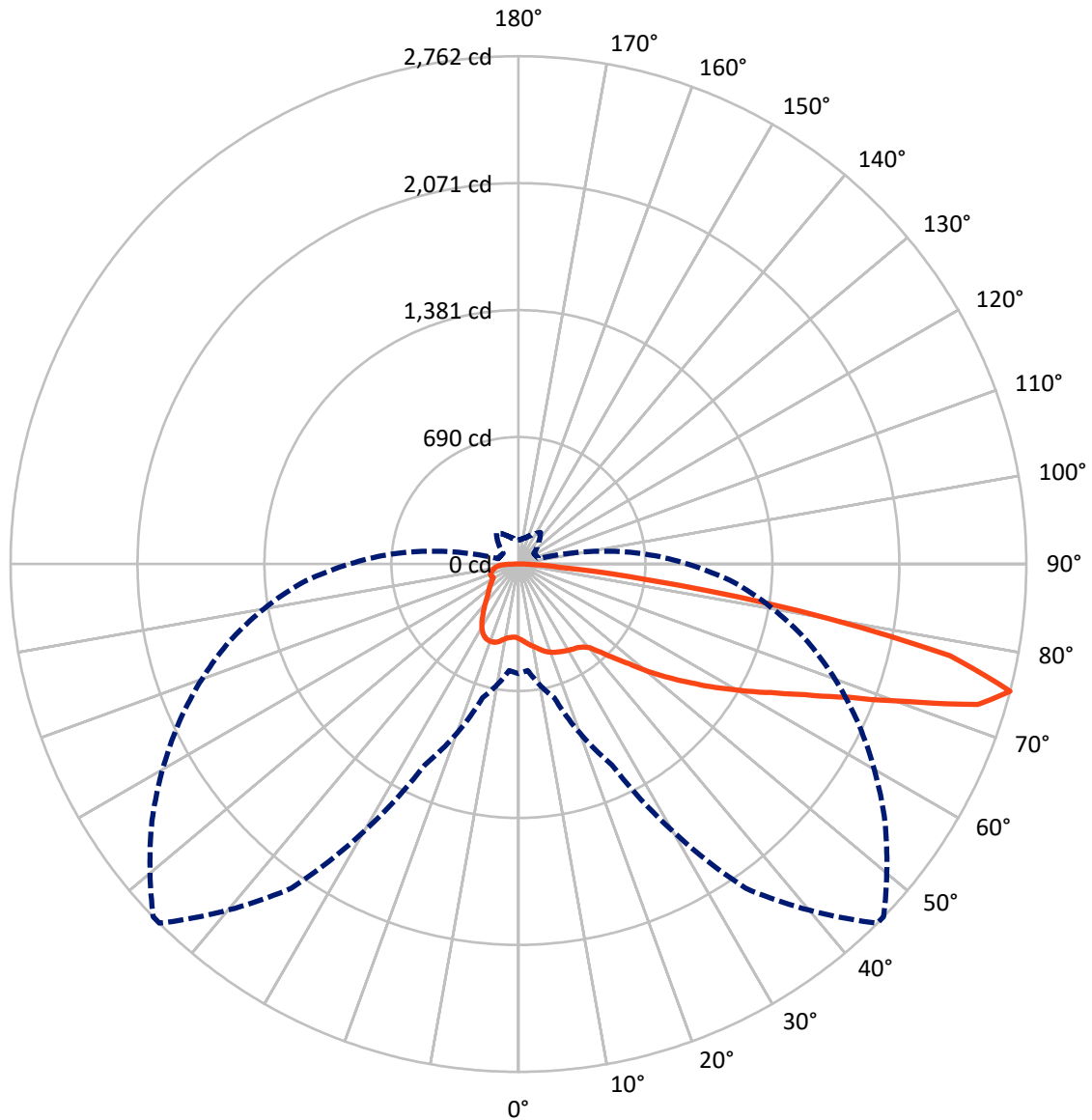


Based on 10 foot mounting height. Maximum calculated value = 4.7 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	916.2	0.0	916.2
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	3038.8	0.0	3038.8
	% Fixture	76.8	0.0	76.8
Total	Lumens	3955.0	0.0	3955.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.2	1.0
10°-20°	130.2	3.3
20°-30°	223.4	5.6
30°-40°	312.5	7.9
40°-50°	458.4	11.6
50°-60°	714.1	18.1
60°-70°	1027.5	26.0
70°-80°	895.1	22.6
80°-90°	153.7	3.9
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°	3955.0	100.0
0°-180°	3955.0	100.0



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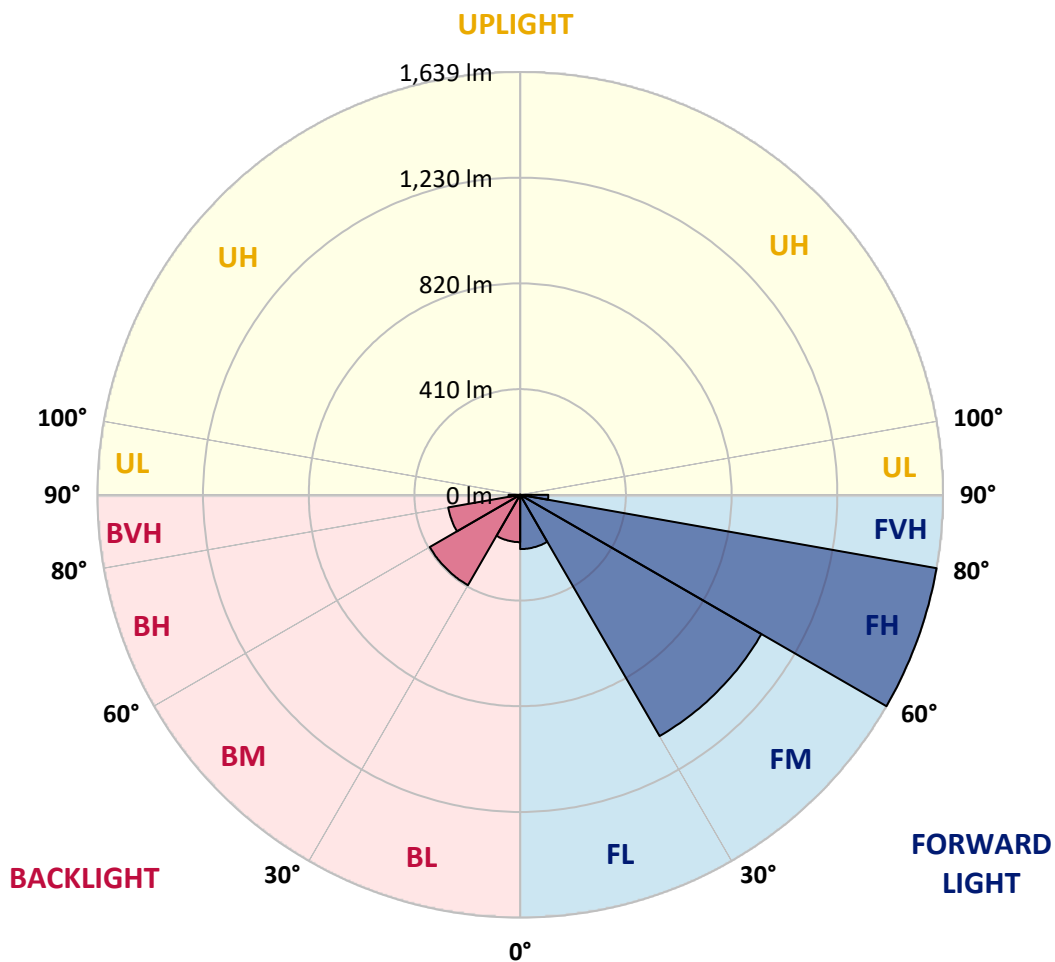
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	210.3	5.3			
FM	(30°-60°)	1080.0	27.3			
FH	(60°-80°)	1639.4	41.5			G1/1800
FVH	(80°-90°)	109.1	2.8			G2/225
BL	(0°-30°)	183.5	4.6	B1/500		
BM	(30°-60°)	404.9	10.2	B1/1000		
BH	(60°-80°)	283.1	7.2	B1/500		G1/500
BVH	(80°-90°)	44.7	1.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	405.4	405.4	405.4	405.4	405.4	405.4	405.4	405.4	405.4	405.4	405.4
2.5°	425.4	422.4	422.4	420.1	420.1	416.2	414.7	413.9	410.1	407.8	405.4
5°	450.1	446.2	445.4	440.1	437.8	429.3	428.5	423.1	416.2	409.3	403.9
7.5°	472.4	470.1	466.2	460.8	453.9	443.1	442.4	433.9	422.4	413.1	405.4
10°	488.5	487.0	481.6	474.7	467.0	456.2	455.5	446.2	432.4	421.6	410.8
12.5°	507.8	505.5	498.5	489.3	480.8	470.8	470.1	462.4	447.0	433.1	419.3
15°	526.2	523.2	514.7	505.5	496.2	487.8	487.8	479.3	463.1	447.0	430.8
17.5°	535.5	533.9	525.5	515.5	507.8	501.6	500.8	493.1	477.0	460.1	442.4
20°	538.5	539.3	531.6	520.8	515.5	512.4	511.6	506.2	488.5	472.4	455.5
22.5°	537.8	540.1	533.9	522.4	520.8	520.8	520.8	514.7	500.8	484.7	467.8
25°	540.8	543.9	539.3	525.5	525.5	528.5	528.5	525.5	513.2	499.3	482.4
27.5°	551.6	553.9	550.1	530.8	531.6	536.2	535.5	536.2	528.5	515.5	498.5
30°	564.7	567.8	563.2	539.3	538.5	543.2	543.2	547.0	541.6	527.8	513.9
32.5°	600.1	599.3	584.7	548.5	546.2	550.8	550.8	554.7	551.6	540.8	527.8
35°	705.5	693.9	661.6	578.5	555.5	557.8	557.8	564.7	566.2	557.8	546.2
37.5°	813.2	809.3	784.7	658.6	589.3	572.4	571.6	581.6	588.5	581.6	573.9
40°	921.7	918.6	913.2	765.5	660.1	598.5	596.2	604.7	617.0	612.4	607.8
42.5°	1022.5	1020.9	1026.3	870.9	750.1	654.7	647.8	637.8	655.5	653.9	653.9
45°	1101.7	1105.5	1108.6	969.4	847.8	727.0	718.6	684.7	708.6	714.7	719.3
47.5°	1146.3	1149.4	1160.2	1065.5	945.5	810.9	804.7	749.3	780.9	799.3	812.4
50°	1210.2	1201.7	1210.9	1159.4	1063.2	920.1	903.2	836.3	876.3	908.6	939.4
52.5°	1271.7	1257.9	1265.6	1267.9	1197.1	1027.1	1009.4	938.6	988.6	1039.4	1094.0
55°	1327.1	1326.3	1334.0	1373.3	1326.3	1141.7	1121.7	1051.7	1124.0	1178.6	1271.0
57.5°	1371.7	1379.4	1413.3	1495.6	1475.6	1266.3	1244.0	1183.2	1268.6	1323.3	1476.4
60°	1424.1	1436.4	1492.5	1599.5	1611.8	1397.1	1374.0	1330.2	1417.1	1472.5	1714.1
62.5°	1441.7	1459.4	1574.8	1708.7	1754.1	1540.2	1519.5	1490.2	1573.3	1623.3	1951.1
65°	1324.0	1357.9	1620.2	1764.9	1907.2	1712.6	1694.9	1669.5	1728.7	1761.8	2111.8
67.5°	1291.7	1307.1	1531.8	1845.7	2051.1	1934.1	1916.4	1872.6	1874.1	1860.3	2164.2
70°	1246.3	1263.3	1441.0	1906.4	2257.3	2237.2	2215.7	2086.5	2007.2	1923.4	2061.1
72.5°	1061.7	1056.3	1241.7	1742.6	2356.5	2612.7	2587.3	2316.5	2105.7	1868.7	1739.5
75°	596.2	580.9	753.2	1205.6	2151.9	2761.9	2761.2	2432.7	2036.5	1627.9	1184.0
77.5°	173.1	168.5	248.5	505.5	1448.7	2399.6	2428.8	2194.2	1699.5	1169.4	650.1
80°	81.6	83.1	106.9	166.9	618.6	1548.7	1632.5	1444.8	1015.5	539.3	268.5
82.5°	51.5	52.3	73.1	107.7	261.6	703.2	772.4	650.1	402.4	233.1	118.5
85°	32.3	32.3	48.5	70.8	156.2	224.6	243.9	221.6	172.3	126.9	64.6
87.5°	17.7	17.7	29.2	40.8	85.4	72.3	74.6	88.5	107.7	77.7	32.3
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°	405.4	405.4	405.4	405.4	405.4	405.4	405.4	405.4	405.4	405.4	405.4
2.5°	404.7	403.1	400.8	400.1	399.3	398.5	399.3	400.8	399.3	399.3	400.1
5°	402.4	400.8	397.8	397.8	398.5	399.3	403.1	405.4	406.2	406.2	406.2
7.5°	402.4	400.1	397.8	398.5	400.1	403.1	409.3	413.1	416.2	417.0	417.0
10°	406.2	403.1	401.6	403.1	407.8	410.1	416.2	422.4	426.2	427.8	427.8
12.5°	413.1	410.1	410.1	413.1	419.3	422.4	427.8	432.4	437.0	439.3	439.3
15°	424.7	420.8	421.6	427.0	433.9	437.0	440.8	442.4	446.2	449.3	449.3
17.5°	435.4	431.6	433.1	439.3	443.9	445.4	447.8	447.0	448.5	450.8	451.6
20°	447.8	443.9	444.7	448.5	449.3	447.8	447.8	445.4	444.7	448.5	450.1
22.5°	460.1	456.2	455.5	453.1	449.3	445.4	443.1	440.8	439.3	443.1	444.7
25°	474.7	469.3	465.5	455.5	445.4	438.5	435.4	433.9	433.1	437.0	438.5
27.5°	490.8	485.5	473.9	452.4	436.2	424.7	422.4	422.4	423.9	426.2	427.8
30°	506.2	500.8	480.1	445.4	420.1	403.1	400.8	403.1	407.0	409.3	411.6
32.5°	521.6	516.2	483.9	434.7	396.2	374.7	373.1	377.0	383.1	384.7	386.2
35°	542.4	537.0	488.5	419.3	366.2	343.1	341.6	343.9	349.3	351.6	353.9
37.5°	571.6	568.5	495.5	402.4	338.5	313.1	308.5	307.0	310.0	309.3	312.4
40°	610.1	612.4	507.8	380.1	311.6	285.4	275.4	270.8	267.7	261.6	264.7
42.5°	666.3	667.8	521.6	354.7	288.5	259.3	246.2	237.7	231.6	221.6	223.1
45°	748.6	735.5	537.8	327.7	267.7	238.5	223.1	213.1	204.6	196.2	197.0
47.5°	857.8	817.8	555.5	305.4	247.0	221.6	207.7	196.2	186.2	179.3	180.0
50°	992.5	920.1	573.2	284.7	226.2	208.5	196.2	183.9	173.9	166.9	166.2
52.5°	1170.2	1043.2	584.7	261.6	205.4	197.0	186.2	174.6	162.3	153.9	153.1
55°	1354.8	1186.3	594.7	233.9	185.4	183.9	178.5	165.4	150.8	140.0	138.5
57.5°	1557.9	1339.4	602.4	207.0	170.0	173.1	171.6	156.2	140.0	130.0	129.2
60°	1742.6	1497.9	577.8	183.1	156.2	162.3	163.9	150.8	142.3	144.6	145.4
62.5°	1928.7	1620.2	483.9	165.4	146.9	155.4	168.5	167.7	163.9	167.7	168.5
65°	1995.7	1645.6	343.1	150.8	137.7	158.5	183.1	181.6	163.9	156.9	155.4
67.5°	1958.0	1570.2	230.8	139.3	130.8	162.3	198.5	181.6	157.7	148.5	145.4
70°	1778.7	1384.8	169.3	127.7	124.6	161.6	207.0	180.8	154.6	144.6	140.8
72.5°	1418.7	1068.6	136.2	116.9	115.4	157.7	211.6	179.3	151.6	140.8	136.2
75°	918.6	664.7	114.6	106.2	101.6	151.6	209.3	174.6	147.7	133.9	130.8
77.5°	426.2	286.2	97.7	93.9	88.5	142.3	202.3	165.4	139.3	126.2	122.3
80°	198.5	135.4	82.3	81.6	79.2	134.6	193.1	154.6	129.2	118.5	112.3
82.5°	106.2	81.6	66.9	66.9	69.2	125.4	181.6	141.6	116.2	110.8	94.6
85°	56.2	46.9	48.5	52.3	59.2	110.8	166.2	127.7	101.6	84.6	82.3
87.5°	28.5	30.0	30.0	35.4	45.4	90.0	136.9	105.4	86.2	69.2	67.7
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)