

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: P214855

Luminaire Tested: **ARCH-AF24-40-D-U-T4W-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214855  
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-AF24-40-D-U-T4W-7030  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4516 lumens  
Efficiency: N/A  
Efficacy: 112.9 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): 40  
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

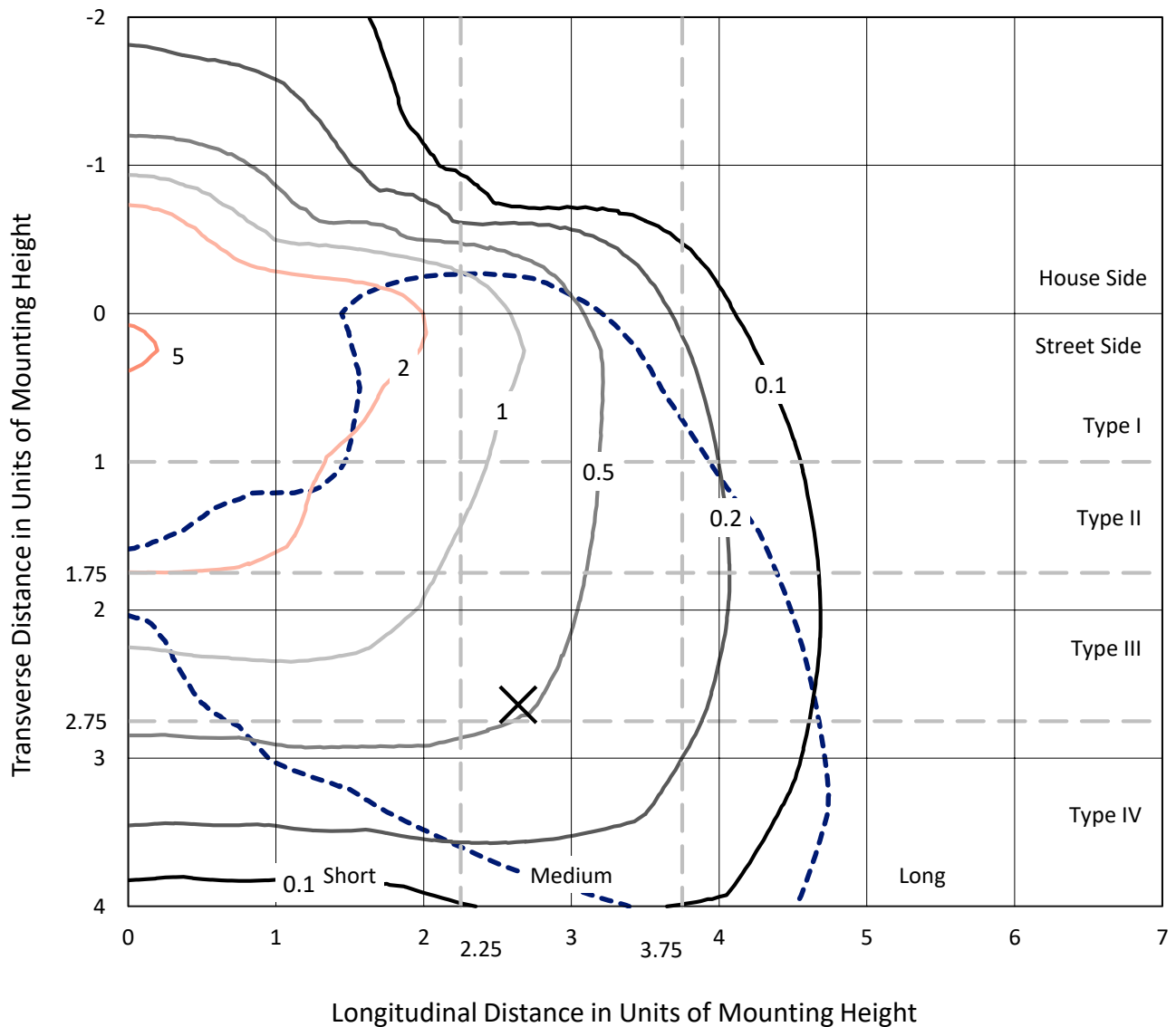


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

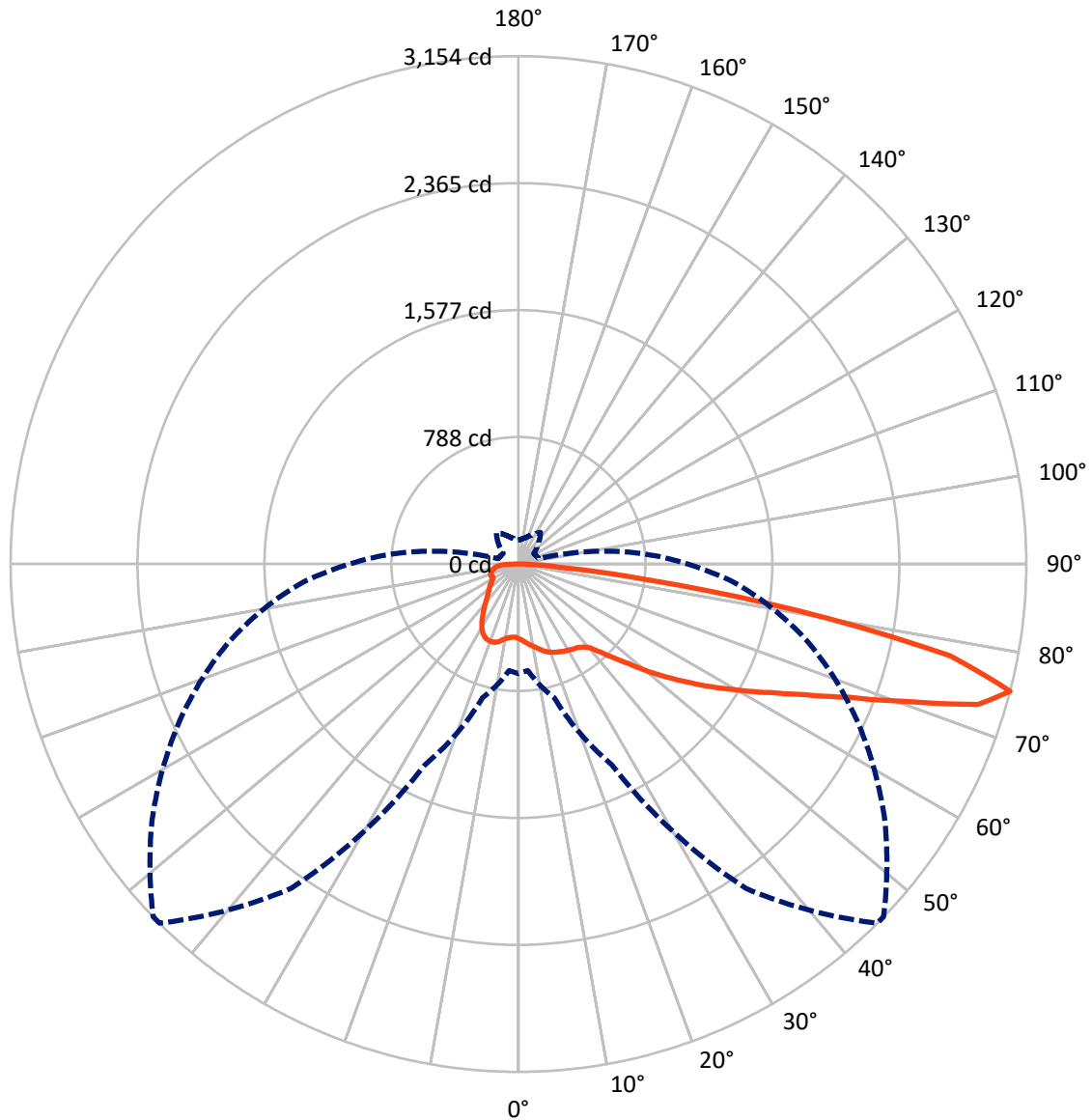


Based on 10 foot mounting height. Maximum calculated value = 5.4 fc  
 Type IV - Medium - Non-Cutoff

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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
<b>House Side</b>	Lumens	1046.2	0.0	1046.2
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	3469.8	0.0	3469.8
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	4516.0	0.0	4516.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.9	1.0
10°-20°	148.7	3.3
20°-30°	255.1	5.6
30°-40°	356.8	7.9
40°-50°	523.4	11.6
50°-60°	815.4	18.1
60°-70°	1173.2	26.0
70°-80°	1022.0	22.6
80°-90°	175.5	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°	4516.0	100.0
0°-180°	4516.0	100.0



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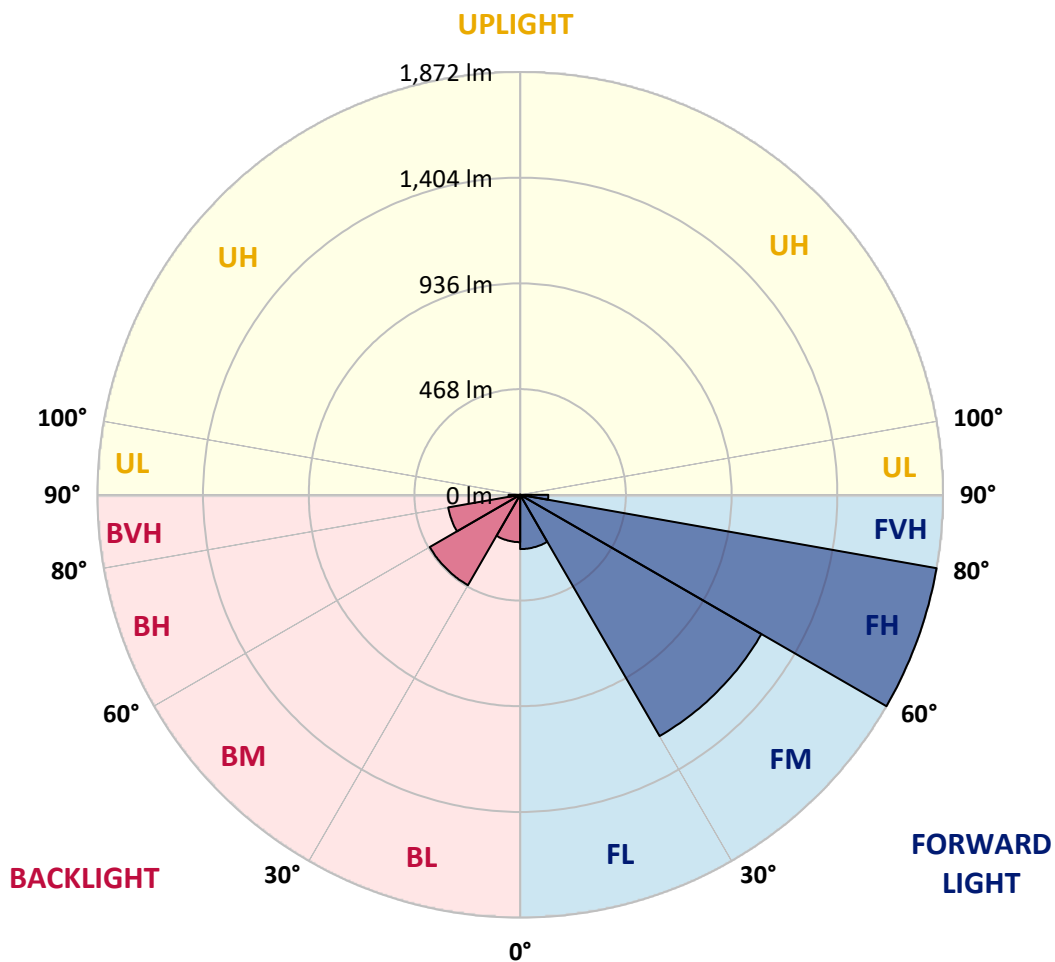
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	240.1	5.3			
FM	(30°-60°)	1233.2	27.3			
FH	(60°-80°)	1871.9	41.5			G2/5000
FVH	(80°-90°)	124.5	2.8			G2/225
BL	(0°-30°)	209.5	4.6	B1/500		
BM	(30°-60°)	462.4	10.2	B1/1000		
BH	(60°-80°)	323.3	7.2	B1/500		G1/500
BVH	(80°-90°)	51.0	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°	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0
2.5°	485.8	482.3	482.3	479.6	479.6	475.3	473.5	472.6	468.2	465.6	463.0
5°	513.9	509.5	508.6	502.5	499.8	490.2	489.3	483.2	475.3	467.3	461.2
7.5°	539.4	536.7	532.4	526.2	518.3	506.0	505.1	495.5	482.3	471.7	463.0
10°	557.8	556.1	549.9	542.0	533.2	520.9	520.1	509.5	493.7	481.4	469.1
12.5°	579.8	577.2	569.2	558.7	549.0	537.6	536.7	528.0	510.4	494.6	478.8
15°	600.9	597.4	587.7	577.2	566.6	557.0	557.0	547.3	528.8	510.4	491.9
17.5°	611.4	609.7	600.0	588.6	579.8	572.8	571.9	563.1	544.7	525.3	505.1
20°	614.9	615.8	607.0	594.7	588.6	585.1	584.2	578.0	557.8	539.4	520.1
22.5°	614.1	616.7	609.7	596.5	594.7	594.7	594.7	587.7	571.9	553.4	534.1
25°	617.6	621.1	615.8	600.0	600.0	603.5	603.5	600.0	585.9	570.1	550.8
27.5°	629.9	632.5	628.1	606.1	607.0	612.3	611.4	612.3	603.5	588.6	569.2
30°	644.8	648.3	643.0	615.8	614.9	620.2	620.2	624.6	618.4	602.6	586.8
32.5°	685.2	684.3	667.6	626.3	623.7	629.0	629.0	633.4	629.9	617.6	602.6
35°	805.6	792.4	755.5	660.6	634.3	636.9	636.9	644.8	646.6	636.9	623.7
37.5°	928.5	924.2	896.0	752.0	672.9	653.6	652.7	664.1	672.0	664.1	655.3
40°	1052.4	1048.9	1042.7	874.1	753.7	683.5	680.8	690.5	704.5	699.3	694.0
42.5°	1167.5	1165.7	1171.9	994.4	856.5	747.6	739.7	728.3	748.5	746.7	746.7
45°	1258.0	1262.4	1265.9	1106.9	968.1	830.2	820.5	781.8	809.1	816.1	821.4
47.5°	1308.9	1312.4	1324.7	1216.7	1079.6	925.9	918.9	855.6	891.6	912.7	927.7
50°	1381.8	1372.2	1382.7	1323.9	1214.0	1050.7	1031.3	954.9	1000.6	1037.5	1072.6
52.5°	1452.1	1436.3	1445.1	1447.7	1366.9	1172.8	1152.6	1071.7	1128.8	1186.8	1249.2
55°	1515.4	1514.5	1523.3	1568.1	1514.5	1303.7	1280.8	1200.9	1283.4	1345.8	1451.2
57.5°	1566.3	1575.1	1613.8	1707.7	1684.9	1446.0	1420.5	1351.1	1448.6	1511.0	1685.8
60°	1626.0	1640.1	1704.2	1826.3	1840.4	1595.3	1568.9	1518.9	1618.1	1681.4	1957.2
62.5°	1646.3	1666.5	1798.2	1951.1	2002.9	1758.7	1735.0	1701.6	1796.5	1853.6	2227.8
65°	1511.8	1550.5	1850.1	2015.2	2177.7	1955.5	1935.3	1906.3	1973.9	2011.7	2411.4
67.5°	1475.0	1492.5	1749.0	2107.5	2342.0	2208.5	2188.3	2138.2	2140.0	2124.1	2471.1
70°	1423.1	1442.4	1645.4	2176.9	2577.4	2554.6	2530.0	2382.4	2291.9	2196.2	2353.4
72.5°	1212.3	1206.1	1417.9	1989.7	2690.8	2983.3	2954.3	2645.1	2404.4	2133.8	1986.2
75°	680.8	663.2	860.0	1376.6	2457.1	3153.7	3152.8	2777.7	2325.3	1858.8	1352.0
77.5°	197.7	192.4	283.7	577.2	1654.2	2740.0	2773.3	2505.4	1940.5	1335.3	742.3
80°	93.1	94.9	122.1	190.6	706.3	1768.4	1864.1	1649.8	1159.6	615.8	306.6
82.5°	58.9	59.7	83.5	123.0	298.7	802.9	882.0	742.3	459.4	266.2	135.3
85°	36.9	36.9	55.3	80.8	178.3	256.5	278.5	253.0	196.8	144.9	73.8
87.5°	20.2	20.2	33.4	46.6	97.5	82.6	85.2	101.0	123.0	88.7	36.9
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°	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0	463.0
2.5°	462.1	460.3	457.7	456.8	455.9	455.0	455.9	457.7	455.9	455.9	456.8
5°	459.4	457.7	454.2	454.2	455.0	455.9	460.3	463.0	463.8	463.8	463.8
7.5°	459.4	456.8	454.2	455.0	456.8	460.3	467.3	471.7	475.3	476.1	476.1
10°	463.8	460.3	458.6	460.3	465.6	468.2	475.3	482.3	486.7	488.4	488.4
12.5°	471.7	468.2	468.2	471.7	478.8	482.3	488.4	493.7	499.0	501.6	501.6
15°	484.9	480.5	481.4	487.6	495.5	499.0	503.4	505.1	509.5	513.0	513.0
17.5°	497.2	492.8	494.6	501.6	506.9	508.6	511.3	510.4	512.1	514.8	515.7
20°	511.3	506.9	507.8	512.1	513.0	511.3	511.3	508.6	507.8	512.1	513.9
22.5°	525.3	520.9	520.1	517.4	513.0	508.6	506.0	503.4	501.6	506.0	507.8
25°	542.0	535.9	531.5	520.1	508.6	500.7	497.2	495.5	494.6	499.0	500.7
27.5°	560.5	554.3	541.1	516.5	498.1	484.9	482.3	482.3	484.0	486.7	488.4
30°	578.0	571.9	548.2	508.6	479.6	460.3	457.7	460.3	464.7	467.3	470.0
32.5°	595.6	589.5	552.6	496.3	452.4	427.8	426.1	430.5	437.5	439.2	441.0
35°	619.3	613.2	557.8	478.8	418.2	391.8	390.0	392.7	398.8	401.5	404.1
37.5°	652.7	649.2	565.7	459.4	386.5	357.5	352.3	350.5	354.0	353.1	356.7
40°	696.6	699.3	579.8	434.0	355.8	325.9	314.5	309.2	305.7	298.7	302.2
42.5°	760.8	762.5	595.6	405.0	329.4	296.0	281.1	271.4	264.4	253.0	254.8
45°	854.8	839.8	614.1	374.2	305.7	272.3	254.8	243.3	233.7	224.0	224.9
47.5°	979.5	933.8	634.3	348.8	282.0	253.0	237.2	224.0	212.6	204.7	205.6
50°	1133.2	1050.7	654.5	325.0	258.3	238.1	224.0	210.0	198.5	190.6	189.7
52.5°	1336.2	1191.2	667.6	298.7	234.6	224.9	212.6	199.4	185.4	175.7	174.8
55°	1547.0	1354.6	679.1	267.1	211.7	210.0	203.8	188.9	172.2	159.9	158.1
57.5°	1778.9	1529.4	687.8	236.3	194.1	197.7	195.9	178.3	159.9	148.5	147.6
60°	1989.7	1710.4	659.7	209.1	178.3	185.4	187.1	172.2	162.5	165.2	166.0
62.5°	2202.3	1850.1	552.6	188.9	167.8	177.5	192.4	191.5	187.1	191.5	192.4
65°	2278.8	1879.0	391.8	172.2	157.2	181.0	209.1	207.3	187.1	179.2	177.5
67.5°	2235.7	1793.0	263.5	159.0	149.3	185.4	226.6	207.3	180.1	169.5	166.0
70°	2031.0	1581.2	193.3	145.8	142.3	184.5	236.3	206.4	176.6	165.2	160.8
72.5°	1619.9	1220.2	155.5	133.5	131.8	180.1	241.6	204.7	173.1	160.8	155.5
75°	1048.9	759.0	130.9	121.2	116.0	173.1	238.9	199.4	168.7	152.9	149.3
77.5°	486.7	326.8	111.6	107.2	101.0	162.5	231.0	188.9	159.0	144.1	139.7
80°	226.6	154.6	94.0	93.1	90.5	153.7	220.5	176.6	147.6	135.3	128.3
82.5°	121.2	93.1	76.4	76.4	79.1	143.2	207.3	161.6	132.6	126.5	108.1
85°	64.1	53.6	55.3	59.7	67.6	126.5	189.7	145.8	116.0	96.6	94.0
87.5°	32.5	34.3	34.3	40.4	51.8	102.8	156.4	120.4	98.4	79.1	77.3
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)