

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: P234747

Luminaire Tested: **ARCH-AF24-60-D-U-T4W-8027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P234747  
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-AF24-60-D-U-T4W-8027  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5869 lumens  
Efficiency: N/A  
Efficacy: 91.7 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): 64  
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

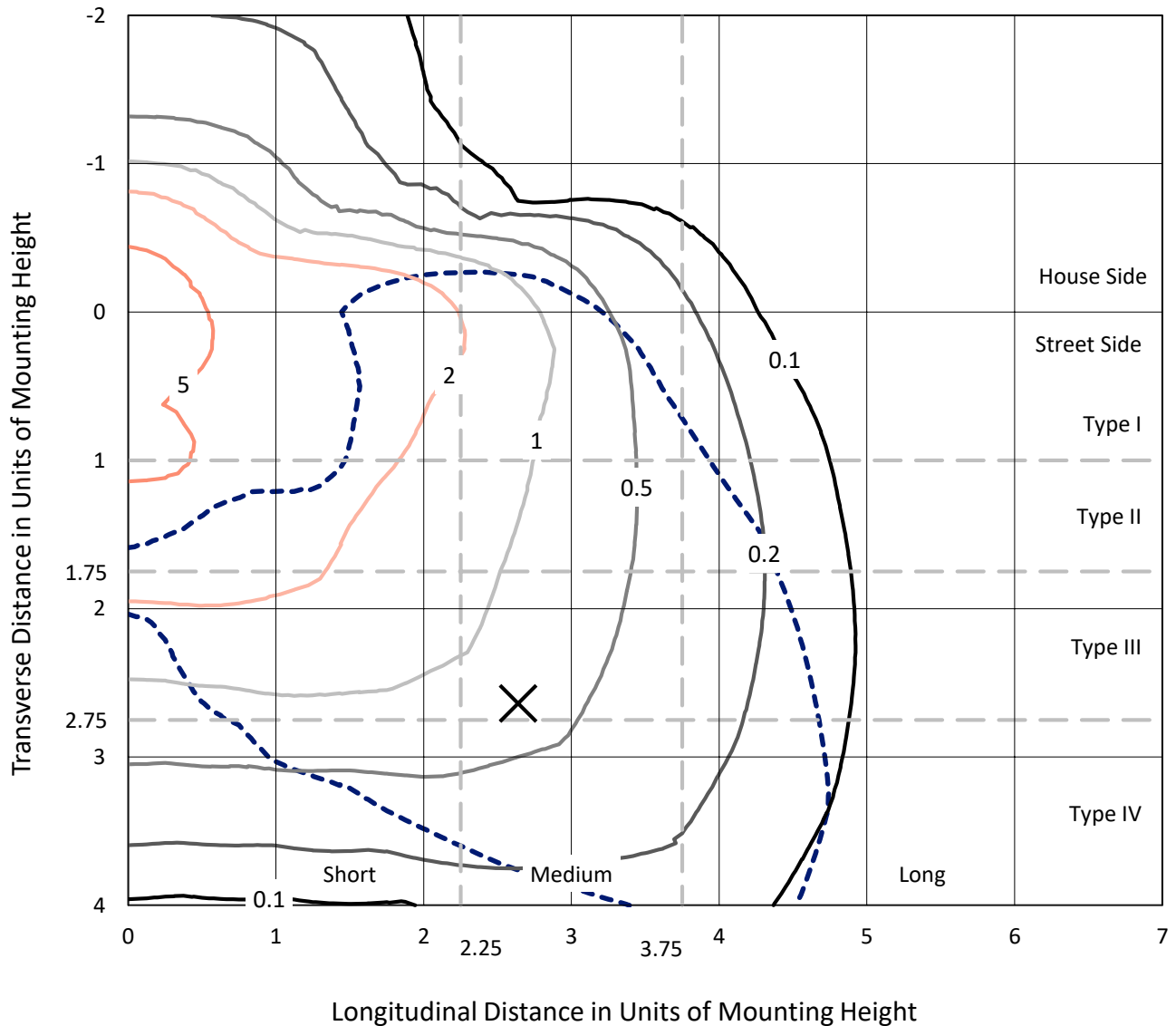


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

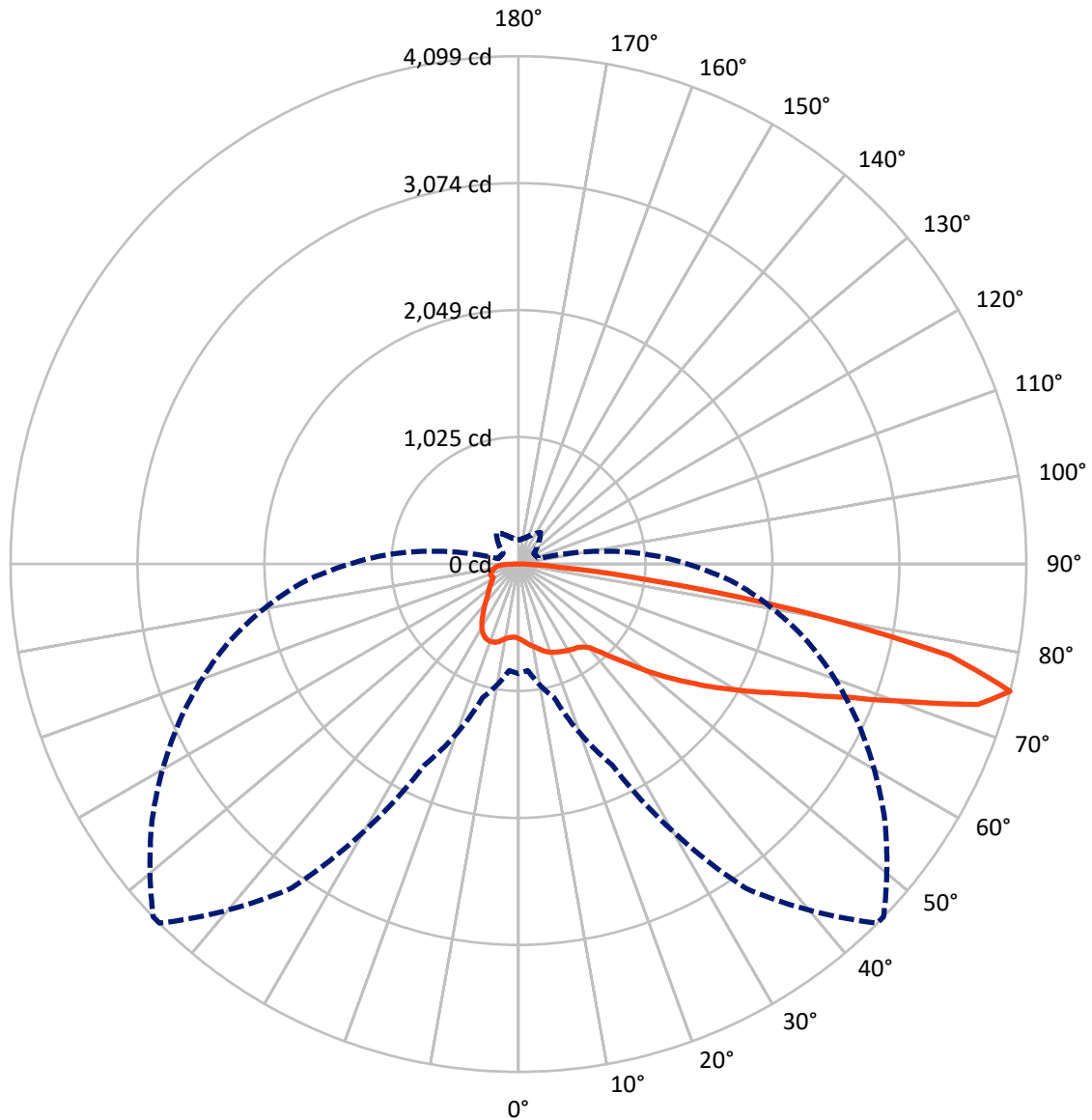


Based on 10 foot mounting height. Maximum calculated value = 7 fc  
 Type IV - Medium - Non-Cutoff

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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
<b>House Side</b>	Lumens	1359.6	0.0	1359.6
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	4509.4	0.0	4509.4
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	5869.0	0.0	5869.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.6	1.0
10°-20°	193.2	3.3
20°-30°	331.6	5.6
30°-40°	463.7	7.9
40°-50°	680.2	11.6
50°-60°	1059.6	18.1
60°-70°	1524.7	26.0
70°-80°	1328.2	22.6
80°-90°	228.1	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°	5869.0	100.0
0°-180°	5869.0	100.0



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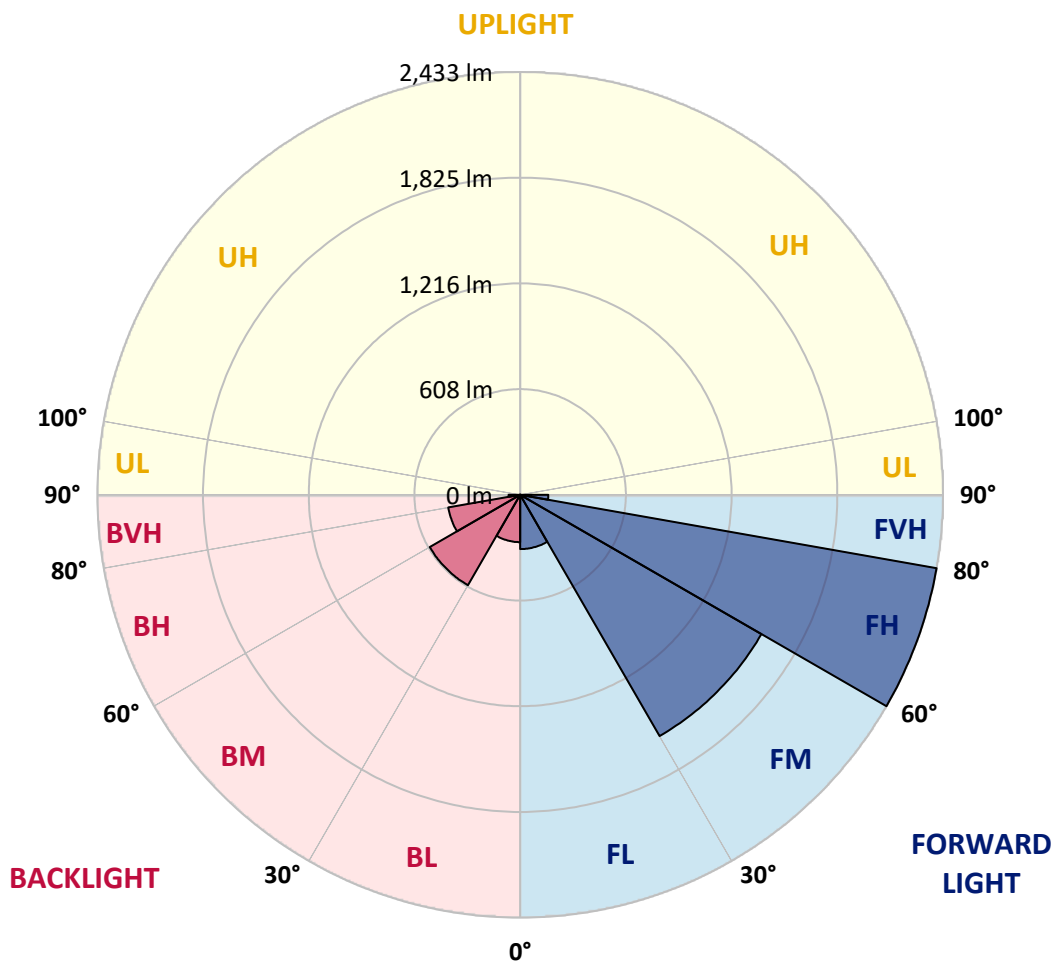
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	312.1	5.3			
FM (30°-60°)	1602.7	27.3			
FH (60°-80°)	2432.7	41.5			G2/5000
FVH (80°-90°)	161.8	2.8			G2/225
BL (0°-30°)	272.3	4.6	B1/500		
BM (30°-60°)	600.9	10.2	B1/1000		
BH (60°-80°)	420.2	7.2	B1/500		G1/500
BVH (80°-90°)	66.3	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°	601.7	601.7	601.7	601.7	601.7	601.7	601.7	601.7	601.7	601.7	601.7
2.5°	631.3	626.8	626.8	623.3	623.3	617.6	615.4	614.2	608.5	605.1	601.7
5°	667.9	662.2	661.0	653.0	649.6	637.0	635.9	627.9	617.6	607.4	599.4
7.5°	701.0	697.6	691.8	683.9	673.6	657.6	656.5	643.9	626.8	613.1	601.7
10°	725.0	722.7	714.7	704.4	693.0	677.0	675.9	662.2	641.6	625.6	609.6
12.5°	753.5	750.1	739.8	726.1	713.5	698.7	697.6	686.1	663.3	642.8	622.2
15°	780.9	776.3	763.8	750.1	736.4	723.8	723.8	711.3	687.3	663.3	639.3
17.5°	794.6	792.3	779.8	764.9	753.5	744.4	743.2	731.8	707.8	682.7	656.5
20°	799.2	800.3	788.9	772.9	764.9	760.3	759.2	751.2	725.0	701.0	675.9
22.5°	798.0	801.4	792.3	775.2	772.9	772.9	772.9	763.8	743.2	719.2	694.1
25°	802.6	807.2	800.3	779.8	779.8	784.3	784.3	779.8	761.5	740.9	715.8
27.5°	818.6	822.0	816.3	787.7	788.9	795.7	794.6	795.7	784.3	764.9	739.8
30°	838.0	842.5	835.7	800.3	799.2	806.0	806.0	811.7	803.7	783.2	762.6
32.5°	890.5	889.4	867.7	814.0	810.6	817.4	817.4	823.1	818.6	802.6	783.2
35°	1046.9	1029.8	981.8	858.5	824.3	827.7	827.7	838.0	840.3	827.7	810.6
37.5°	1206.7	1201.0	1164.5	977.3	874.5	849.4	848.3	863.1	873.4	863.1	851.7
40°	1367.7	1363.1	1355.2	1136.0	979.5	888.2	884.8	897.3	915.6	908.8	901.9
42.5°	1517.3	1515.0	1523.0	1292.4	1113.1	971.6	961.3	946.4	972.7	970.4	970.4
45°	1634.9	1640.6	1645.1	1438.5	1258.1	1078.9	1066.3	1016.1	1051.5	1060.6	1067.5
47.5°	1701.1	1705.6	1721.6	1581.2	1403.1	1203.3	1194.2	1112.0	1158.8	1186.2	1205.6
50°	1795.8	1783.3	1797.0	1720.5	1577.8	1365.4	1340.3	1241.0	1300.4	1348.3	1394.0
52.5°	1887.2	1866.6	1878.0	1881.5	1776.4	1524.1	1497.9	1392.8	1467.0	1542.4	1623.4
55°	1969.4	1968.2	1979.6	2037.9	1968.2	1694.2	1664.5	1560.7	1668.0	1749.0	1886.0
57.5°	2035.6	2047.0	2097.2	2219.4	2189.7	1879.2	1846.1	1755.9	1882.6	1963.7	2190.8
60°	2113.2	2131.5	2214.8	2373.5	2391.8	2073.3	2039.0	1973.9	2102.9	2185.1	2543.6
62.5°	2139.5	2165.7	2337.0	2535.6	2603.0	2285.6	2254.8	2211.4	2334.7	2408.9	2895.3
65°	1964.8	2015.0	2404.3	2619.0	2830.2	2541.3	2515.1	2477.4	2565.3	2614.4	3133.9
67.5°	1916.9	1939.7	2273.0	2738.8	3043.7	2870.1	2843.9	2778.8	2781.1	2760.5	3211.5
70°	1849.5	1874.6	2138.3	2829.0	3349.6	3320.0	3288.0	3096.2	2978.6	2854.2	3058.5
72.5°	1575.5	1567.5	1842.6	2585.9	3496.9	3877.1	3839.4	3437.5	3124.7	2773.1	2581.3
75°	884.8	862.0	1117.7	1789.0	3193.2	4098.6	4097.4	3609.9	3022.0	2415.8	1757.0
77.5°	256.9	250.0	368.8	750.1	2149.7	3560.8	3604.2	3256.0	2521.9	1735.3	964.7
80°	121.0	123.3	158.7	247.7	917.9	2298.2	2422.6	2144.0	1507.0	800.3	398.4
82.5°	76.5	77.6	108.5	159.8	388.2	1043.5	1146.2	964.7	597.1	345.9	175.8
85°	47.9	47.9	71.9	105.0	231.8	333.4	361.9	328.8	255.7	188.4	95.9
87.5°	26.3	26.3	43.4	60.5	126.7	107.3	110.7	131.3	159.8	115.3	47.9
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°	601.7	601.7	601.7	601.7	601.7	601.7	601.7	601.7	601.7	601.7	601.7
2.5°	600.5	598.2	594.8	593.7	592.5	591.4	592.5	594.8	592.5	592.5	593.7
5°	597.1	594.8	590.2	590.2	591.4	592.5	598.2	601.7	602.8	602.8	602.8
7.5°	597.1	593.7	590.2	591.4	593.7	598.2	607.4	613.1	617.6	618.8	618.8
10°	602.8	598.2	595.9	598.2	605.1	608.5	617.6	626.8	632.5	634.8	634.8
12.5°	613.1	608.5	608.5	613.1	622.2	626.8	634.8	641.6	648.5	651.9	651.9
15°	630.2	624.5	625.6	633.6	643.9	648.5	654.2	656.5	662.2	666.7	666.7
17.5°	646.2	640.5	642.8	651.9	658.7	661.0	664.4	663.3	665.6	669.0	670.2
20°	664.4	658.7	659.9	665.6	666.7	664.4	664.4	661.0	659.9	665.6	667.9
22.5°	682.7	677.0	675.9	672.4	666.7	661.0	657.6	654.2	651.9	657.6	659.9
25°	704.4	696.4	690.7	675.9	661.0	650.7	646.2	643.9	642.8	648.5	650.7
27.5°	728.4	720.4	703.3	671.3	647.3	630.2	626.8	626.8	629.1	632.5	634.8
30°	751.2	743.2	712.4	661.0	623.3	598.2	594.8	598.2	603.9	607.4	610.8
32.5°	774.0	766.1	718.1	645.0	588.0	556.0	553.7	559.4	568.5	570.8	573.1
35°	804.9	796.9	725.0	622.2	543.4	509.2	506.9	510.3	518.3	521.7	525.2
37.5°	848.3	843.7	735.2	597.1	502.3	464.7	457.8	455.5	460.1	458.9	463.5
40°	905.3	908.8	753.5	564.0	462.4	423.6	408.7	401.9	397.3	388.2	392.7
42.5°	988.7	991.0	774.0	526.3	428.1	384.7	365.3	352.8	343.6	328.8	331.1
45°	1110.8	1091.4	798.0	486.3	397.3	353.9	331.1	316.2	303.7	291.1	292.3
47.5°	1273.0	1213.6	824.3	453.2	366.5	328.8	308.2	291.1	276.3	266.0	267.1
50°	1472.7	1365.4	850.5	422.4	335.6	309.4	291.1	272.9	258.0	247.7	246.6
52.5°	1736.5	1548.1	867.7	388.2	304.8	292.3	276.3	259.2	240.9	228.3	227.2
55°	2010.5	1760.4	882.5	347.1	275.1	272.9	264.9	245.5	223.8	207.8	205.5
57.5°	2311.9	1987.6	893.9	307.1	252.3	256.9	254.6	231.8	207.8	192.9	191.8
60°	2585.9	2222.8	857.4	271.7	231.8	240.9	243.2	223.8	211.2	214.6	215.8
62.5°	2862.1	2404.3	718.1	245.5	218.1	230.6	250.0	248.9	243.2	248.9	250.0
65°	2961.5	2442.0	509.2	223.8	204.4	235.2	271.7	269.4	243.2	232.9	230.6
67.5°	2905.5	2330.1	342.5	206.6	194.1	240.9	294.5	269.4	234.0	220.3	215.8
70°	2639.5	2055.0	251.2	189.5	184.9	239.7	307.1	268.3	229.5	214.6	208.9
72.5°	2105.2	1585.8	202.1	173.5	171.2	234.0	314.0	266.0	224.9	208.9	202.1
75°	1363.1	986.4	170.1	157.5	150.7	224.9	310.5	259.2	219.2	198.6	194.1
77.5°	632.5	424.7	145.0	139.3	131.3	211.2	300.3	245.5	206.6	187.2	181.5
80°	294.5	200.9	122.2	121.0	117.6	199.8	286.6	229.5	191.8	175.8	166.7
82.5°	157.5	121.0	99.3	99.3	102.7	186.1	269.4	210.1	172.4	164.4	140.4
85°	83.3	69.6	71.9	77.6	87.9	164.4	246.6	189.5	150.7	125.6	122.2
87.5°	42.2	44.5	44.5	52.5	67.4	133.6	203.2	156.4	127.9	102.7	100.5
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)