

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: P231296

Luminaire Tested: **ARCH-M-AF48-40-D-U-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231296
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-M-AF48-40-D-U-T4W
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 240mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5522.9 lumens
Efficiency: N/A
Efficacy: 145.3 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

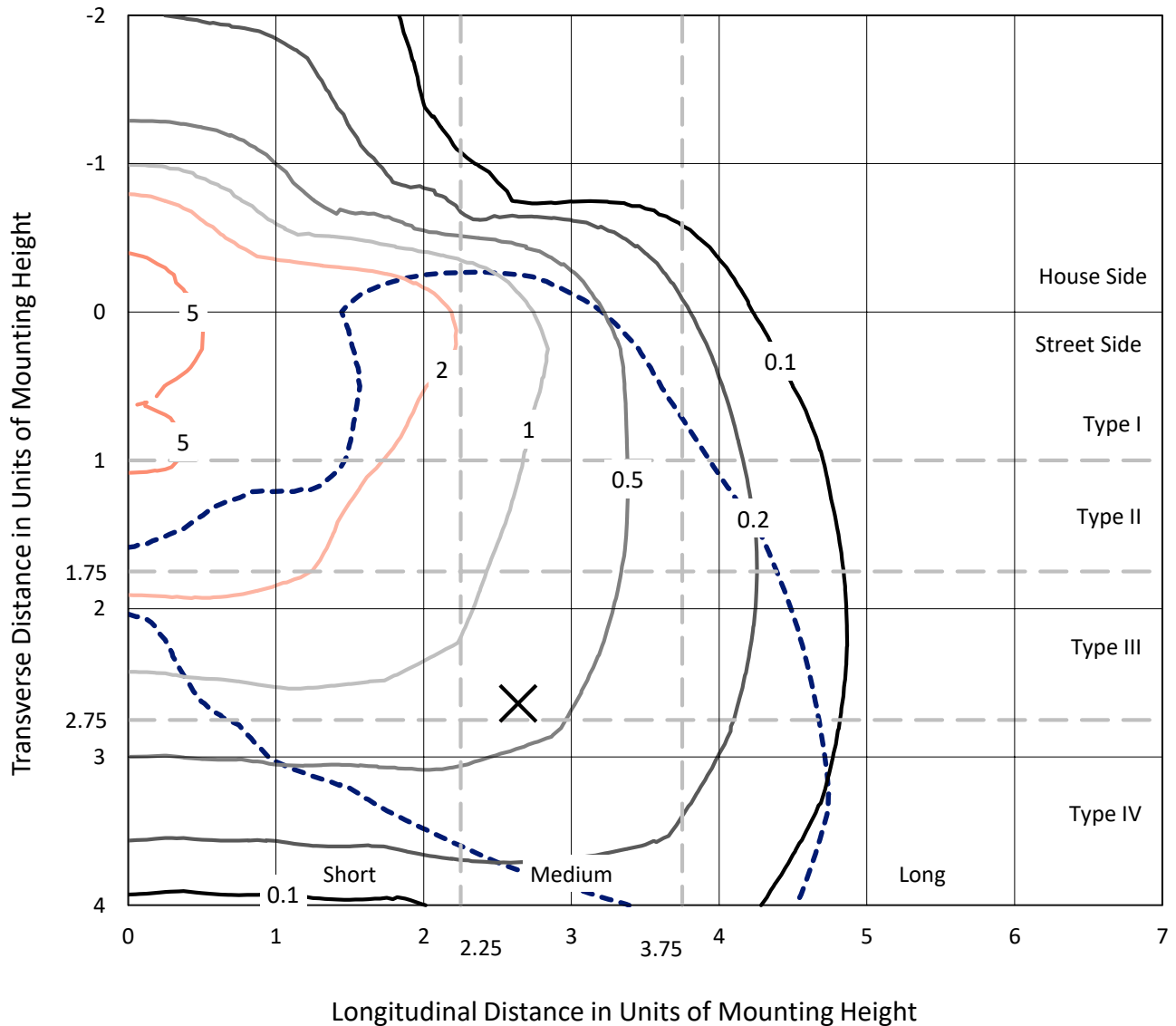
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

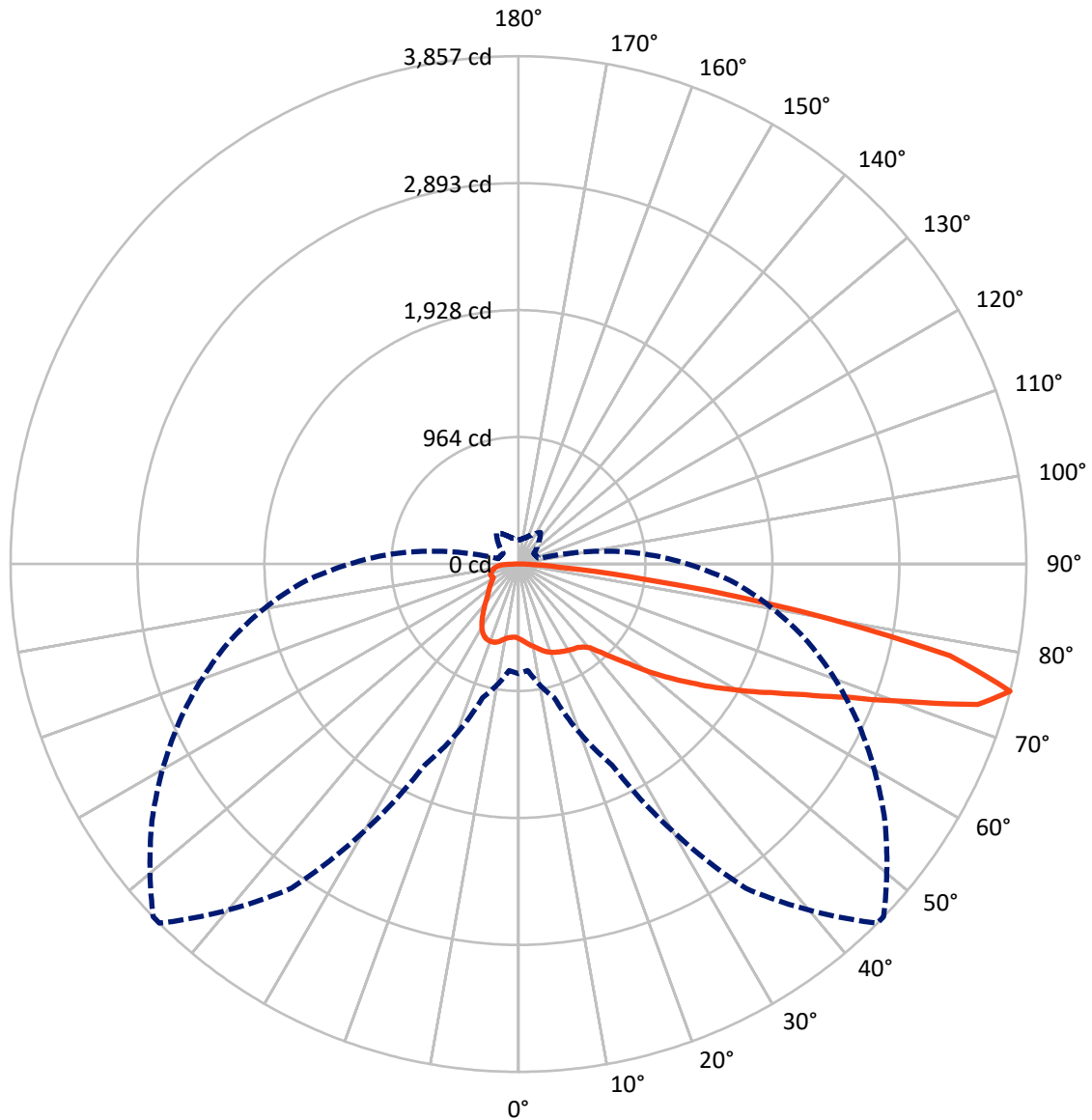


Based on 10 foot mounting height. Maximum calculated value = 6.6 fc
 Type IV - Medium - Non-Cutoff

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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	1279.4	0.0	1279.4
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	4243.5	0.0	4243.5
	% Fixture	76.8	0.0	76.8
Total	Lumens	5522.9	0.0	5522.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.1	1.0
10°-20°	181.8	3.3
20°-30°	312.0	5.6
30°-40°	436.4	7.9
40°-50°	640.1	11.6
50°-60°	997.1	18.1
60°-70°	1434.8	26.0
70°-80°	1249.9	22.6
80°-90°	214.7	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°	5522.9	100.0
0°-180°	5522.9	100.0

Coefficient of Utilization



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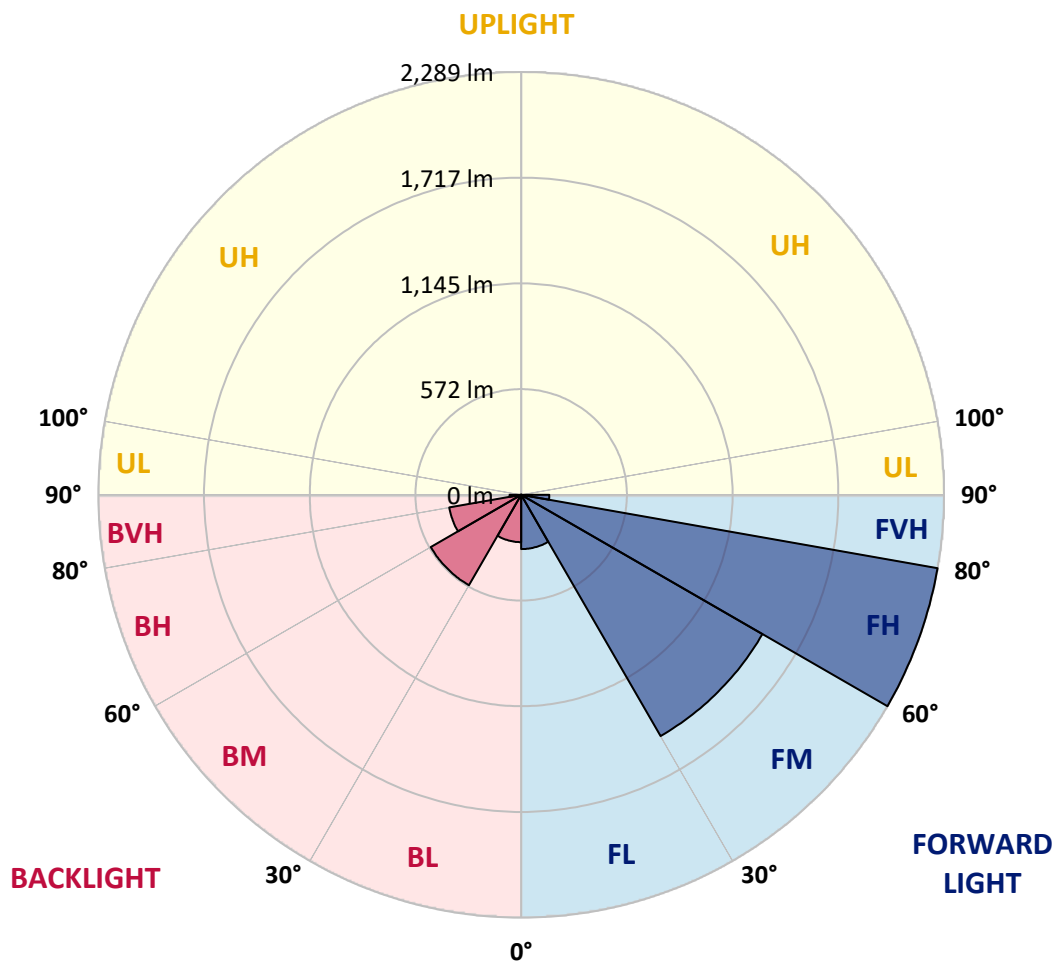
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	293.7	5.3			
FM	(30°-60°)	1508.2	27.3			
FH	(60°-80°)	2289.3	41.5			G2/5000
FVH	(80°-90°)	152.3	2.8			G2/225
BL	(0°-30°)	256.2	4.6	B1/500		
BM	(30°-60°)	565.4	10.2	B1/1000		
BH	(60°-80°)	395.4	7.2	B1/500		G1/500
BVH	(80°-90°)	62.4	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°	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2
2.5°	594.1	589.8	589.8	586.6	586.6	581.2	579.1	578.0	572.6	569.4	566.2
5°	628.5	623.1	622.1	614.5	611.3	599.4	598.4	590.9	581.2	571.5	564.1
7.5°	659.6	656.4	651.0	643.5	633.8	618.8	617.8	605.9	589.8	576.9	566.2
10°	682.2	680.1	672.5	662.9	652.1	637.1	636.0	623.1	603.7	588.7	573.7
12.5°	709.1	705.8	696.2	683.2	671.5	657.5	656.4	645.7	624.2	604.9	585.5
15°	734.9	730.6	718.7	705.8	692.9	681.1	681.1	669.3	646.7	624.2	601.6
17.5°	747.8	745.6	733.8	719.9	709.1	700.5	699.4	688.7	666.0	642.4	617.8
20°	752.1	753.1	742.4	727.3	719.9	715.6	714.4	707.0	682.2	659.6	636.0
22.5°	750.9	754.2	745.6	729.5	727.3	727.3	727.3	718.7	699.4	676.8	653.2
25°	755.2	759.5	753.1	733.8	733.8	738.1	738.1	733.8	716.6	697.2	673.6
27.5°	770.3	773.6	768.1	741.3	742.4	748.8	747.8	748.8	738.1	719.9	696.2
30°	788.6	792.9	786.4	753.1	752.1	758.5	758.5	763.8	756.4	737.0	717.7
32.5°	838.0	836.9	816.5	766.0	762.8	769.3	769.3	774.6	770.3	755.2	737.0
35°	985.2	969.0	923.9	807.9	775.7	778.9	778.9	788.6	790.7	778.9	762.8
37.5°	1135.6	1130.2	1095.8	919.6	823.0	799.3	798.2	812.2	821.8	812.2	801.5
40°	1287.1	1282.8	1275.2	1069.0	921.8	835.9	832.6	844.4	861.6	855.2	848.7
42.5°	1427.8	1425.7	1433.2	1216.2	1047.5	914.3	904.6	890.6	915.3	913.2	913.2
45°	1538.4	1543.8	1548.1	1353.7	1184.0	1015.3	1003.4	956.2	989.5	998.1	1004.5
47.5°	1600.8	1605.1	1620.1	1488.0	1320.3	1132.3	1123.7	1046.4	1090.5	1116.2	1134.5
50°	1689.9	1678.2	1691.0	1619.0	1484.7	1284.9	1261.3	1167.8	1223.7	1268.8	1311.7
52.5°	1775.8	1756.5	1767.2	1770.5	1671.7	1434.3	1409.5	1310.7	1380.6	1451.5	1527.7
55°	1853.3	1852.2	1862.9	1917.7	1852.2	1594.3	1566.3	1468.7	1569.6	1645.9	1774.8
57.5°	1915.6	1926.3	1973.6	2088.6	2060.6	1768.4	1737.2	1652.4	1771.5	1847.9	2061.7
60°	1988.6	2005.8	2084.3	2233.5	2250.7	1951.0	1918.7	1857.6	1978.9	2056.3	2393.6
62.5°	2013.3	2038.0	2199.1	2386.1	2449.5	2150.9	2121.8	2081.0	2197.0	2266.9	2724.5
65°	1849.0	1896.2	2262.6	2464.5	2663.3	2391.5	2366.8	2331.3	2414.1	2460.2	2949.1
67.5°	1803.8	1825.4	2139.0	2577.3	2864.2	2700.9	2676.1	2615.0	2617.1	2597.8	3022.1
70°	1740.4	1764.1	2012.2	2662.2	3152.1	3124.2	3094.1	2913.6	2803.0	2685.9	2878.2
72.5°	1482.6	1475.1	1734.0	2433.4	3290.7	3648.5	3613.0	3234.9	2940.5	2609.5	2429.1
75°	832.6	811.1	1051.8	1683.5	3004.9	3856.8	3855.8	3397.0	2843.8	2273.3	1653.4
77.5°	241.7	235.3	347.0	705.8	2023.0	3350.9	3391.7	3064.0	2373.2	1633.0	907.8
80°	113.9	116.0	149.4	233.1	863.8	2162.6	2279.7	2017.6	1418.1	753.1	374.9
82.5°	72.0	73.0	102.1	150.4	365.3	981.9	1078.6	907.8	561.9	325.5	165.4
85°	45.1	45.1	67.7	98.8	218.1	313.7	340.5	309.4	240.7	177.3	90.2
87.5°	24.8	24.8	40.8	57.0	119.3	101.0	104.2	123.6	150.4	108.5	45.1
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°	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2
2.5°	565.1	562.9	559.8	558.6	557.6	556.5	557.6	559.8	557.6	557.6	558.6
5°	561.9	559.8	555.5	555.5	556.5	557.6	562.9	566.2	567.2	567.2	567.2
7.5°	561.9	558.6	555.5	556.5	558.6	562.9	571.5	576.9	581.2	582.3	582.3
10°	567.2	562.9	560.8	562.9	569.4	572.6	581.2	589.8	595.2	597.3	597.3
12.5°	576.9	572.6	572.6	576.9	585.5	589.8	597.3	603.7	610.2	613.5	613.5
15°	593.0	587.7	588.7	596.3	605.9	610.2	615.6	617.8	623.1	627.4	627.4
17.5°	608.0	602.7	604.9	613.5	619.9	622.1	625.2	624.2	626.4	629.5	630.6
20°	625.2	619.9	620.9	626.4	627.4	625.2	625.2	622.1	620.9	626.4	628.5
22.5°	642.4	637.1	636.0	632.8	627.4	622.1	618.8	615.6	613.5	618.8	620.9
25°	662.9	655.3	650.0	636.0	622.1	612.3	608.0	605.9	604.9	610.2	612.3
27.5°	685.5	677.9	661.7	631.7	609.2	593.0	589.8	589.8	592.0	595.2	597.3
30°	707.0	699.4	670.3	622.1	586.6	562.9	559.8	562.9	568.4	571.5	574.8
32.5°	728.4	720.9	675.8	607.0	553.3	523.2	521.1	526.4	535.0	537.2	539.3
35°	757.4	749.9	682.2	585.5	511.4	479.2	477.0	480.3	487.7	491.0	494.2
37.5°	798.2	793.9	691.9	561.9	472.7	437.2	430.8	428.6	432.9	431.9	436.2
40°	851.9	855.2	709.1	530.7	435.1	398.5	384.6	378.2	373.9	365.3	369.6
42.5°	930.4	932.5	728.4	495.3	402.8	362.0	343.8	331.9	323.4	309.4	311.6
45°	1045.4	1027.0	750.9	457.7	373.9	333.1	311.6	297.6	285.8	273.9	275.1
47.5°	1197.9	1142.0	775.7	426.5	344.8	309.4	290.1	273.9	260.0	250.3	251.4
50°	1385.9	1284.9	800.4	397.5	315.9	291.1	273.9	256.8	242.8	233.1	232.1
52.5°	1634.1	1456.8	816.5	365.3	286.8	275.1	260.0	243.9	226.7	214.8	213.8
55°	1891.9	1656.7	830.4	326.6	258.9	256.8	249.3	231.0	210.5	195.5	193.3
57.5°	2175.5	1870.5	841.2	289.0	237.4	241.7	239.6	218.1	195.5	181.6	180.4
60°	2433.4	2091.7	806.8	255.7	218.1	226.7	228.8	210.5	198.8	201.9	203.1
62.5°	2693.3	2262.6	675.8	231.0	205.2	217.0	235.3	234.3	228.8	234.3	235.3
65°	2786.8	2298.1	479.2	210.5	192.3	221.3	255.7	253.6	228.8	219.1	217.0
67.5°	2734.1	2192.7	322.3	194.5	182.6	226.7	277.2	253.6	220.2	207.4	203.1
70°	2483.8	1933.8	236.4	178.3	174.0	225.6	289.0	252.5	215.9	201.9	196.6
72.5°	1981.0	1492.3	190.2	163.3	161.1	220.2	295.4	250.3	211.6	196.6	190.2
75°	1282.8	928.2	160.1	148.2	141.8	211.6	292.3	243.9	206.2	186.9	182.6
77.5°	595.2	399.7	136.5	131.0	123.6	198.8	282.5	231.0	194.5	176.2	170.8
80°	277.2	189.0	115.0	113.9	110.7	188.0	269.6	215.9	180.4	165.4	156.8
82.5°	148.2	113.9	93.5	93.5	96.7	175.1	253.6	197.6	162.2	154.7	132.2
85°	78.5	65.6	67.7	73.0	82.8	154.7	232.1	178.3	141.8	118.2	115.0
87.5°	39.8	41.9	41.9	49.4	63.4	125.7	191.2	147.2	120.3	96.7	94.5
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)