

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: P265947

Luminaire Tested: **ARCH-AF24-50-D-U-T4W-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265947
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-AF24-50-D-U-T4W-7027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5717.1 lumens
Efficiency: N/A
Efficacy: 105.9 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): 54
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

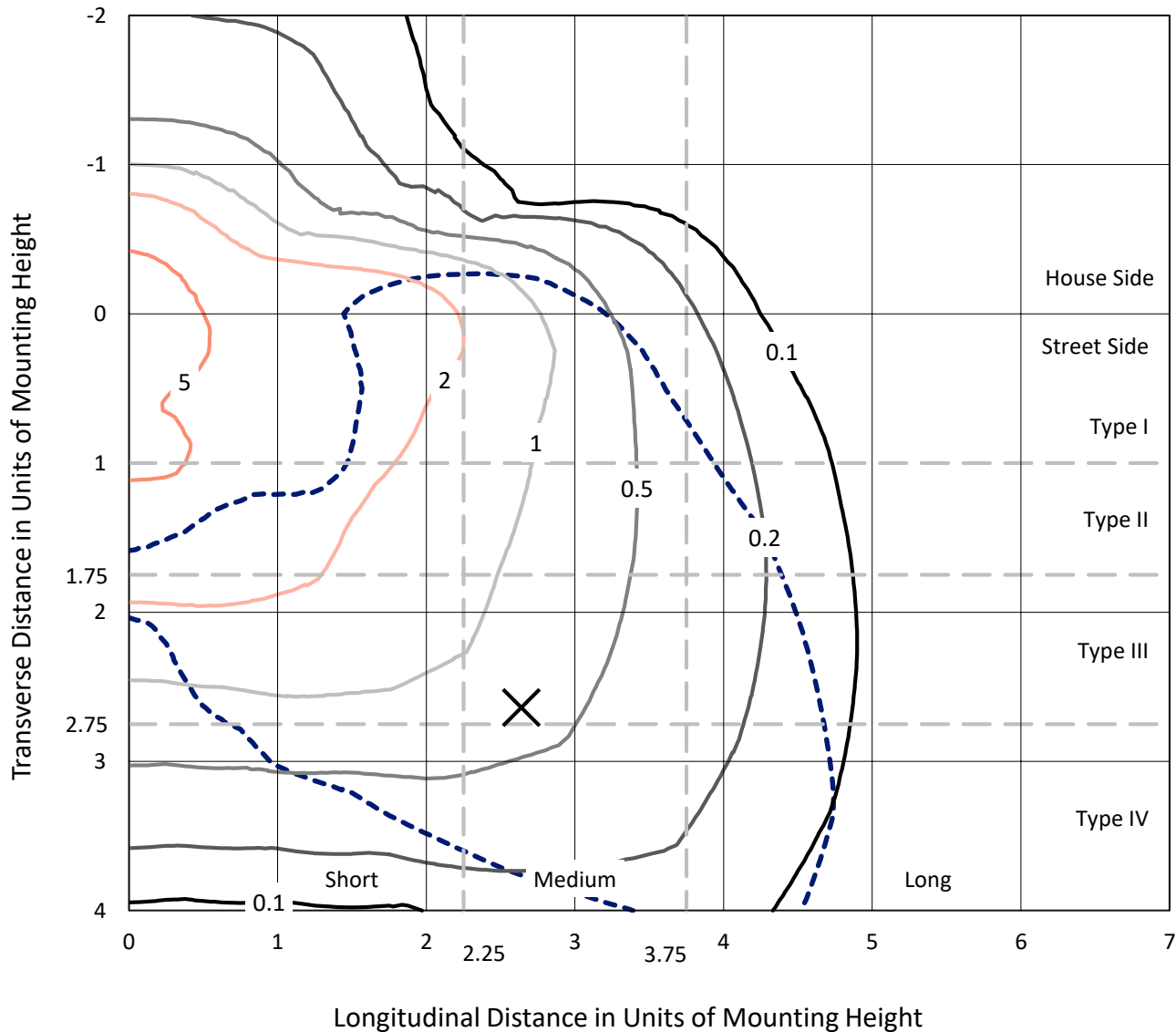


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

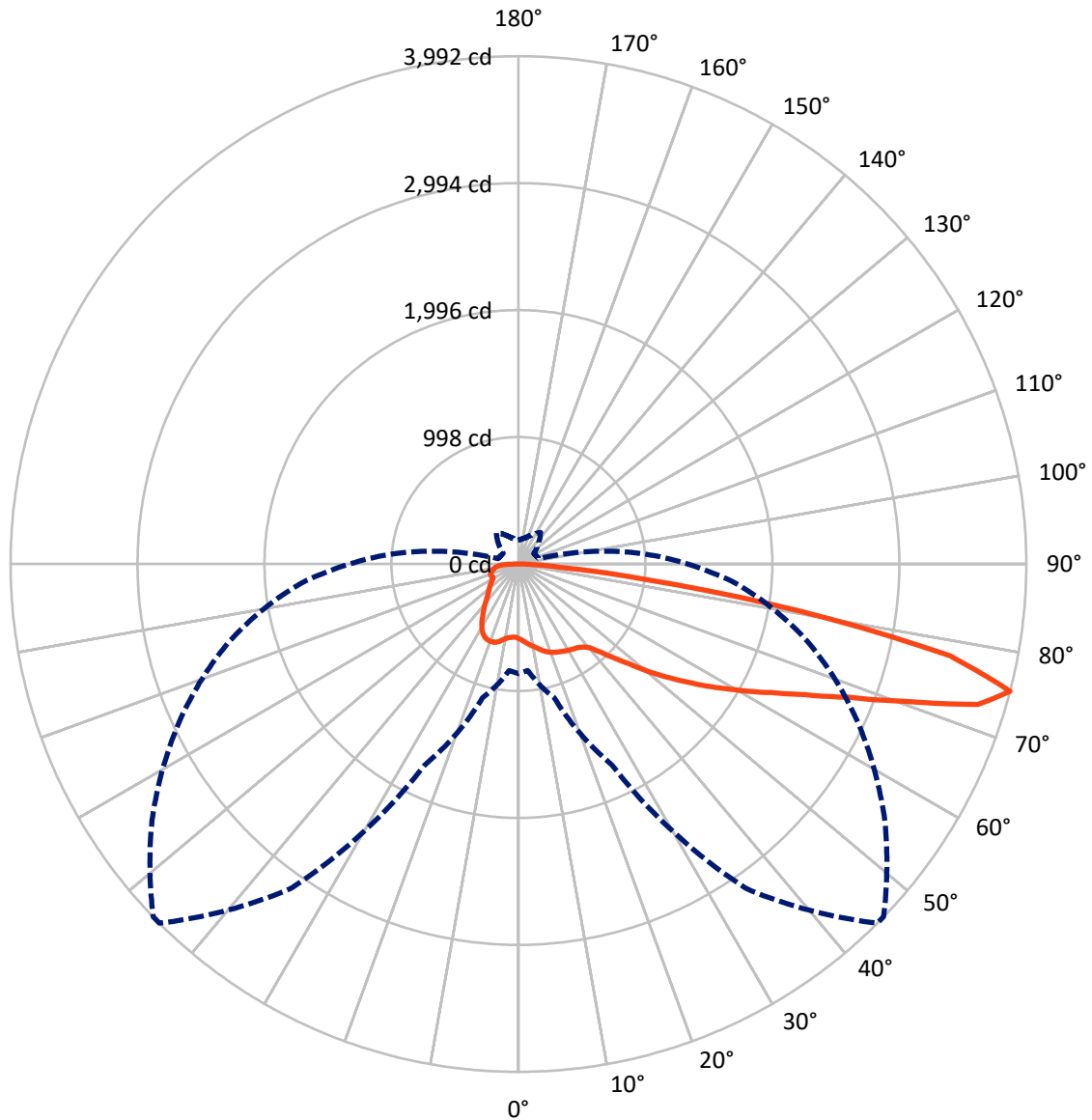


Based on 10 foot mounting height. Maximum calculated value = 6.9 fc
 Type IV - Medium - Non-Cutoff

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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	1324.4	0.0	1324.4
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	4392.7	0.0	4392.7
	% Fixture	76.8	0.0	76.8
Total	Lumens	5717.1	0.0	5717.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.1	1.0
10°-20°	188.2	3.3
20°-30°	323.0	5.6
30°-40°	451.7	7.9
40°-50°	662.6	11.6
50°-60°	1032.2	18.1
60°-70°	1485.3	26.0
70°-80°	1293.8	22.6
80°-90°	222.2	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°	5717.1	100.0
0°-180°	5717.1	100.0



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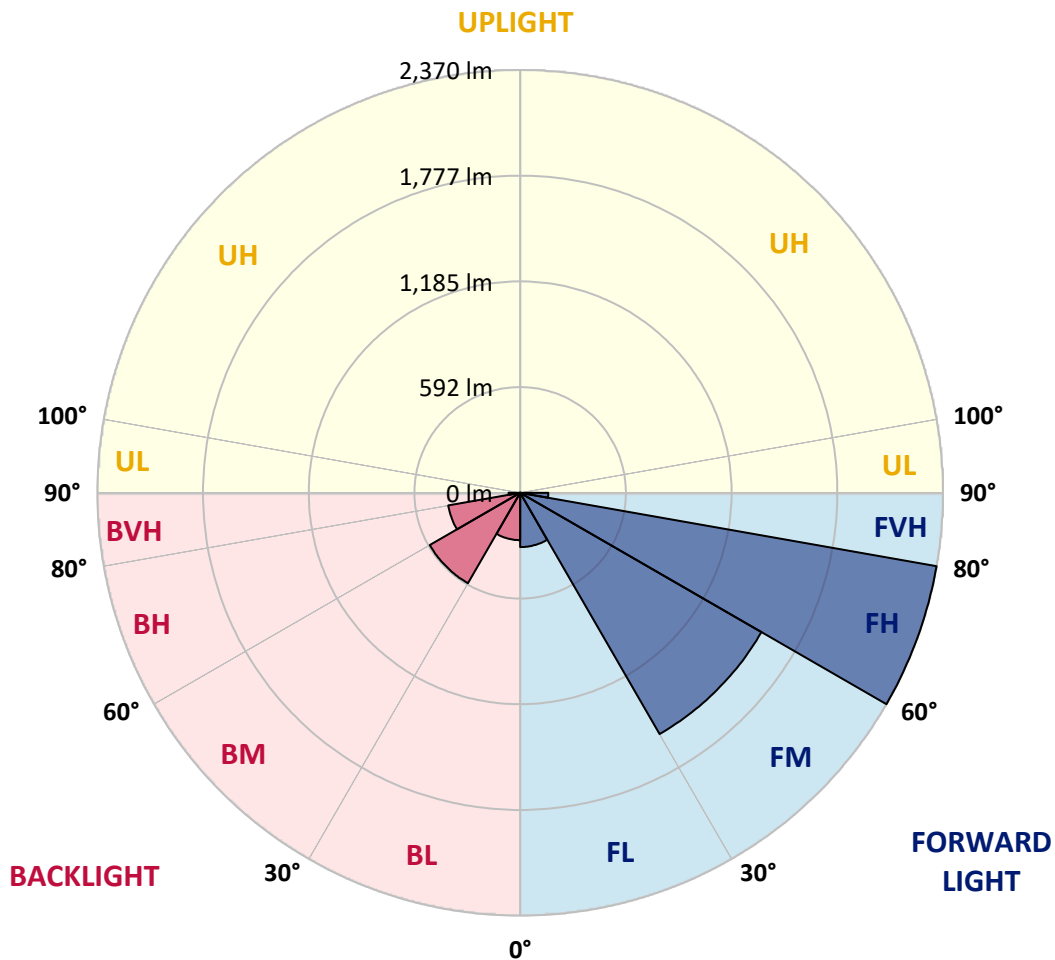
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	304.0	5.3			
FM	(30°-60°)	1561.2	27.3			
FH	(60°-80°)	2369.8	41.5			G2/5000
FVH	(80°-90°)	157.6	2.8			G2/225
BL	(0°-30°)	265.3	4.6	B1/500		
BM	(30°-60°)	585.3	10.2	B1/1000		
BH	(60°-80°)	409.3	7.2	B1/500		G1/500
BVH	(80°-90°)	64.6	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°	586.1	586.1	586.1	586.1	586.1	586.1	586.1	586.1	586.1	586.1	586.1
2.5°	615.0	610.6	610.6	607.3	607.3	601.7	599.3	598.4	592.7	589.4	586.1
5°	650.6	645.1	643.9	636.1	632.8	620.5	619.4	611.7	601.7	591.7	583.9
7.5°	682.8	679.5	674.0	666.2	656.1	640.6	639.5	627.2	610.6	597.3	586.1
10°	706.2	704.0	696.1	686.1	675.0	659.4	658.4	645.1	625.0	609.4	593.9
12.5°	733.9	730.6	720.7	707.3	695.1	680.6	679.5	668.3	646.2	626.1	606.0
15°	760.7	756.3	743.9	730.6	717.3	705.1	705.1	692.9	669.4	646.2	622.7
17.5°	774.0	771.9	759.5	745.1	733.9	725.1	723.9	712.9	689.4	665.0	639.5
20°	778.6	779.5	768.5	752.9	745.1	740.7	739.6	731.8	706.2	682.8	658.4
22.5°	777.4	780.6	771.9	755.1	752.9	752.9	752.9	743.9	723.9	700.7	676.2
25°	781.9	786.2	779.5	759.5	759.5	764.0	764.0	759.5	741.8	721.8	697.4
27.5°	797.3	800.7	795.2	767.3	768.5	775.1	774.0	775.1	764.0	745.1	720.7
30°	816.3	820.7	814.0	779.5	778.6	785.2	785.2	790.7	783.0	762.9	742.9
32.5°	867.5	866.3	845.2	792.9	789.6	796.3	796.3	801.8	797.3	781.9	762.9
35°	1019.8	1003.1	956.4	836.3	802.9	806.3	806.3	816.3	818.5	806.3	789.6
37.5°	1175.5	1170.0	1134.4	951.9	852.0	827.3	826.4	840.8	850.8	840.8	829.7
40°	1332.4	1327.9	1320.1	1106.5	954.2	865.2	862.0	874.1	891.8	885.2	878.6
42.5°	1478.0	1475.7	1483.6	1259.0	1084.3	946.5	936.5	921.9	947.5	945.2	945.2
45°	1592.5	1598.2	1602.5	1401.3	1225.6	1050.9	1038.7	989.8	1024.2	1033.2	1039.9
47.5°	1657.1	1661.5	1677.0	1540.2	1366.9	1172.2	1163.2	1083.1	1128.8	1155.5	1174.4
50°	1749.4	1737.1	1750.4	1676.0	1536.9	1330.1	1305.6	1208.8	1266.7	1313.4	1357.9
52.5°	1838.3	1818.3	1829.5	1832.8	1730.5	1484.7	1459.0	1356.8	1429.1	1502.4	1581.5
55°	1918.4	1917.3	1928.4	1985.2	1917.3	1650.4	1621.5	1520.3	1624.9	1703.7	1837.3
57.5°	1982.9	1994.1	2042.9	2162.0	2133.0	1830.6	1798.2	1710.5	1833.9	1912.9	2134.2
60°	2058.6	2076.3	2157.5	2312.1	2329.9	2019.6	1986.2	1922.8	2048.6	2128.7	2477.9
62.5°	2084.1	2109.7	2276.6	2470.0	2535.6	2226.4	2196.4	2154.1	2274.2	2346.6	2820.3
65°	1914.0	1962.8	2342.2	2551.1	2757.0	2475.5	2449.9	2413.2	2498.9	2546.8	3052.8
67.5°	1867.2	1889.4	2214.2	2668.0	2964.9	2795.9	2770.4	2707.0	2709.1	2689.0	3128.3
70°	1801.6	1826.2	2083.0	2755.8	3263.0	3234.1	3202.8	3016.1	2901.5	2780.3	2979.4
72.5°	1534.8	1526.9	1795.0	2518.9	3406.5	3776.7	3740.1	3348.6	3043.8	2701.4	2514.4
75°	862.0	839.6	1088.7	1742.7	3110.7	3992.4	3991.3	3516.5	2943.7	2353.2	1711.5
77.5°	250.2	243.5	359.2	730.6	2094.0	3468.6	3510.9	3171.7	2456.7	1690.4	939.7
80°	117.9	120.2	154.6	241.4	894.2	2238.7	2359.8	2088.6	1468.0	779.5	388.2
82.5°	74.5	75.6	105.6	155.6	378.1	1016.5	1116.6	939.7	581.7	337.0	171.2
85°	46.7	46.7	70.1	102.2	225.7	324.7	352.6	320.2	249.1	183.6	93.5
87.5°	25.6	25.6	42.3	59.0	123.4	104.6	107.8	127.9	155.6	112.3	46.7
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°	586.1	586.1	586.1	586.1	586.1	586.1	586.1	586.1	586.1	586.1	586.1
2.5°	584.9	582.7	579.3	578.2	577.3	576.1	577.3	579.3	577.3	577.3	578.2
5°	581.7	579.3	574.9	574.9	576.1	577.3	582.7	586.1	587.2	587.2	587.2
7.5°	581.7	578.2	574.9	576.1	578.2	582.7	591.7	597.3	601.7	602.8	602.8
10°	587.2	582.7	580.6	582.7	589.4	592.7	601.7	610.6	616.1	618.4	618.4
12.5°	597.3	592.7	592.7	597.3	606.0	610.6	618.4	625.0	631.7	635.0	635.0
15°	613.9	608.3	609.4	617.2	627.2	631.7	637.3	639.5	645.1	649.5	649.5
17.5°	629.4	624.0	626.1	635.0	641.7	643.9	647.3	646.2	648.3	651.7	652.8
20°	647.3	641.7	642.7	648.3	649.5	647.3	647.3	643.9	642.7	648.3	650.6
22.5°	665.0	659.4	658.4	655.0	649.5	643.9	640.6	637.3	635.0	640.6	642.7
25°	686.1	678.4	672.8	658.4	643.9	633.9	629.4	627.2	626.1	631.7	633.9
27.5°	709.5	701.8	685.0	654.0	630.6	613.9	610.6	610.6	612.7	616.1	618.4
30°	731.8	723.9	694.0	643.9	607.3	582.7	579.3	582.7	588.3	591.7	594.9
32.5°	753.9	746.2	699.5	628.4	572.7	541.6	539.4	544.9	553.9	556.1	558.2
35°	784.0	776.2	706.2	606.0	529.5	496.0	493.8	497.1	504.8	508.3	511.6
37.5°	826.4	821.9	716.2	581.7	489.3	452.7	446.0	443.8	448.2	447.0	451.5
40°	882.0	885.2	733.9	549.5	450.4	412.6	398.2	391.5	387.0	378.1	382.6
42.5°	963.2	965.3	753.9	512.8	417.1	374.9	355.9	343.6	334.8	320.2	322.5
45°	1082.1	1063.1	777.4	473.8	387.0	344.8	322.5	308.1	295.8	283.5	284.8
47.5°	1240.0	1182.2	802.9	441.4	356.9	320.2	300.3	283.5	269.1	259.2	260.1
50°	1434.7	1330.1	828.5	411.5	327.0	301.4	283.5	265.8	251.3	241.4	240.2
52.5°	1691.5	1508.1	845.2	378.1	296.9	284.8	269.1	252.5	234.6	222.4	221.3
55°	1958.5	1714.9	859.7	338.1	268.1	265.8	258.1	239.0	218.0	202.4	200.2
57.5°	2252.1	1936.1	870.7	299.1	245.7	250.2	248.0	225.7	202.4	187.9	186.8
60°	2518.9	2165.4	835.2	264.7	225.7	234.6	237.0	218.0	205.7	209.0	210.3
62.5°	2788.1	2342.2	699.5	239.0	212.4	224.7	243.5	242.5	237.0	242.5	243.5
65°	2884.8	2378.8	496.0	218.0	199.1	229.1	264.7	262.5	237.0	226.9	224.7
67.5°	2830.3	2269.8	333.6	201.3	189.1	234.6	286.9	262.5	228.0	214.7	210.3
70°	2571.2	2001.9	244.7	184.6	180.2	233.6	299.1	261.3	223.6	209.0	203.6
72.5°	2050.7	1544.7	196.9	169.1	166.8	228.0	305.9	259.2	219.0	203.6	196.9
75°	1327.9	960.8	165.6	153.5	146.9	219.0	302.5	252.5	213.5	193.6	189.1
77.5°	616.1	413.7	141.3	135.6	127.9	205.7	292.5	239.0	201.3	182.4	176.8
80°	286.9	195.7	118.9	117.9	114.5	194.7	279.2	223.6	186.8	171.2	162.4
82.5°	153.5	117.9	96.7	96.7	100.2	181.3	262.5	204.6	168.0	160.2	136.8
85°	81.1	67.8	70.1	75.6	85.6	160.2	240.2	184.6	146.9	122.3	118.9
87.5°	41.1	43.4	43.4	51.2	65.7	130.2	197.9	152.4	124.5	100.2	97.8
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)