

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: P234784

Luminaire Tested: **ARCH-M-AF48-90-D-U-T2R-8027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234784
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-AF48-90-D-U-T2R-8027
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 2700K, 600mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9622 lumens
Efficiency: N/A
Efficacy: 104.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G2

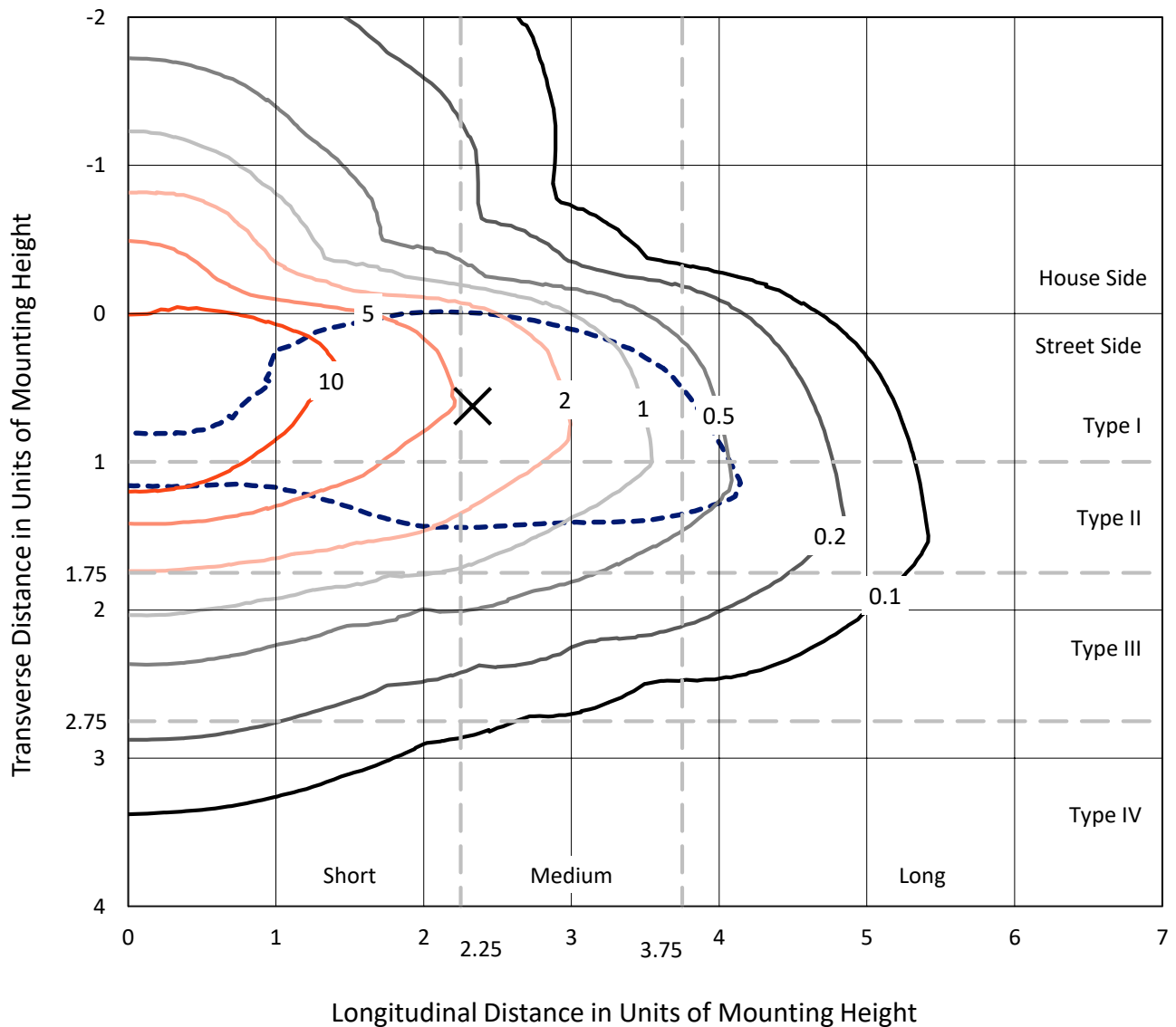
Input Watts (W): 92
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

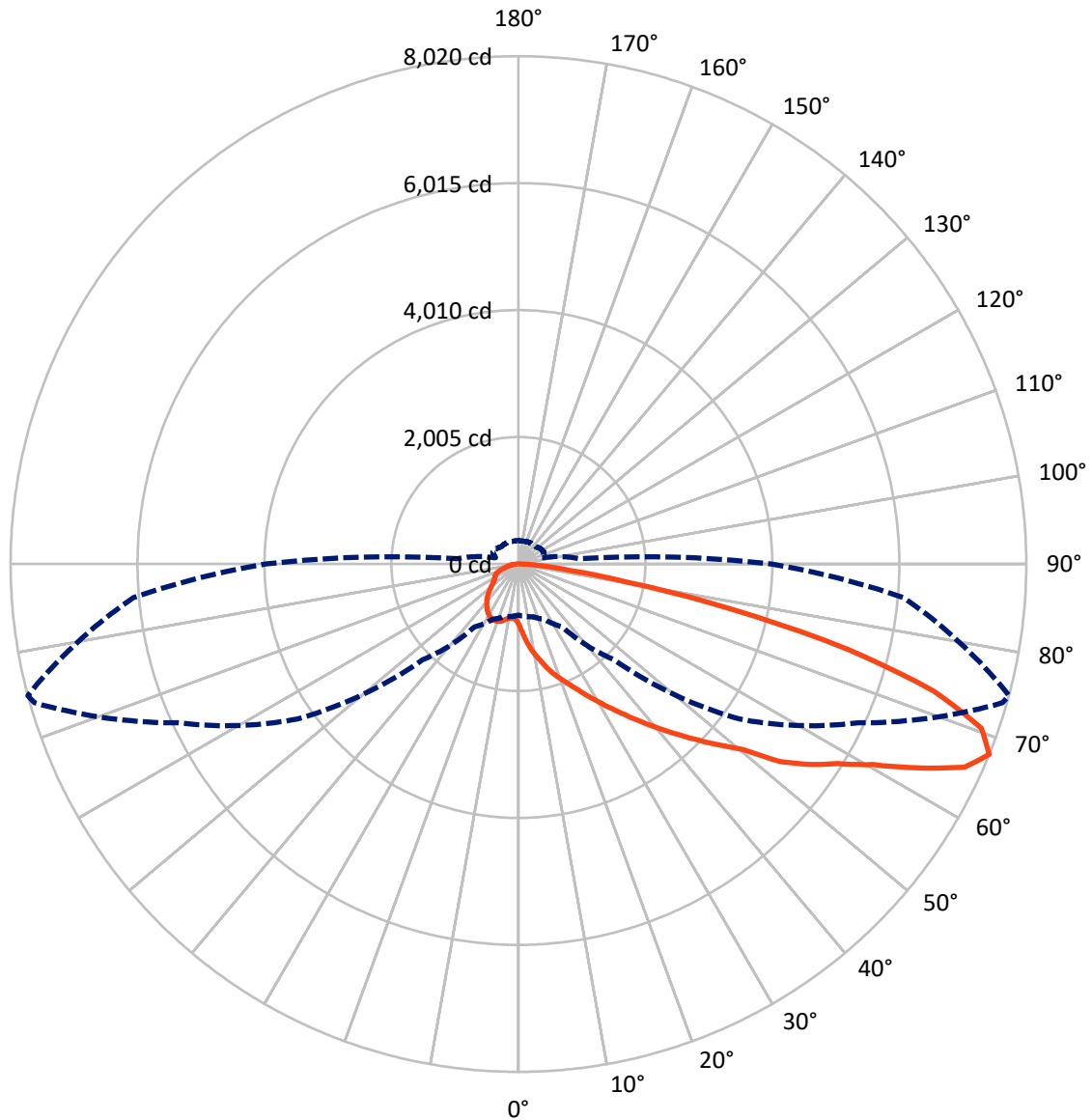


Based on 10 foot mounting height. Maximum calculated value = 20 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1643.1	0.0	1643.1
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	7978.9	0.0	7978.9
	% Fixture	82.9	0.0	82.9
Total	Lumens	9622.0	0.0	9622.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.0	1.2
10°-20°	404.8	4.2
20°-30°	738.3	7.7
30°-40°	1211.9	12.6
40°-50°	1752.5	18.2
50°-60°	2065.4	21.5
60°-70°	2007.0	20.9
70°-80°	1115.6	11.6
80°-90°	214.5	2.2
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°	9622.0	100.0
0°-180°	9622.0	100.0



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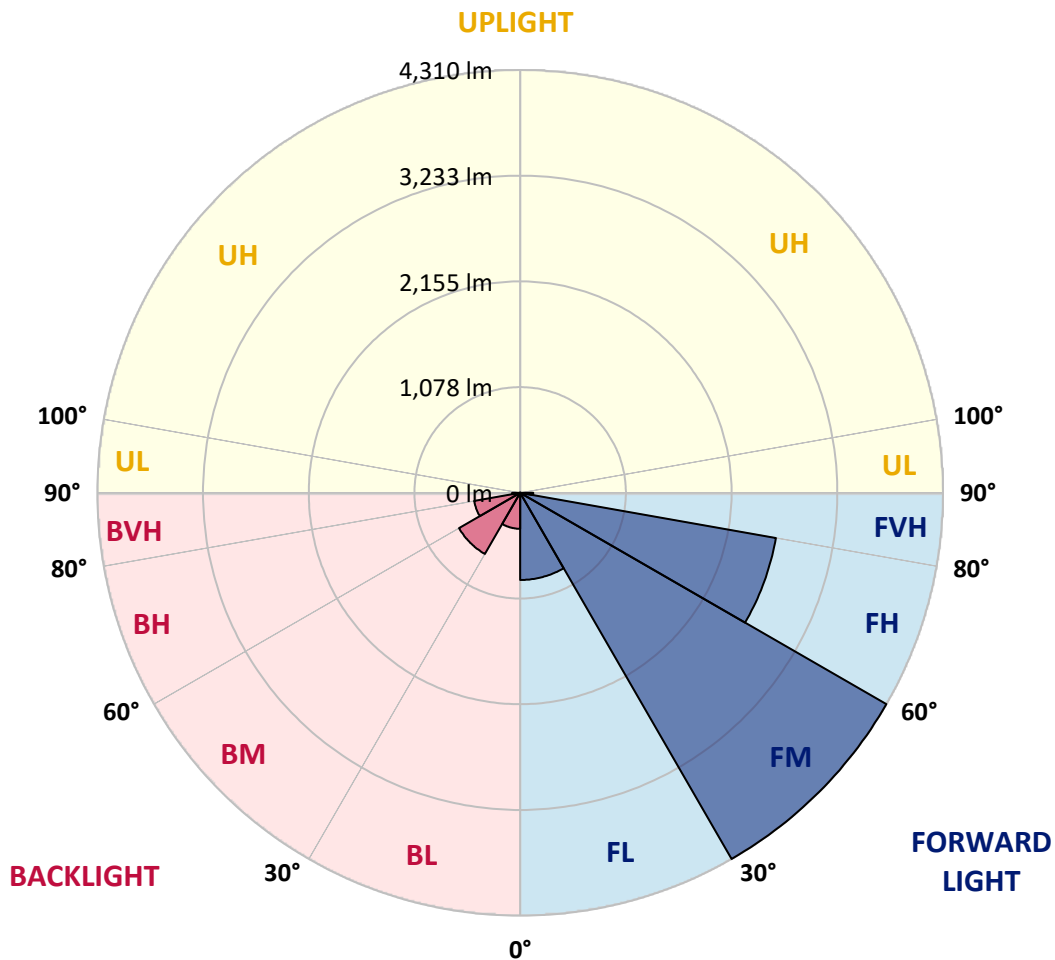
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	888.4	9.2			
FM (30°-60°)	4310.1	44.8			
FH (60°-80°)	2646.9	27.5			G2/5000
FVH (80°-90°)	133.5	1.4			G2/225
BL (0°-30°)	366.7	3.8	B1/500		
BM (30°-60°)	719.6	7.5	B1/1000		
BH (60°-80°)	475.7	4.9	B1/500		G1/500
BVH (80°-90°)	81.0	0.8			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 II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	953.4	953.4	953.4	953.4	953.4	953.4	953.4	953.4	953.4	953.4	953.4
2.5°	1351.7	1355.7	1347.7	1329.6	1303.4	1255.2	1212.9	1138.5	1072.1	1064.1	993.7
5°	1589.1	1593.1	1583.0	1560.9	1532.8	1480.5	1422.1	1325.6	1219.0	1198.8	1050.0
7.5°	1752.0	1754.0	1741.9	1719.8	1697.7	1645.4	1587.1	1478.4	1347.7	1331.6	1122.4
10°	1890.8	1894.8	1878.7	1864.7	1840.5	1788.2	1727.9	1613.2	1478.4	1456.3	1196.8
12.5°	2019.5	2023.6	2013.5	2001.4	1993.4	1945.1	1878.7	1741.9	1597.1	1573.0	1285.3
15°	2106.0	2110.1	2112.1	2128.2	2138.2	2104.0	2037.6	1888.8	1725.9	1703.7	1389.9
17.5°	2081.9	2091.9	2122.1	2180.5	2242.8	2244.8	2190.5	2033.6	1852.6	1828.4	1496.5
20°	2011.5	2019.5	2055.7	2144.2	2266.9	2337.4	2333.3	2180.5	1971.3	1945.1	1595.1
22.5°	2069.8	2079.9	2079.9	2134.2	2254.9	2385.6	2437.9	2325.3	2089.9	2065.8	1693.7
25°	2319.2	2325.3	2283.0	2260.9	2305.2	2425.9	2524.4	2482.2	2234.8	2206.6	1800.3
27.5°	2667.2	2657.2	2604.9	2516.4	2468.1	2500.3	2600.9	2631.0	2401.7	2367.5	1910.9
30°	3013.2	3007.2	2946.8	2828.2	2719.5	2651.1	2685.3	2763.8	2582.8	2542.5	2017.5
32.5°	3337.1	3327.0	3260.6	3121.8	2999.1	2872.4	2806.0	2884.5	2775.9	2729.6	2136.2
35°	3634.8	3608.6	3542.2	3397.4	3270.7	3150.0	2987.1	2999.1	2985.0	2936.8	2266.9
37.5°	3876.1	3856.0	3783.6	3648.8	3514.1	3399.4	3228.4	3129.9	3210.3	3164.1	2417.8
40°	4089.4	4067.2	3992.8	3858.0	3733.3	3624.7	3489.9	3288.8	3463.8	3411.5	2586.8
42.5°	4250.3	4234.2	4173.8	4041.1	3920.4	3821.8	3755.5	3489.9	3727.3	3677.0	2771.8
45°	4336.8	4320.7	4288.5	4181.9	4071.3	3994.8	4000.9	3729.3	4002.9	3960.6	2991.1
47.5°	4230.2	4242.2	4270.4	4250.3	4181.9	4145.7	4220.1	3976.7	4310.6	4270.4	3228.4
50°	3944.5	3956.6	4069.2	4208.0	4232.2	4276.4	4417.2	4262.3	4636.5	4604.3	3522.1
52.5°	3242.5	3308.9	3620.7	3952.6	4179.9	4362.9	4636.5	4686.8	5185.6	5185.6	4041.1
55°	2450.0	2508.3	2864.4	3443.7	3976.7	4371.0	4797.4	4974.4	5581.9	5589.9	4312.6
57.5°	1985.3	2021.5	2196.5	2789.9	3550.3	4270.4	4988.5	5221.8	5911.8	5948.0	4662.6
60°	1611.2	1631.3	1746.0	2158.3	2960.9	3998.8	5125.3	5575.8	6382.5	6432.7	5109.2
62.5°	1295.4	1315.5	1392.0	1639.4	2323.3	3489.9	5101.1	5944.0	7010.0	7092.5	5694.5
65°	1033.9	1056.0	1106.3	1259.2	1721.8	2858.3	4853.7	6133.0	7659.8	7740.2	6082.7
67.5°	806.6	826.7	860.9	961.5	1212.9	2138.2	4268.4	5933.9	7951.4	8019.8	6102.9
70°	609.5	619.5	647.7	712.1	867.0	1420.1	3341.1	5266.1	7689.9	7752.3	5700.6
72.5°	472.7	470.7	486.8	519.0	605.5	977.6	2214.6	4282.5	6798.8	6863.2	4863.8
75°	386.2	384.2	394.3	404.3	438.5	655.7	1307.5	3224.4	5487.3	5364.6	3648.8
77.5°	325.9	323.8	333.9	335.9	350.0	452.6	744.3	2122.1	3660.9	3449.7	2055.7
80°	275.6	273.6	285.6	289.7	299.7	331.9	428.4	1148.6	1838.5	1741.9	981.6
82.5°	207.2	215.2	237.4	247.4	259.5	245.4	265.5	506.9	852.9	814.7	426.4
85°	100.6	118.7	179.0	199.1	213.2	154.9	181.0	239.4	384.2	366.1	173.0
87.5°	34.2	30.2	106.6	126.7	138.8	70.4	100.6	132.8	158.9	144.8	54.3
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°	953.4	953.4	953.4	953.4	953.4	953.4	953.4	953.4	953.4	953.4	953.4
2.5°	963.5	933.3	889.1	854.9	832.8	814.7	806.6	804.6	800.6	798.6	798.6
5°	983.6	929.3	860.9	824.7	814.7	806.6	810.6	812.6	812.6	812.6	812.6
7.5°	1013.8	937.4	854.9	830.7	828.7	828.7	840.8	846.8	850.9	850.9	850.9
10°	1054.0	951.4	864.9	844.8	850.9	854.9	869.0	877.0	881.0	883.0	885.1
12.5°	1108.3	981.6	885.1	869.0	877.0	879.0	889.1	893.1	897.1	899.1	899.1
15°	1180.7	1025.9	917.2	897.1	899.1	897.1	897.1	893.1	891.1	891.1	895.1
17.5°	1255.2	1068.1	945.4	917.2	909.2	893.1	881.0	871.0	864.9	860.9	862.9
20°	1329.6	1106.3	961.5	921.3	899.1	873.0	850.9	836.8	828.7	820.7	824.7
22.5°	1404.0	1142.5	967.5	909.2	877.0	838.8	814.7	792.5	774.4	762.4	764.4
25°	1486.5	1182.8	967.5	895.1	846.8	806.6	776.4	740.2	714.1	704.0	708.0
27.5°	1569.0	1217.0	957.5	869.0	812.6	772.4	728.2	685.9	669.8	663.8	665.8
30°	1651.4	1243.1	935.3	836.8	776.4	732.2	673.8	645.7	625.6	609.5	611.5
32.5°	1733.9	1261.2	905.2	796.5	738.2	681.9	633.6	601.4	565.2	545.1	547.1
35°	1828.4	1275.3	869.0	756.3	696.0	637.6	601.4	549.1	510.9	494.8	490.8
37.5°	1927.0	1285.3	830.7	712.1	653.7	605.5	569.3	504.9	468.7	446.6	444.5
40°	2033.6	1289.4	784.5	665.8	613.5	585.3	527.0	478.7	416.4	402.3	402.3
42.5°	2160.3	1287.4	738.2	619.5	569.3	539.1	496.8	474.7	420.4	406.3	398.3
45°	2305.2	1287.4	687.9	565.2	525.0	480.7	462.6	448.6	412.4	418.4	422.4
47.5°	2470.1	1283.3	627.6	521.0	488.8	450.6	440.5	410.3	396.3	400.3	404.3
50°	2697.4	1289.4	573.3	484.8	462.6	430.5	418.4	402.3	396.3	398.3	396.3
52.5°	3013.2	1269.2	521.0	462.6	442.5	400.3	400.3	398.3	400.3	398.3	398.3
55°	3186.2	1225.0	482.8	450.6	428.4	386.2	394.3	398.3	402.3	400.3	400.3
57.5°	3431.6	1194.8	452.6	442.5	420.4	382.2	390.2	398.3	400.3	398.3	398.3
60°	3721.3	1174.7	432.5	444.5	414.4	382.2	392.2	398.3	396.3	394.3	394.3
62.5°	4057.2	1166.7	418.4	450.6	408.3	384.2	392.2	398.3	390.2	388.2	388.2
65°	4183.9	1094.3	400.3	454.6	412.4	384.2	390.2	392.2	382.2	380.2	378.2
67.5°	3988.8	969.5	374.1	446.6	424.4	384.2	384.2	382.2	370.1	368.1	364.1
70°	3552.3	804.6	333.9	420.4	432.5	386.2	376.1	366.1	354.0	354.0	346.0
72.5°	2908.6	633.6	281.6	374.1	426.4	392.2	360.1	346.0	331.9	331.9	323.8
75°	2096.0	472.7	225.3	311.8	400.3	390.2	339.9	321.8	305.7	303.7	293.7
77.5°	1194.8	331.9	183.0	243.4	356.0	380.2	321.8	293.7	275.6	269.5	263.5
80°	613.5	223.3	148.9	191.1	295.7	352.0	307.8	261.5	241.4	231.3	221.3
82.5°	291.7	148.9	114.7	140.8	223.3	307.8	289.7	225.3	203.2	191.1	179.0
85°	130.7	88.5	76.4	90.5	158.9	239.4	255.5	185.1	158.9	199.1	146.8
87.5°	42.2	40.2	40.2	42.2	76.4	104.6	187.1	136.8	126.7	104.6	88.5
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)