

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: P234781

Luminaire Tested: **ARCH-M-AF48-60-D-U-T2R-8027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234781
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-AF48-60-D-U-T2R-8027
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 2700K, 405mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6822 lumens
Efficiency: N/A
Efficacy: 108.3 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

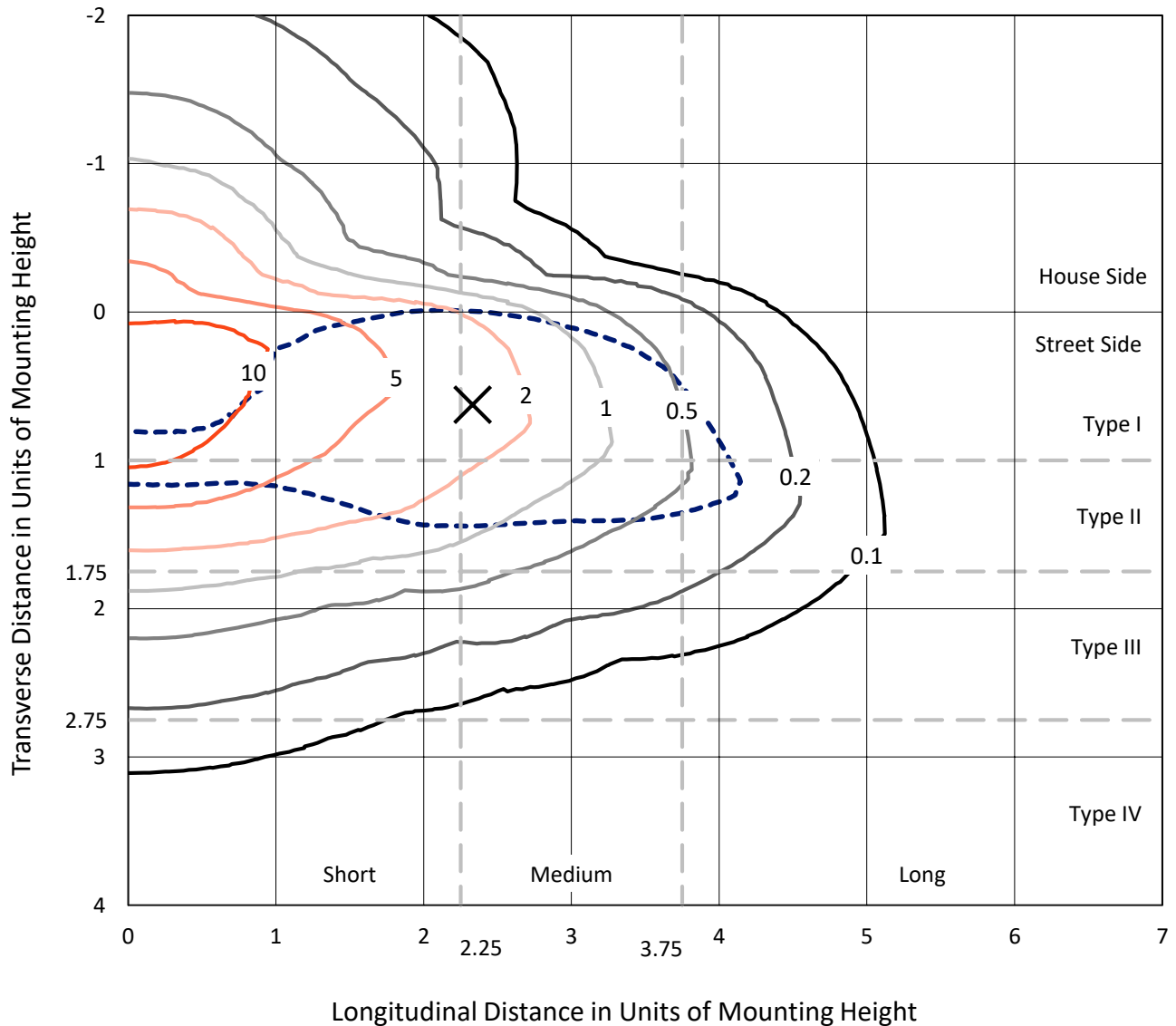
Input Watts (W): 63
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

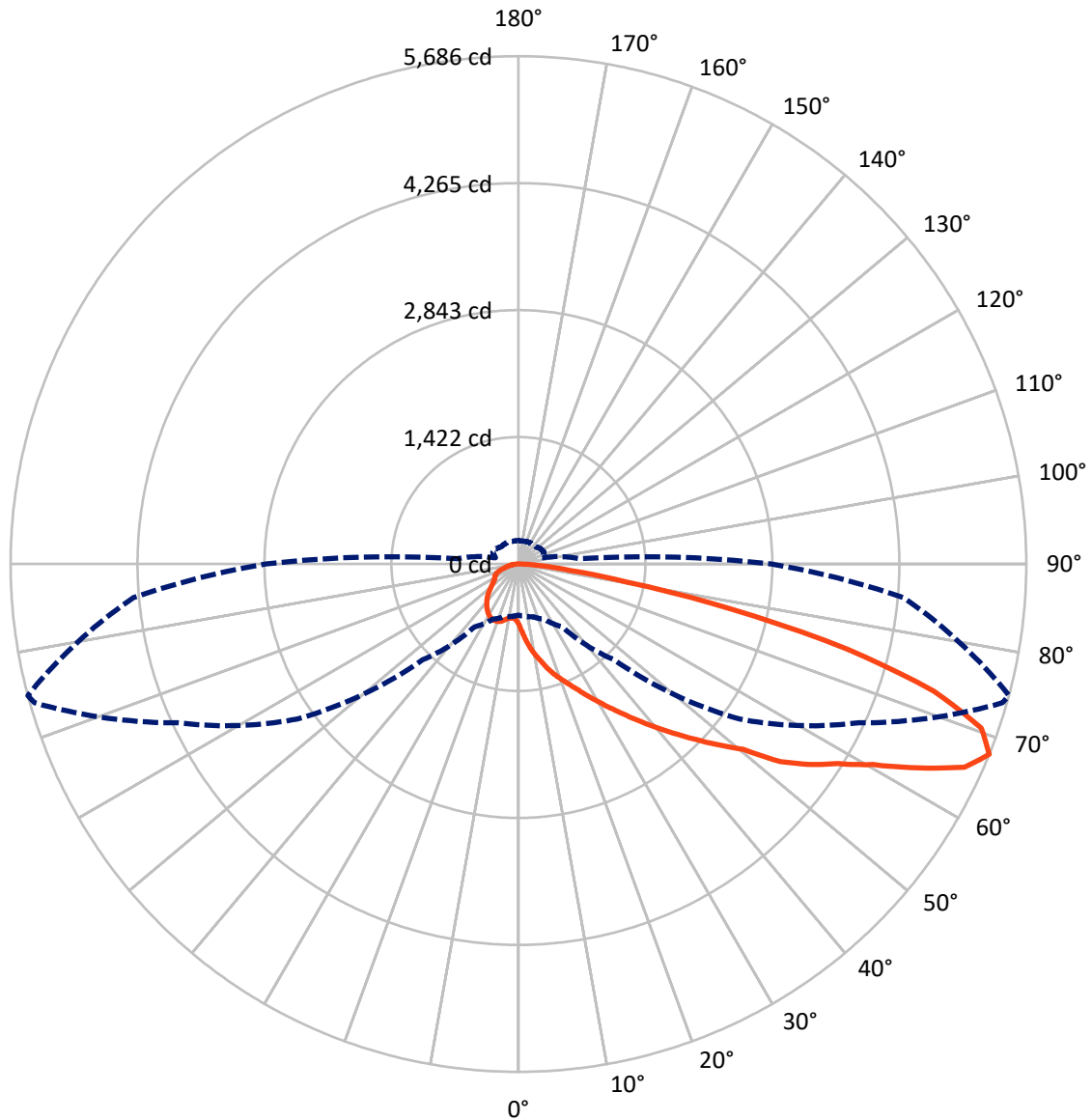


Based on 10 foot mounting height. Maximum calculated value = 14.2 fc
 Type II - Medium - Semi-Cutoff

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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	1165.0	0.0	1165.0
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	5657.1	0.0	5657.1
	% Fixture	82.9	0.0	82.9
Total	Lumens	6822.0	0.0	6822.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.4	1.2
10°-20°	287.0	4.2
20°-30°	523.5	7.7
30°-40°	859.2	12.6
40°-50°	1242.5	18.2
50°-60°	1464.3	21.5
60°-70°	1423.0	20.9
70°-80°	791.0	11.6
80°-90°	152.1	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°	6822.0	100.0
0°-180°	6822.0	100.0



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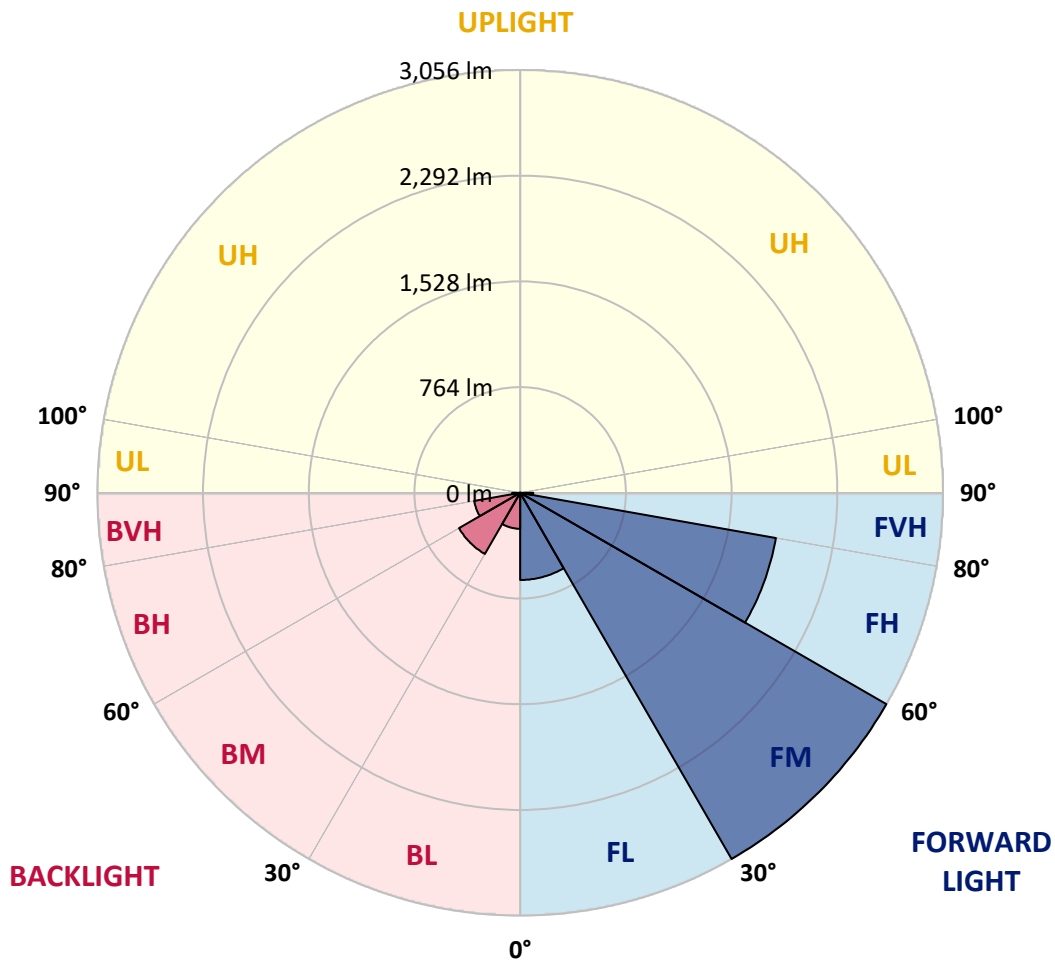
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	629.9	9.2			
FM	(30°-60°)	3055.9	44.8			
FH	(60°-80°)	1876.7	27.5			G2/5000
FVH	(80°-90°)	94.7	1.4			G1/100
BL	(0°-30°)	260.0	3.8	B1/500		
BM	(30°-60°)	510.2	7.5	B1/1000		
BH	(60°-80°)	337.3	4.9	B1/500		G1/500
BVH	(80°-90°)	57.4	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°	676.0	676.0	676.0	676.0	676.0	676.0	676.0	676.0	676.0	676.0	676.0
2.5°	958.4	961.2	955.5	942.7	924.1	889.9	860.0	807.2	760.1	754.4	704.5
5°	1126.7	1129.5	1122.4	1106.7	1086.7	1049.6	1008.3	939.8	864.2	850.0	744.4
7.5°	1242.2	1243.6	1235.0	1219.4	1203.7	1166.6	1125.2	1048.2	955.5	944.1	795.8
10°	1340.6	1343.4	1332.0	1322.0	1304.9	1267.8	1225.1	1143.8	1048.2	1032.5	848.6
12.5°	1431.9	1434.7	1427.6	1419.0	1413.3	1379.1	1332.0	1235.0	1132.4	1115.2	911.3
15°	1493.2	1496.0	1497.5	1508.9	1516.0	1491.7	1444.7	1339.2	1223.6	1207.9	985.5
17.5°	1476.1	1483.2	1504.6	1545.9	1590.2	1591.6	1553.1	1441.8	1313.5	1296.4	1061.1
20°	1426.1	1431.9	1457.5	1520.3	1607.3	1657.2	1654.3	1545.9	1397.6	1379.1	1130.9
22.5°	1467.5	1474.6	1474.6	1513.1	1598.7	1691.4	1728.5	1648.6	1481.8	1464.7	1200.8
25°	1644.3	1648.6	1618.7	1603.0	1634.4	1719.9	1789.8	1759.9	1584.4	1564.5	1276.4
27.5°	1891.1	1883.9	1846.9	1784.1	1749.9	1772.7	1844.0	1865.4	1702.8	1678.6	1354.8
30°	2136.4	2132.1	2089.3	2005.2	1928.1	1879.7	1903.9	1959.5	1831.2	1802.6	1430.4
32.5°	2366.0	2358.8	2311.8	2213.4	2126.4	2036.5	1989.5	2045.1	1968.1	1935.3	1514.6
35°	2577.0	2558.5	2511.4	2408.8	2318.9	2233.3	2117.8	2126.4	2116.4	2082.2	1607.3
37.5°	2748.2	2733.9	2682.6	2587.0	2491.5	2410.2	2289.0	2219.1	2276.1	2243.3	1714.2
40°	2899.4	2883.7	2830.9	2735.3	2646.9	2569.9	2474.4	2331.7	2455.8	2418.7	1834.0
42.5°	3013.4	3002.0	2959.3	2865.1	2779.6	2709.7	2662.6	2474.4	2642.6	2607.0	1965.2
45°	3074.8	3063.4	3040.5	2965.0	2886.5	2832.3	2836.6	2644.1	2838.0	2808.1	2120.7
47.5°	2999.2	3007.7	3027.7	3013.4	2965.0	2939.3	2992.1	2819.5	3056.2	3027.7	2289.0
50°	2796.7	2805.2	2885.1	2983.5	3000.6	3032.0	3131.8	3022.0	3287.3	3264.4	2497.2
52.5°	2298.9	2346.0	2567.1	2802.4	2963.5	3093.3	3287.3	3322.9	3676.6	3676.6	2865.1
55°	1737.0	1778.4	2030.8	2441.6	2819.5	3099.0	3401.4	3526.9	3957.6	3963.3	3057.7
57.5°	1407.6	1433.3	1557.4	1978.1	2517.1	3027.7	3536.8	3702.3	4191.4	4217.1	3305.8
60°	1142.3	1156.6	1237.9	1530.3	2099.3	2835.2	3633.8	3953.3	4525.2	4560.8	3622.4
62.5°	918.4	932.7	986.9	1162.3	1647.2	2474.4	3616.7	4214.3	4970.1	5028.6	4037.4
65°	733.0	748.7	784.4	892.8	1220.8	2026.6	3441.3	4348.3	5430.8	5487.8	4312.7
67.5°	571.9	586.1	610.4	681.7	860.0	1516.0	3026.3	4207.1	5637.6	5686.0	4326.9
70°	432.1	439.3	459.2	504.9	614.7	1006.9	2368.8	3733.7	5452.2	5496.4	4041.7
72.5°	335.1	333.7	345.1	367.9	429.3	693.1	1570.2	3036.3	4820.4	4866.0	3448.4
75°	273.8	272.4	279.5	286.7	310.9	464.9	927.0	2286.1	3890.5	3803.5	2587.0
77.5°	231.0	229.6	236.7	238.2	248.1	320.9	527.7	1504.6	2595.6	2445.8	1457.5
80°	195.4	194.0	202.5	205.4	212.5	235.3	303.8	814.3	1303.5	1235.0	696.0
82.5°	146.9	152.6	168.3	175.4	184.0	174.0	188.3	359.4	604.7	577.6	302.3
85°	71.3	84.1	126.9	141.2	151.2	109.8	128.4	169.7	272.4	259.6	122.6
87.5°	24.2	21.4	75.6	89.8	98.4	49.9	71.3	94.1	112.7	102.7	38.5
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°	676.0	676.0	676.0	676.0	676.0	676.0	676.0	676.0	676.0	676.0	676.0
2.5°	683.1	661.7	630.4	606.1	590.4	577.6	571.9	570.5	567.6	566.2	566.2
5°	697.4	658.9	610.4	584.7	577.6	571.9	574.7	576.2	576.2	576.2	576.2
7.5°	718.8	664.6	606.1	589.0	587.6	587.6	596.1	600.4	603.3	603.3	603.3
10°	747.3	674.6	613.2	599.0	603.3	606.1	616.1	621.8	624.7	626.1	627.5
12.5°	785.8	696.0	627.5	616.1	621.8	623.2	630.4	633.2	636.1	637.5	637.5
15°	837.1	727.3	650.3	636.1	637.5	636.1	636.1	633.2	631.8	631.8	634.6
17.5°	889.9	757.3	670.3	650.3	644.6	633.2	624.7	617.5	613.2	610.4	611.8
20°	942.7	784.4	681.7	653.2	637.5	618.9	603.3	593.3	587.6	581.9	584.7
22.5°	995.5	810.1	686.0	644.6	621.8	594.7	577.6	561.9	549.1	540.5	541.9
25°	1053.9	838.6	686.0	634.6	600.4	571.9	550.5	524.8	506.3	499.2	502.0
27.5°	1112.4	862.8	678.8	616.1	576.2	547.6	516.3	486.3	474.9	470.6	472.1
30°	1170.9	881.4	663.2	593.3	550.5	519.1	477.8	457.8	443.5	432.1	433.5
32.5°	1229.3	894.2	641.8	564.8	523.4	483.5	449.2	426.4	400.7	386.5	387.9
35°	1296.4	904.2	616.1	536.2	493.4	452.1	426.4	389.3	362.2	350.8	348.0
37.5°	1366.2	911.3	589.0	504.9	463.5	429.3	403.6	358.0	332.3	316.6	315.2
40°	1441.8	914.2	556.2	472.1	435.0	415.0	373.7	339.4	295.2	285.2	285.2
42.5°	1531.7	912.7	523.4	439.3	403.6	382.2	352.3	336.6	298.1	288.1	282.4
45°	1634.4	912.7	487.7	400.7	372.2	340.8	328.0	318.0	292.4	296.6	299.5
47.5°	1751.3	909.9	445.0	369.4	346.6	319.5	312.3	290.9	281.0	283.8	286.7
50°	1912.5	914.2	406.5	343.7	328.0	305.2	296.6	285.2	281.0	282.4	281.0
52.5°	2136.4	899.9	369.4	328.0	313.8	283.8	283.8	282.4	283.8	282.4	282.4
55°	2259.0	868.5	342.3	319.5	303.8	273.8	279.5	282.4	285.2	283.8	283.8
57.5°	2433.0	847.1	320.9	313.8	298.1	271.0	276.7	282.4	283.8	282.4	282.4
60°	2638.4	832.9	306.6	315.2	293.8	271.0	278.1	282.4	281.0	279.5	279.5
62.5°	2876.5	827.2	296.6	319.5	289.5	272.4	278.1	282.4	276.7	275.2	275.2
65°	2966.4	775.8	283.8	322.3	292.4	272.4	276.7	278.1	271.0	269.5	268.1
67.5°	2828.0	687.4	265.3	316.6	300.9	272.4	272.4	271.0	262.4	261.0	258.1
70°	2518.6	570.5	236.7	298.1	306.6	273.8	266.7	259.6	251.0	251.0	245.3
72.5°	2062.2	449.2	199.7	265.3	302.3	278.1	255.3	245.3	235.3	235.3	229.6
75°	1486.0	335.1	159.7	221.1	283.8	276.7	241.0	228.2	216.8	215.3	208.2
77.5°	847.1	235.3	129.8	172.6	252.4	269.5	228.2	208.2	195.4	191.1	186.8
80°	435.0	158.3	105.5	135.5	209.6	249.6	218.2	185.4	171.1	164.0	156.9
82.5°	206.8	105.5	81.3	99.8	158.3	218.2	205.4	159.7	144.0	135.5	126.9
85°	92.7	62.8	54.2	64.2	112.7	169.7	181.1	131.2	112.7	141.2	104.1
87.5°	29.9	28.5	28.5	29.9	54.2	74.2	132.6	97.0	89.8	74.2	62.8
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)