

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: P214586

Luminaire Tested: **ARCH-AF16-60-D-U-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214586
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-AF16-60-D-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1160mA LIGHT ENGINE WITH 16 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6899.8 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G2

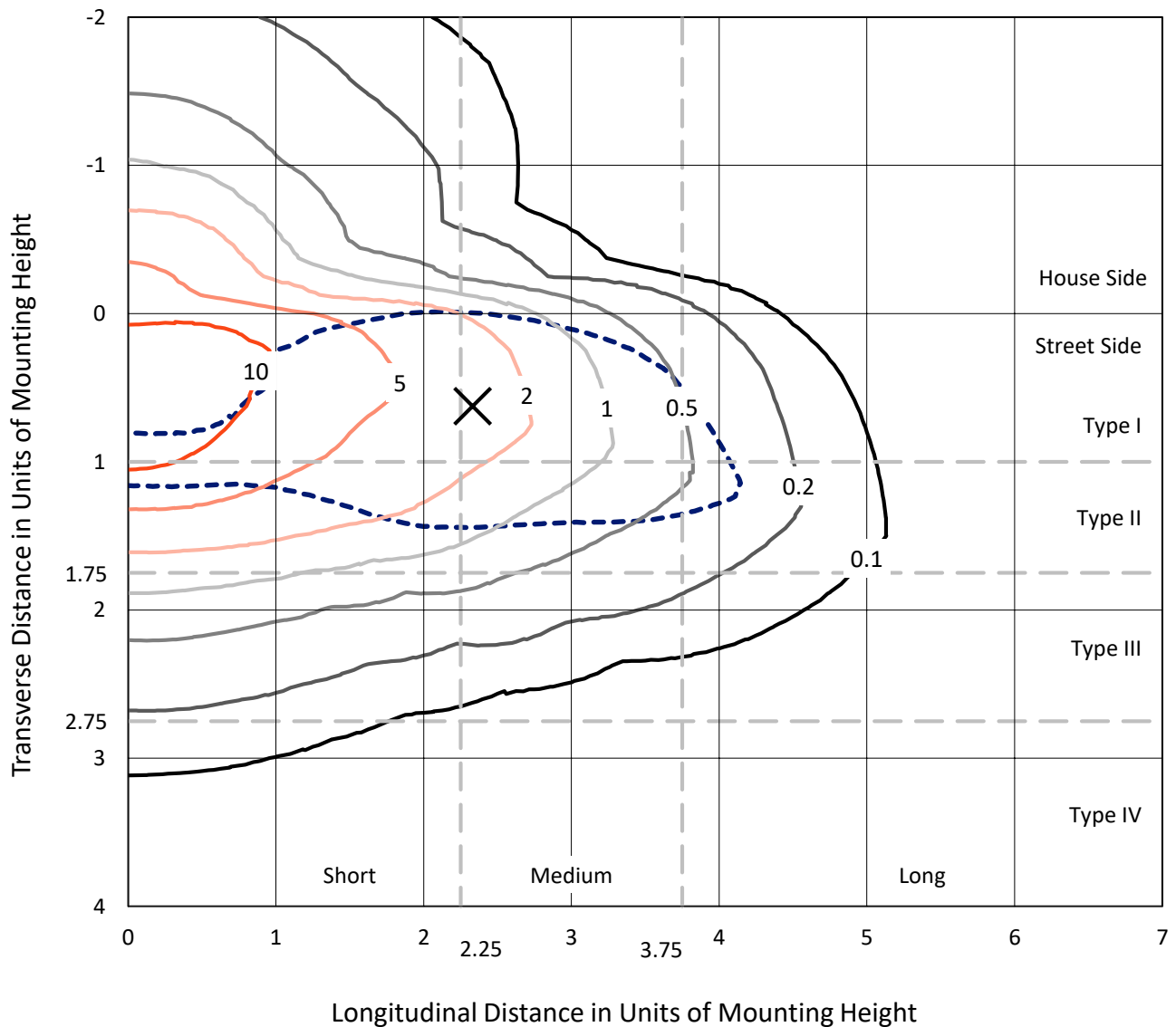
Input Watts (W): 63
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

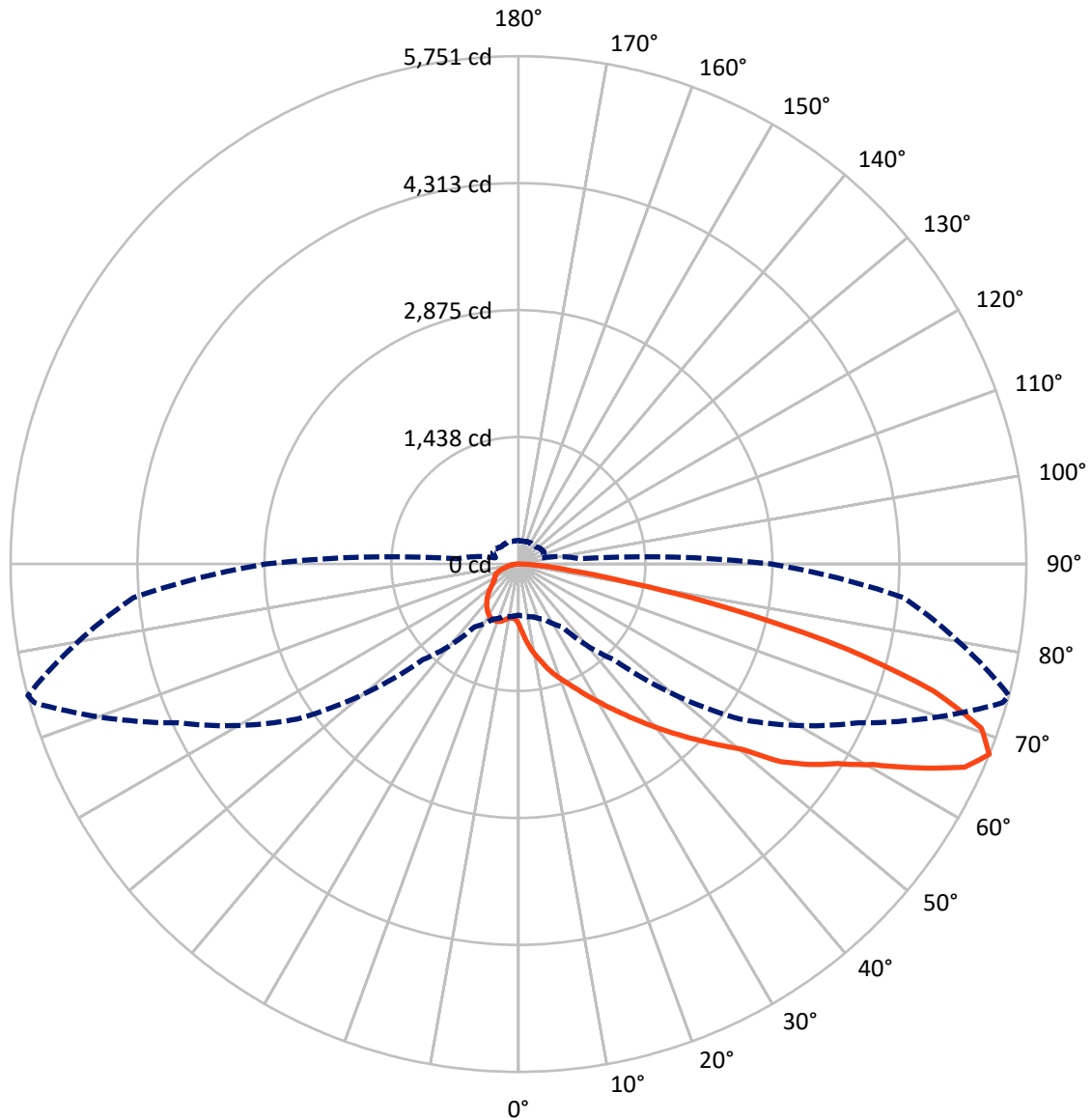


Based on 10 foot mounting height. Maximum calculated value = 14.3 fc
 Type II - Medium - Semi-Cutoff

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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	1178.2	0.0	1178.2
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	5721.6	0.0	5721.6
	% Fixture	82.9	0.0	82.9
Total	Lumens	6899.8	0.0	6899.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.3	1.2
10°-20°	290.3	4.2
20°-30°	529.4	7.7
30°-40°	869.0	12.6
40°-50°	1256.7	18.2
50°-60°	1481.0	21.5
60°-70°	1439.2	20.9
70°-80°	800.0	11.6
80°-90°	153.8	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°	6899.8	100.0
0°-180°	6899.8	100.0

Coefficient of Utilization



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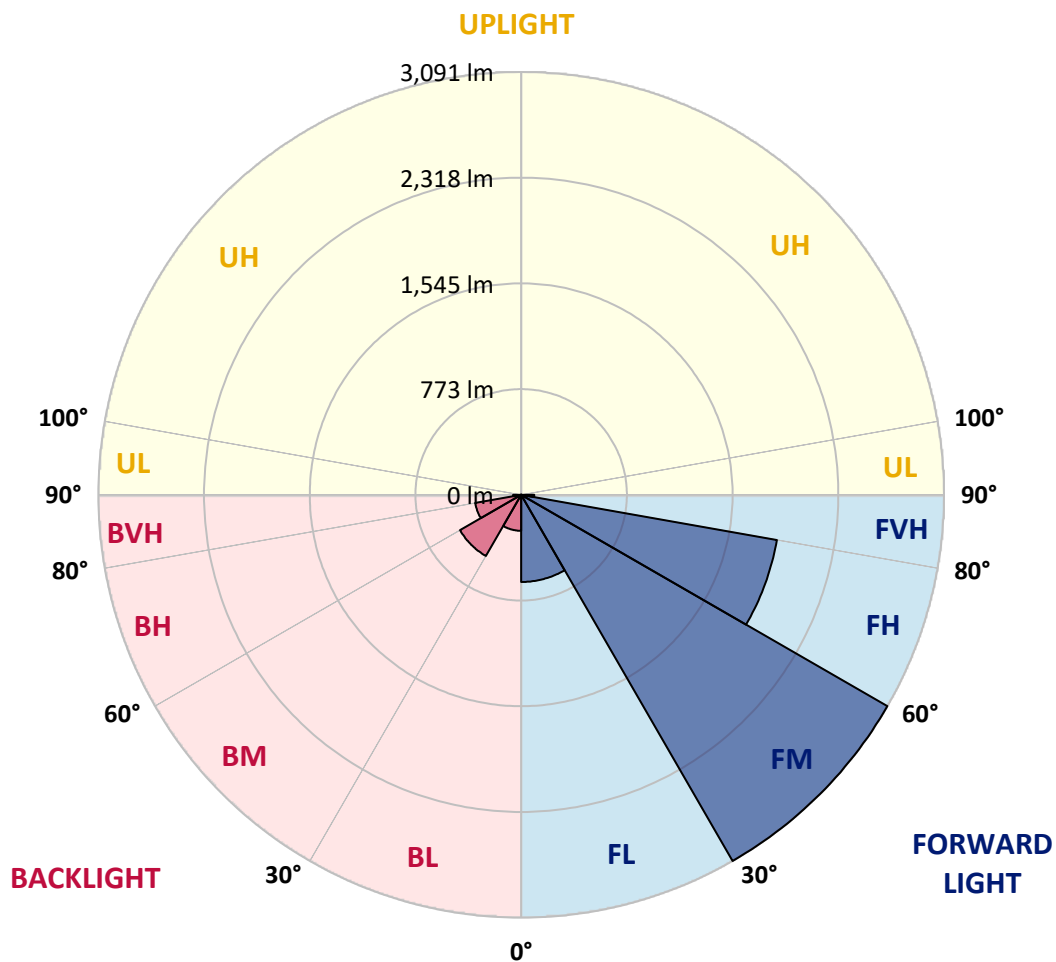
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	637.0	9.2			
FM (30°-60°)	3090.7	44.8			
FH (60°-80°)	1898.1	27.5			G2/5000
FVH (80°-90°)	95.7	1.4			G1/100
BL (0°-30°)	263.0	3.8	B1/500		
BM (30°-60°)	516.0	7.5	B1/1000		
BH (60°-80°)	341.2	4.9	B1/500		G1/500
BVH (80°-90°)	58.1	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°	683.7	683.7	683.7	683.7	683.7	683.7	683.7	683.7	683.7	683.7	683.7
2.5°	969.3	972.2	966.4	953.4	934.7	900.1	869.8	816.4	768.8	763.0	712.6
5°	1139.5	1142.4	1135.2	1119.3	1099.2	1061.6	1019.8	950.5	874.1	859.7	752.9
7.5°	1256.4	1257.8	1249.1	1233.3	1217.4	1179.9	1138.0	1060.2	966.4	954.9	804.9
10°	1355.8	1358.8	1347.2	1337.1	1319.8	1282.3	1239.0	1156.9	1060.2	1044.3	858.3
12.5°	1448.2	1451.1	1443.9	1435.2	1429.5	1394.8	1347.2	1249.1	1145.3	1128.0	921.7
15°	1510.2	1513.0	1514.6	1526.0	1533.3	1508.8	1461.2	1354.4	1237.6	1221.7	996.7
17.5°	1492.9	1500.2	1521.7	1563.6	1608.3	1609.7	1570.7	1458.3	1328.5	1311.1	1073.2
20°	1442.4	1448.2	1474.2	1537.6	1625.6	1676.1	1673.2	1563.6	1413.5	1394.8	1143.9
22.5°	1484.2	1491.5	1491.5	1530.4	1617.0	1710.7	1748.2	1667.4	1498.6	1481.3	1214.5
25°	1663.1	1667.4	1637.1	1621.3	1653.0	1739.5	1810.2	1779.9	1602.6	1582.3	1291.0
27.5°	1912.6	1905.5	1867.9	1804.5	1769.8	1792.9	1865.0	1886.6	1722.2	1697.7	1370.2
30°	2160.8	2156.4	2113.1	2028.0	1950.2	1901.1	1925.6	1981.9	1852.1	1823.2	1446.8
32.5°	2393.0	2385.7	2338.2	2238.6	2150.7	2059.8	2012.1	2068.4	1990.6	1957.3	1531.9
35°	2606.5	2587.7	2540.1	2436.3	2345.3	2258.8	2142.0	2150.7	2140.5	2105.9	1625.6
37.5°	2779.6	2765.1	2713.2	2616.5	2519.9	2437.7	2315.0	2244.4	2302.0	2268.9	1733.8
40°	2932.4	2916.5	2863.1	2766.6	2677.2	2599.2	2502.5	2358.3	2483.8	2446.3	1854.9
42.5°	3047.8	3036.3	2993.1	2897.8	2811.3	2740.6	2693.0	2502.5	2672.8	2636.8	1987.6
45°	3109.9	3098.3	3075.2	2998.8	2919.4	2864.7	2869.0	2674.2	2870.4	2840.1	2144.8
47.5°	3033.4	3042.1	3062.2	3047.8	2998.8	2972.8	3026.2	2851.7	3091.1	3062.2	2315.0
50°	2828.6	2837.3	2918.0	3017.5	3034.8	3066.6	3167.6	3056.5	3324.8	3301.7	2525.7
52.5°	2325.2	2372.7	2596.4	2834.3	2997.3	3128.6	3324.8	3360.8	3718.5	3718.5	2897.8
55°	1756.8	1798.7	2054.0	2469.4	2851.7	3134.3	3440.2	3567.1	4002.7	4008.4	3092.5
57.5°	1423.6	1449.6	1575.1	2000.6	2545.8	3062.2	3577.2	3744.5	4239.2	4265.2	3343.5
60°	1155.3	1169.8	1252.0	1547.7	2123.2	2867.5	3675.3	3998.4	4576.8	4612.8	3663.7
62.5°	928.9	943.4	998.2	1175.6	1666.0	2502.5	3658.0	4262.3	5026.8	5085.9	4083.4
65°	741.4	757.3	793.3	903.0	1234.7	2049.7	3480.5	4397.9	5492.7	5550.4	4361.9
67.5°	578.4	592.8	617.4	689.5	869.8	1533.3	3060.8	4255.1	5701.8	5750.9	4376.3
70°	437.0	444.3	464.4	510.7	621.6	1018.3	2395.9	3776.2	5514.3	5559.0	4087.8
72.5°	339.0	337.6	349.0	372.1	434.1	701.0	1588.1	3070.9	4875.4	4921.5	3487.8
75°	276.9	275.5	282.7	289.9	314.5	470.3	937.5	2312.2	3934.9	3846.9	2616.5
77.5°	233.6	232.2	239.5	240.9	250.9	324.6	533.7	1521.7	2625.2	2473.7	1474.2
80°	197.6	196.2	204.8	207.7	214.9	238.0	307.2	823.6	1318.4	1249.1	703.9
82.5°	148.5	154.4	170.2	177.4	186.1	175.9	190.4	363.5	611.6	584.2	305.8
85°	72.1	85.1	128.4	142.8	152.9	111.1	129.8	171.7	275.5	262.5	124.1
87.5°	24.6	21.7	76.4	90.8	99.5	50.5	72.1	95.2	114.0	103.8	39.0
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°	683.7	683.7	683.7	683.7	683.7	683.7	683.7	683.7	683.7	683.7	683.7
2.5°	690.9	669.3	637.5	613.1	597.2	584.2	578.4	576.9	574.1	572.6	572.6
5°	705.3	666.4	617.4	591.4	584.2	578.4	581.2	582.8	582.8	582.8	582.8
7.5°	727.0	672.2	613.1	595.8	594.2	594.2	602.9	607.2	610.2	610.2	610.2
10°	755.9	682.3	620.2	605.8	610.2	613.1	623.1	628.9	631.8	633.2	634.6
12.5°	794.7	703.9	634.6	623.1	628.9	630.3	637.5	640.5	643.3	644.8	644.8
15°	846.7	735.6	657.8	643.3	644.8	643.3	643.3	640.5	639.0	639.0	641.9
17.5°	900.1	765.9	677.9	657.8	651.9	640.5	631.8	624.6	620.2	617.4	618.8
20°	953.4	793.3	689.5	660.6	644.8	626.0	610.2	600.1	594.2	588.5	591.4
22.5°	1006.8	819.3	693.8	651.9	628.9	601.5	584.2	568.4	555.4	546.7	548.1
25°	1065.9	848.1	693.8	641.9	607.2	578.4	556.8	530.8	512.1	504.8	507.7
27.5°	1125.0	872.7	686.6	623.1	582.8	553.9	522.1	491.8	480.3	476.0	477.4
30°	1184.3	891.4	670.7	600.1	556.8	525.1	483.2	463.0	448.6	437.0	438.5
32.5°	1243.4	904.4	649.1	571.2	529.4	489.0	454.4	431.3	405.3	390.9	392.3
35°	1311.1	914.5	623.1	542.4	499.1	457.3	431.3	393.7	366.4	354.9	352.0
37.5°	1381.8	921.7	595.8	510.7	468.8	434.1	408.2	362.0	336.0	320.2	318.8
40°	1458.3	924.5	562.5	477.4	440.0	419.7	377.9	343.3	298.6	288.5	288.5
42.5°	1549.2	923.1	529.4	444.3	408.2	386.6	356.3	340.4	301.5	291.3	285.6
45°	1653.0	923.1	493.3	405.3	376.4	344.7	331.7	321.6	295.7	300.0	302.9
47.5°	1771.2	920.2	450.0	373.6	350.5	323.2	315.9	294.3	284.2	287.0	289.9
50°	1934.3	924.5	411.1	347.6	331.7	308.7	300.0	288.5	284.2	285.6	284.2
52.5°	2160.8	910.1	373.6	331.7	317.3	287.0	287.0	285.6	287.0	285.6	285.6
55°	2284.8	878.4	346.2	323.2	307.2	276.9	282.7	285.6	288.5	287.0	287.0
57.5°	2460.7	856.8	324.6	317.3	301.5	274.0	279.8	285.6	287.0	285.6	285.6
60°	2668.5	842.4	310.2	318.8	297.2	274.0	281.3	285.6	284.2	282.7	282.7
62.5°	2909.4	836.6	300.0	323.2	292.8	275.5	281.3	285.6	279.8	278.3	278.3
65°	3000.2	784.7	287.0	326.0	295.7	275.5	279.8	281.3	274.0	272.6	271.2
67.5°	2860.3	695.2	268.3	320.2	304.3	275.5	275.5	274.0	265.4	263.9	261.1
70°	2547.2	576.9	239.5	301.5	310.2	276.9	269.8	262.5	253.9	253.9	248.1
72.5°	2085.7	454.4	201.9	268.3	305.8	281.3	258.2	248.1	238.0	238.0	232.2
75°	1503.0	339.0	161.5	223.6	287.0	279.8	243.8	230.8	219.2	217.8	210.6
77.5°	856.8	238.0	131.2	174.5	255.3	272.6	230.8	210.6	197.6	193.2	188.9
80°	440.0	160.1	106.7	137.1	212.1	252.5	220.7	187.5	173.1	165.9	158.7
82.5°	209.2	106.7	82.2	101.0	160.1	220.7	207.7	161.5	145.7	137.1	128.4
85°	93.8	63.4	54.8	65.0	114.0	171.7	183.2	132.7	114.0	142.8	105.3
87.5°	30.3	28.8	28.8	30.3	54.8	75.0	134.1	98.1	90.8	75.0	63.4
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)