

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: P231019

Luminaire Tested: **ARCH-M-AF48-130-D-U-T2R-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231019
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-AF48-130-D-U-T2R-7030
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 845mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14385 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 131
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

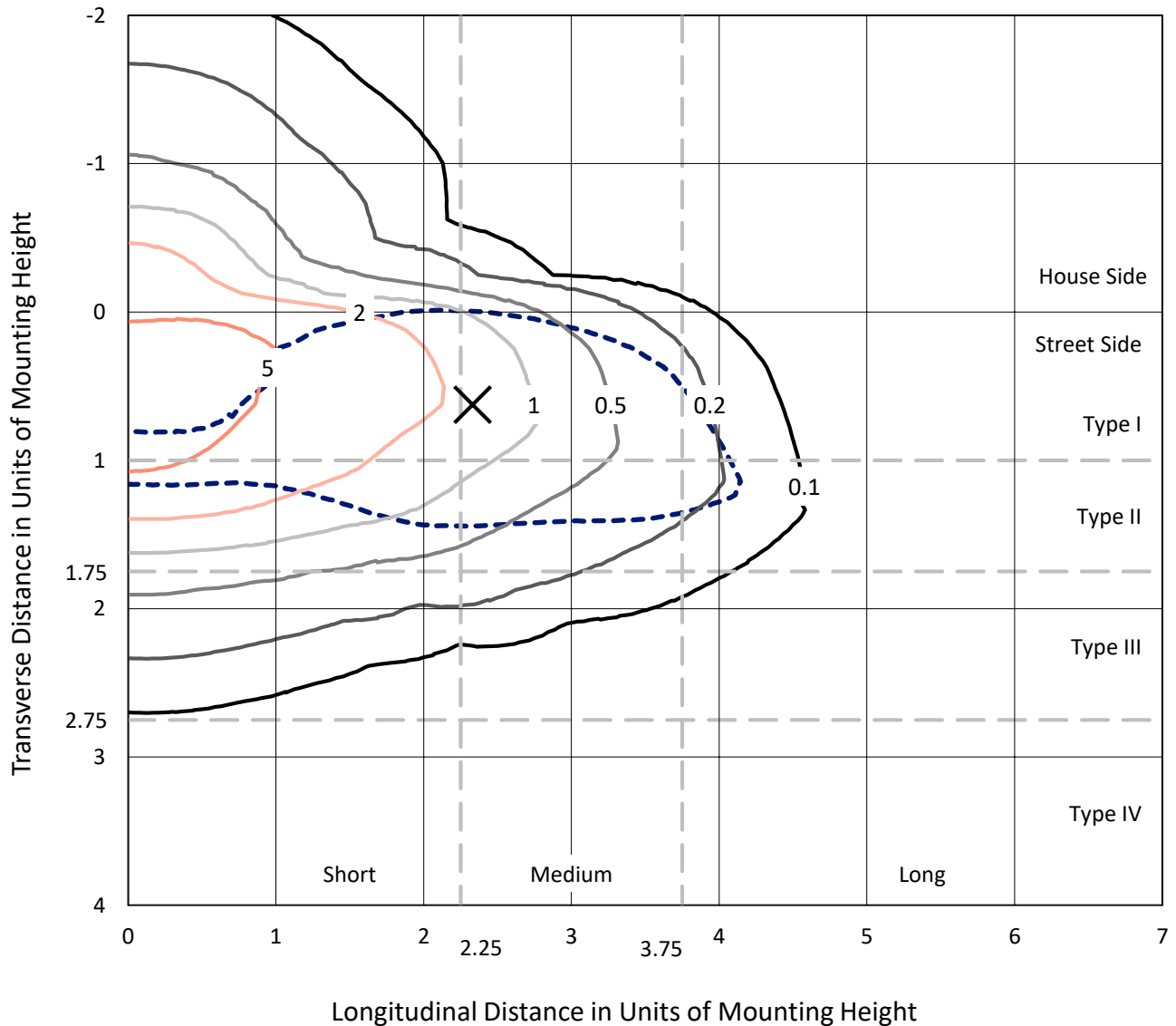


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

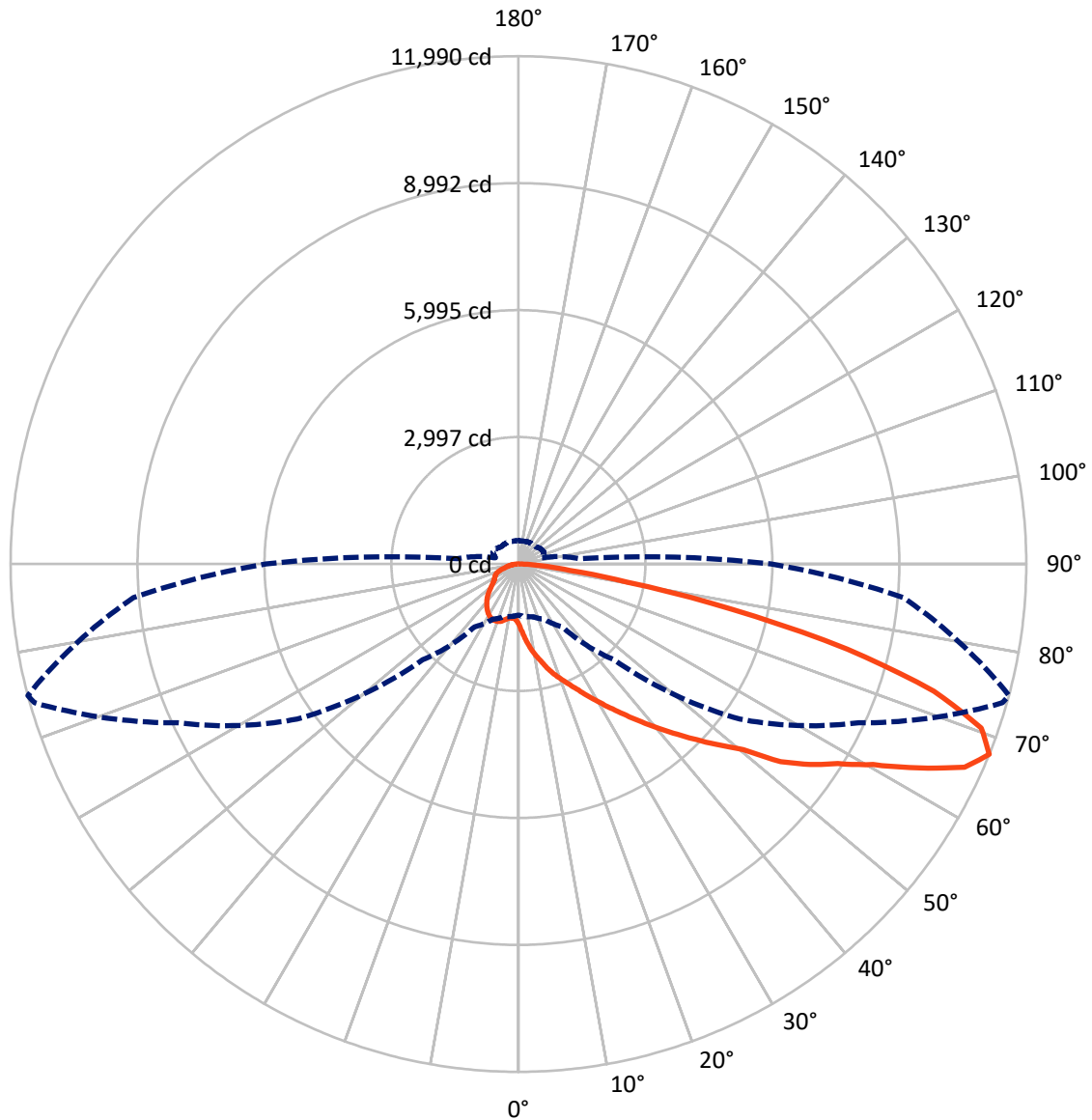


Based on 20 foot mounting height. Maximum calculated value = 7.5 fc
 Type II - Medium - Semi-Cutoff

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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	2456.4	0.0	2456.4
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	11928.6	0.0	11928.6
	% Fixture	82.9	0.0	82.9
Total	Lumens	14385.0	0.0	14385.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.5	1.2
10°-20°	605.2	4.2
20°-30°	1103.8	7.7
30°-40°	1811.7	12.6
40°-50°	2620.0	18.2
50°-60°	3087.7	21.5
60°-70°	3000.5	20.9
70°-80°	1667.9	11.6
80°-90°	320.7	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°	14385.0	100.0
0°-180°	14385.0	100.0

Coefficient of Utilization



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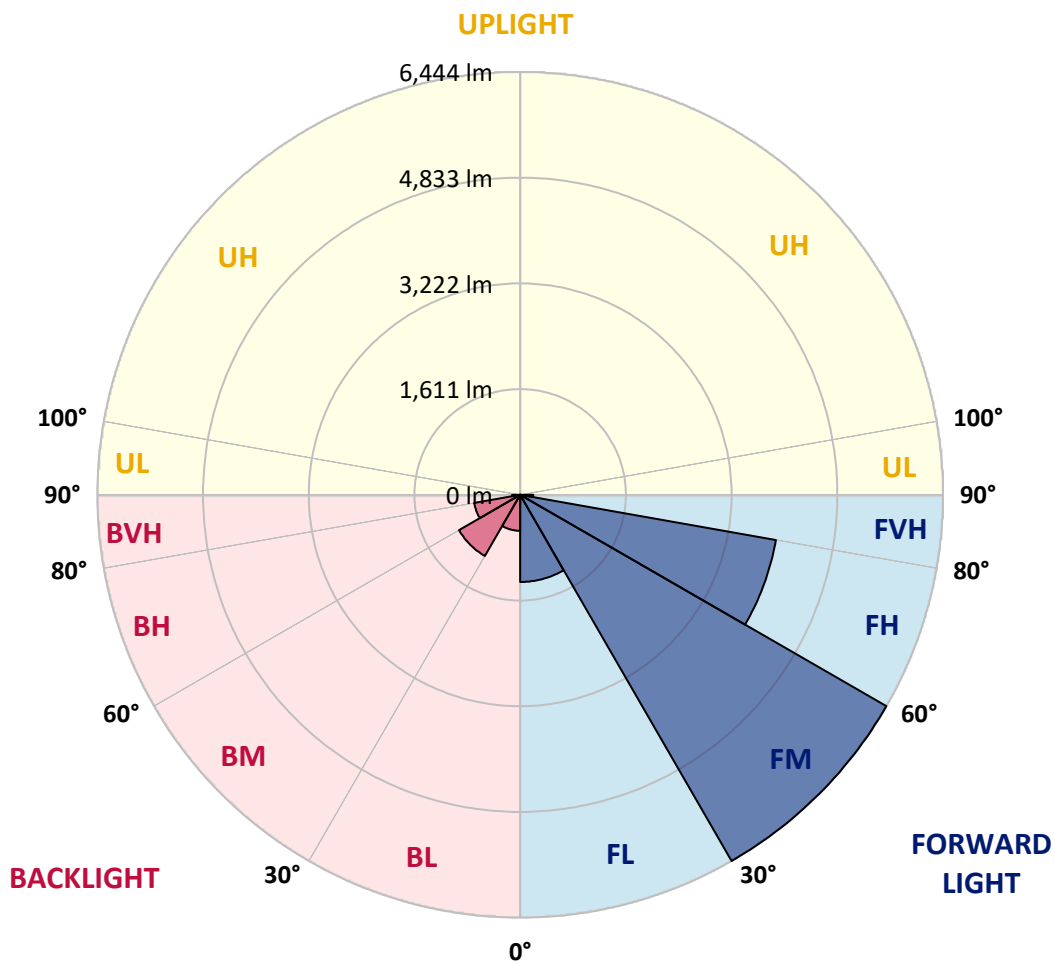
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1328.1	9.2			
FM (30°-60°)	6443.7	44.8			
FH (60°-80°)	3957.1	27.5			G2/5000
FVH (80°-90°)	199.6	1.4			G2/225
BL (0°-30°)	548.3	3.8	B2/1000		
BM (30°-60°)	1075.8	7.5	B2/2500		
BH (60°-80°)	711.3	4.9	B2/1000		G2/1000
BVH (80°-90°)	121.1	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1425.4	1425.4	1425.4	1425.4	1425.4	1425.4	1425.4	1425.4	1425.4	1425.4	1425.4
2.5°	2020.8	2026.9	2014.8	1987.8	1948.7	1876.5	1813.3	1702.1	1602.8	1590.8	1485.6
5°	2375.7	2381.7	2366.7	2333.6	2291.5	2213.3	2126.1	1981.7	1822.4	1792.3	1569.8
7.5°	2619.3	2622.3	2604.2	2571.2	2538.1	2459.9	2372.7	2210.3	2014.8	1990.8	1678.0
10°	2826.8	2832.8	2808.7	2787.7	2751.6	2673.4	2583.2	2411.8	2210.3	2177.2	1789.3
12.5°	3019.2	3025.2	3010.2	2992.2	2980.1	2908.0	2808.7	2604.2	2387.7	2351.6	1921.6
15°	3148.5	3154.6	3157.6	3181.6	3196.7	3145.5	3046.3	2823.8	2580.2	2547.1	2078.0
17.5°	3112.5	3127.5	3172.6	3259.8	3353.0	3356.0	3274.8	3040.3	2769.6	2733.5	2237.4
20°	3007.2	3019.2	3073.4	3205.7	3389.1	3494.4	3488.4	3259.8	2947.1	2908.0	2384.7
22.5°	3094.4	3109.4	3109.4	3190.6	3371.1	3566.5	3644.7	3476.3	3124.5	3088.4	2532.1
25°	3467.3	3476.3	3413.2	3380.1	3446.3	3626.7	3774.0	3710.9	3341.0	3298.9	2691.4
27.5°	3987.5	3972.5	3894.3	3762.0	3689.8	3737.9	3888.3	3933.4	3590.6	3539.5	2856.8
30°	4504.8	4495.8	4405.5	4228.1	4065.7	3963.5	4014.6	4131.9	3861.2	3801.1	3016.2
32.5°	4988.9	4973.9	4874.7	4667.2	4483.7	4294.3	4195.0	4312.3	4149.9	4080.8	3193.6
35°	5434.0	5394.9	5295.7	5079.2	4889.7	4709.3	4465.7	4483.7	4462.7	4390.5	3389.1
37.5°	5794.9	5764.8	5656.5	5455.1	5253.6	5082.2	4826.6	4679.2	4799.5	4730.3	3614.7
40°	6113.6	6080.6	5969.3	5767.8	5581.4	5419.0	5217.5	4916.8	5178.4	5100.2	3867.3
42.5°	6354.2	6330.2	6239.9	6041.5	5861.0	5713.7	5614.4	5217.5	5572.3	5497.2	4143.9
45°	6483.5	6459.5	6411.3	6252.0	6086.6	5972.3	5981.3	5575.3	5984.3	5921.2	4471.7
47.5°	6324.1	6342.2	6384.3	6354.2	6252.0	6197.8	6309.1	5945.2	6444.4	6384.3	4826.6
50°	5897.1	5915.2	6083.6	6291.1	6327.1	6393.3	6603.8	6372.3	6931.6	6883.5	5265.6
52.5°	4847.6	4946.8	5413.0	5909.1	6249.0	6522.6	6931.6	7006.8	7752.6	7752.6	6041.5
55°	3662.8	3750.0	4282.3	5148.3	5945.2	6534.6	7172.2	7436.8	8345.0	8357.0	6447.4
57.5°	2968.1	3022.2	3283.9	4171.0	5307.7	6384.3	7457.9	7806.7	8838.2	8892.3	6970.7
60°	2408.8	2438.8	2610.2	3226.7	4426.6	5978.3	7662.3	8336.0	9541.8	9617.0	7638.3
62.5°	1936.6	1966.7	2081.0	2450.9	3473.3	5217.5	7626.3	8886.3	10480.1	10603.4	8513.4
65°	1545.7	1578.8	1654.0	1882.5	2574.2	4273.2	7256.4	9169.0	11451.4	11571.7	9093.8
67.5°	1205.9	1236.0	1287.1	1437.4	1813.3	3196.7	6381.3	8871.2	11887.5	11989.7	9123.8
70°	911.2	926.2	968.3	1064.5	1296.1	2123.1	4995.0	7872.8	11496.5	11589.7	8522.4
72.5°	706.7	703.7	727.7	775.9	905.2	1461.5	3310.9	6402.3	10164.3	10260.6	7271.4
75°	577.4	574.4	589.4	604.4	655.6	980.3	1954.7	4820.5	8203.6	8020.2	5455.1
77.5°	487.2	484.2	499.2	502.2	523.3	676.6	1112.7	3172.6	5473.1	5157.3	3073.4
80°	412.0	409.0	427.0	433.0	448.1	496.2	640.5	1717.1	2748.6	2604.2	1467.5
82.5°	309.7	321.8	354.8	369.9	387.9	366.9	397.0	757.8	1275.1	1217.9	637.5
85°	150.4	177.4	267.6	297.7	318.8	231.6	270.6	357.9	574.4	547.3	258.6
87.5°	51.1	45.1	159.4	189.5	207.5	105.3	150.4	198.5	237.6	216.5	81.2
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°	1425.4	1425.4	1425.4	1425.4	1425.4	1425.4	1425.4	1425.4	1425.4	1425.4	1425.4
2.5°	1440.4	1395.3	1329.2	1278.1	1245.0	1217.9	1205.9	1202.9	1196.9	1193.9	1193.9
5°	1470.5	1389.3	1287.1	1233.0	1217.9	1205.9	1211.9	1214.9	1214.9	1214.9	1214.9
7.5°	1515.6	1401.4	1278.1	1242.0	1239.0	1239.0	1257.0	1266.0	1272.0	1272.0	1272.0
10°	1575.8	1422.4	1293.1	1263.0	1272.0	1278.1	1299.1	1311.1	1317.2	1320.2	1323.2
12.5°	1657.0	1467.5	1323.2	1299.1	1311.1	1314.1	1329.2	1335.2	1341.2	1344.2	1344.2
15°	1765.2	1533.7	1371.3	1341.2	1344.2	1341.2	1341.2	1335.2	1332.2	1332.2	1338.2
17.5°	1876.5	1596.8	1413.4	1371.3	1359.3	1335.2	1317.2	1302.1	1293.1	1287.1	1290.1
20°	1987.8	1654.0	1437.4	1377.3	1344.2	1305.1	1272.0	1251.0	1239.0	1226.9	1233.0
22.5°	2099.0	1708.1	1446.5	1359.3	1311.1	1254.0	1217.9	1184.8	1157.8	1139.7	1142.7
25°	2222.3	1768.2	1446.5	1338.2	1266.0	1205.9	1160.8	1106.6	1067.6	1052.5	1058.5
27.5°	2345.6	1819.4	1431.4	1299.1	1214.9	1154.8	1088.6	1025.5	1001.4	992.4	995.4
30°	2468.9	1858.4	1398.3	1251.0	1160.8	1094.6	1007.4	965.3	935.2	911.2	914.2
32.5°	2592.2	1885.5	1353.2	1190.9	1103.6	1019.4	947.3	899.2	845.0	815.0	818.0
35°	2733.5	1906.6	1299.1	1130.7	1040.5	953.3	899.2	821.0	763.8	739.8	733.8
37.5°	2880.9	1921.6	1242.0	1064.5	977.3	905.2	851.0	754.8	700.7	667.6	664.6
40°	3040.3	1927.6	1172.8	995.4	917.2	875.1	787.9	715.7	622.5	601.4	601.4
42.5°	3229.7	1924.6	1103.6	926.2	851.0	805.9	742.8	709.7	628.5	607.5	595.4
45°	3446.3	1924.6	1028.5	845.0	784.9	718.7	691.7	670.6	616.5	625.5	631.5
47.5°	3692.8	1918.6	938.2	778.9	730.7	673.6	658.6	613.5	592.4	598.4	604.4
50°	4032.7	1927.6	857.1	724.7	691.7	643.5	625.5	601.4	592.4	595.4	592.4
52.5°	4504.8	1897.5	778.9	691.7	661.6	598.4	598.4	595.4	598.4	595.4	595.4
55°	4763.4	1831.4	721.7	673.6	640.5	577.4	589.4	595.4	601.4	598.4	598.4
57.5°	5130.3	1786.3	676.6	661.6	628.5	571.4	583.4	595.4	598.4	595.4	595.4
60°	5563.3	1756.2	646.5	664.6	619.5	571.4	586.4	595.4	592.4	589.4	589.4
62.5°	6065.5	1744.2	625.5	673.6	610.5	574.4	586.4	595.4	583.4	580.4	580.4
65°	6255.0	1635.9	598.4	679.6	616.5	574.4	583.4	586.4	571.4	568.4	565.4
67.5°	5963.3	1449.5	559.3	667.6	634.5	574.4	574.4	571.4	553.3	550.3	544.3
70°	5310.7	1202.9	499.2	628.5	646.5	577.4	562.3	547.3	529.3	529.3	517.2
72.5°	4348.4	947.3	421.0	559.3	637.5	586.4	538.3	517.2	496.2	496.2	484.2
75°	3133.5	706.7	336.8	466.1	598.4	583.4	508.2	481.2	457.1	454.1	439.1
77.5°	1786.3	496.2	273.7	363.9	532.3	568.4	481.2	439.1	412.0	403.0	393.9
80°	917.2	333.8	222.5	285.7	442.1	526.3	460.1	390.9	360.9	345.8	330.8
82.5°	436.0	222.5	171.4	210.5	333.8	460.1	433.0	336.8	303.7	285.7	267.6
85°	195.5	132.3	114.3	135.3	237.6	357.9	381.9	276.7	237.6	297.7	219.5
87.5°	63.2	60.1	60.1	63.2	114.3	156.4	279.7	204.5	189.5	156.4	132.3
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)