

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: P231032

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231032
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
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 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: 16624 lumens
Efficiency: N/A
Efficacy: 126.9 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 - G3

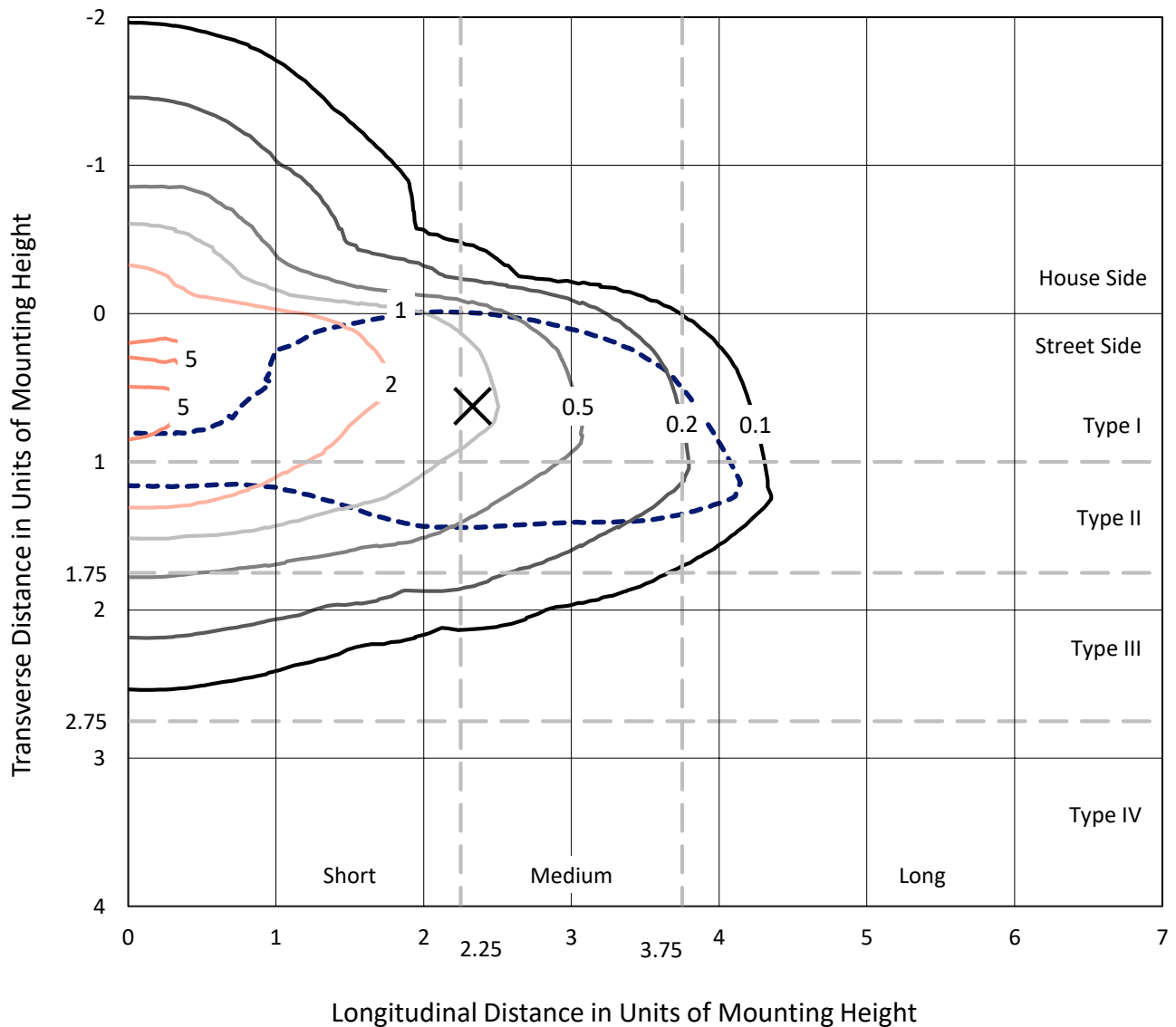
Input Watts (W): 131
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P231032
 CATALOG NUMBER: ARCH-M-AF48-130-D-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

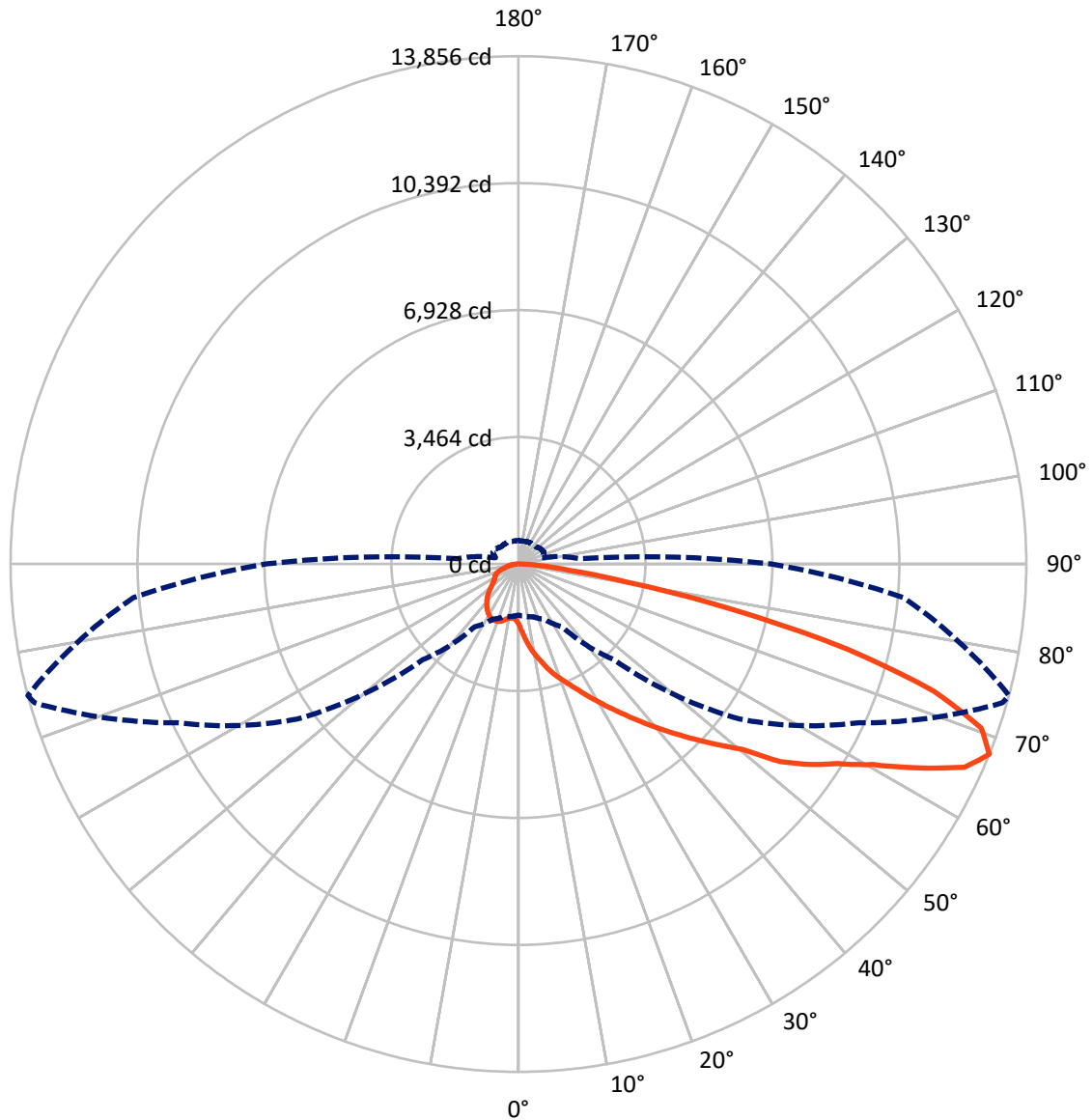


Based on 25 foot mounting height. Maximum calculated value = 5.5 fc
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P231032

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T2R

Luminous Intensity Polar Plot



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

REPORT NUMBER: P231032

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T2R

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2838.8	0.0	2838.8
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	13785.2	0.0	13785.2
	% Fixture	82.9	0.0	82.9
Total	Lumens	16624.0	0.0	16624.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.5	1.2
10°-20°	699.4	4.2
20°-30°	1275.6	7.7
30°-40°	2093.7	12.6
40°-50°	3027.8	18.2
50°-60°	3568.3	21.5
60°-70°	3467.5	20.9
70°-80°	1927.5	11.6
80°-90°	370.6	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°	16624.0	100.0
0°-180°	16624.0	100.0

Coefficient of Utilization



REPORT NUMBER: P231032

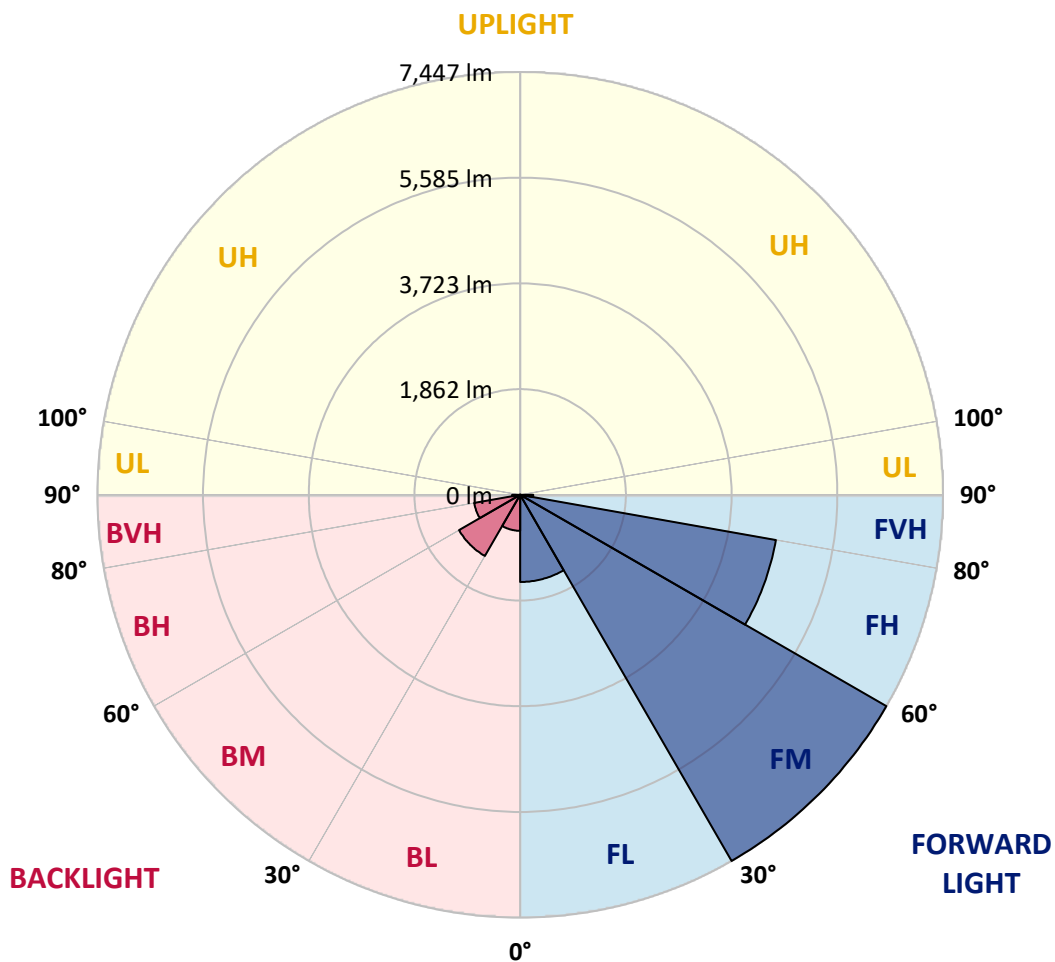
CATALOG NUMBER: ARCH-M-AF48-130-D-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1534.8	9.2			
FM (30°-60°)	7446.7	44.8			
FH (60°-80°)	4573.1	27.5			G2/5000
FVH (80°-90°)	230.7	1.4			G3/500
BL (0°-30°)	633.6	3.8	B2/1000		
BM (30°-60°)	1243.2	7.5	B2/2500		
BH (60°-80°)	822.0	4.9	B2/1000		G2/1000
BVH (80°-90°)	140.0	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-G3

Type II Medium





REPORT NUMBER: P231032

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1647.3	1647.3	1647.3	1647.3	1647.3	1647.3	1647.3	1647.3	1647.3	1647.3	1647.3
2.5°	2335.4	2342.4	2328.4	2297.1	2251.9	2168.6	2095.6	1967.0	1852.4	1838.4	1716.8
5°	2745.5	2752.5	2735.1	2696.8	2648.1	2557.8	2457.0	2290.2	2106.1	2071.3	1814.1
7.5°	3026.9	3030.4	3009.6	2971.4	2933.1	2842.8	2742.0	2554.3	2328.4	2300.6	1939.2
10°	3266.8	3273.6	3245.9	3221.6	3179.8	3089.5	2985.3	2787.1	2554.3	2516.0	2067.8
12.5°	3489.2	3496.1	3478.7	3457.9	3444.0	3360.6	3245.9	3009.6	2759.3	2717.7	2220.7
15°	3638.6	3645.6	3649.1	3676.8	3694.2	3635.2	3520.5	3263.3	2981.8	2943.5	2401.4
17.5°	3596.9	3614.3	3666.4	3767.2	3874.9	3878.4	3784.5	3513.5	3200.7	3159.0	2585.6
20°	3475.3	3489.2	3551.7	3704.6	3916.6	4038.2	4031.3	3767.2	3405.7	3360.6	2755.8
22.5°	3576.0	3593.4	3593.4	3687.2	3895.8	4121.7	4212.0	4017.4	3610.8	3569.1	2926.2
25°	4007.0	4017.4	3944.4	3906.2	3982.7	4191.1	4361.5	4288.5	3861.0	3812.3	3110.4
27.5°	4608.2	4590.8	4500.5	4347.5	4264.2	4319.7	4493.5	4545.7	4149.5	4090.4	3301.5
30°	5205.9	5195.5	5091.2	4886.2	4698.5	4580.4	4639.5	4775.0	4462.2	4392.8	3485.7
32.5°	5765.5	5748.1	5633.4	5393.6	5181.7	4962.6	4848.0	4983.5	4795.9	4715.9	3690.7
35°	6279.8	6234.6	6119.9	5869.7	5650.8	5442.3	5160.8	5181.7	5157.3	5073.8	3916.6
37.5°	6696.8	6662.1	6537.0	6304.1	6071.3	5873.2	5577.7	5407.5	5546.5	5466.5	4177.2
40°	7065.2	7027.0	6898.4	6665.5	6450.1	6262.4	6029.6	5682.1	5984.4	5894.0	4469.2
42.5°	7343.3	7315.4	7211.2	6981.8	6773.3	6602.9	6488.3	6029.6	6439.7	6352.7	4788.9
45°	7492.7	7464.9	7409.2	7225.1	7033.9	6901.8	6912.3	6443.2	6915.8	6842.8	5167.7
47.5°	7308.5	7329.3	7377.9	7343.3	7225.1	7162.5	7291.1	6870.5	7447.5	7377.9	5577.7
50°	6815.0	6835.9	7030.4	7270.2	7312.0	7388.4	7631.6	7364.1	8010.5	7954.9	6085.2
52.5°	5602.1	5716.8	6255.4	6828.9	7221.6	7537.8	8010.5	8097.4	8959.2	8959.2	6981.8
55°	4232.9	4333.6	4948.7	5949.7	6870.5	7551.7	8288.5	8594.3	9643.9	9657.8	7451.0
57.5°	3430.1	3492.7	3794.9	4820.1	6133.8	7377.9	8618.7	9021.8	10213.8	10276.4	8055.6
60°	2783.7	2818.4	3016.5	3729.0	5115.6	6908.8	8855.0	9633.4	11027.0	11113.8	8827.1
62.5°	2238.1	2272.8	2404.9	2832.3	4014.0	6029.6	8813.2	10269.4	12111.3	12253.7	9838.4
65°	1786.3	1824.5	1911.4	2175.5	2974.8	4938.3	8385.8	10596.0	13233.8	13372.8	10509.2
67.5°	1393.6	1428.3	1487.4	1661.2	2095.6	3694.2	7374.5	10252.0	13737.7	13855.9	10544.0
70°	1053.0	1070.4	1119.0	1230.2	1497.8	2453.5	5772.4	9098.2	13285.9	13393.7	9848.9
72.5°	816.7	813.2	841.0	896.6	1046.1	1689.0	3826.2	7398.8	11746.3	11857.5	8403.1
75°	667.3	663.8	681.2	698.6	757.6	1132.9	2258.9	5570.9	9480.5	9268.5	6304.1
77.5°	563.0	559.6	576.8	580.3	604.7	781.9	1285.8	3666.4	6325.0	5960.1	3551.7
80°	476.1	472.6	493.5	500.4	517.8	573.5	740.2	1984.4	3176.4	3009.6	1696.0
82.5°	357.9	371.8	410.1	427.5	448.4	424.0	458.7	875.7	1473.6	1407.5	736.7
85°	173.8	205.0	309.3	344.0	368.4	267.6	312.8	413.6	663.8	632.5	298.9
87.5°	59.1	52.2	184.2	218.9	239.8	121.6	173.8	229.3	274.6	250.2	93.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P231032

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1647.3	1647.3	1647.3	1647.3	1647.3	1647.3	1647.3	1647.3	1647.3	1647.3	1647.3
2.5°	1664.6	1612.5	1536.1	1476.9	1438.8	1407.5	1393.6	1390.1	1383.1	1379.7	1379.7
5°	1699.4	1605.5	1487.4	1424.9	1407.5	1393.6	1400.5	1404.0	1404.0	1404.0	1404.0
7.5°	1751.5	1619.4	1476.9	1435.3	1431.8	1431.8	1452.7	1463.1	1470.1	1470.1	1470.1
10°	1821.1	1643.8	1494.3	1459.6	1470.1	1476.9	1501.3	1515.2	1522.2	1525.6	1529.1
12.5°	1914.9	1696.0	1529.1	1501.3	1515.2	1518.7	1536.1	1543.0	1550.0	1553.5	1553.5
15°	2040.0	1772.4	1584.8	1550.0	1553.5	1550.0	1550.0	1543.0	1539.5	1539.5	1546.5
17.5°	2168.6	1845.4	1633.3	1584.8	1570.8	1543.0	1522.2	1504.8	1494.3	1487.4	1490.8
20°	2297.1	1911.4	1661.2	1591.7	1553.5	1508.2	1470.1	1445.7	1431.8	1417.9	1424.9
22.5°	2425.7	1974.0	1671.6	1570.8	1515.2	1449.2	1407.5	1369.2	1338.0	1317.2	1320.6
25°	2568.2	2043.4	1671.6	1546.5	1463.1	1393.6	1341.5	1278.9	1233.7	1216.4	1223.2
27.5°	2710.7	2102.6	1654.2	1501.3	1404.0	1334.5	1258.0	1185.1	1157.3	1146.8	1150.3
30°	2853.2	2147.7	1616.0	1445.7	1341.5	1265.0	1164.2	1115.5	1080.8	1053.0	1056.5
32.5°	2995.7	2179.0	1563.9	1376.2	1275.4	1178.1	1094.7	1039.1	976.5	941.8	945.3
35°	3159.0	2203.3	1501.3	1306.7	1202.5	1101.6	1039.1	948.8	882.7	854.9	847.9
37.5°	3329.3	2220.7	1435.3	1230.2	1129.4	1046.1	983.5	872.3	809.8	771.5	768.0
40°	3513.5	2227.7	1355.3	1150.3	1060.0	1011.3	910.5	827.2	719.3	695.1	695.1
42.5°	3732.4	2224.2	1275.4	1070.4	983.5	931.4	858.4	820.2	726.3	702.1	688.1
45°	3982.7	2224.2	1188.6	976.5	907.1	830.6	799.3	775.0	712.4	722.8	729.8
47.5°	4267.6	2217.2	1084.3	900.1	844.4	778.5	761.1	708.9	684.7	691.6	698.6
50°	4660.4	2227.7	990.4	837.5	799.3	743.7	722.8	695.1	684.7	688.1	684.7
52.5°	5205.9	2192.9	900.1	799.3	764.6	691.6	691.6	688.1	691.6	688.1	688.1
55°	5504.8	2116.4	834.0	778.5	740.2	667.3	681.2	688.1	695.1	691.6	691.6
57.5°	5928.8	2064.3	781.9	764.6	726.3	660.3	674.2	688.1	691.6	688.1	688.1
60°	6429.2	2029.5	747.2	768.0	715.9	660.3	677.7	688.1	684.7	681.2	681.2
62.5°	7009.6	2015.6	722.8	778.5	705.4	663.8	677.7	688.1	674.2	670.7	670.7
65°	7228.6	1890.5	691.6	785.4	712.4	663.8	674.2	677.7	660.3	656.8	653.4
67.5°	6891.4	1675.1	646.4	771.5	733.3	663.8	663.8	660.3	639.4	636.0	629.0
70°	6137.3	1390.1	576.8	726.3	747.2	667.3	649.9	632.5	611.6	611.6	597.7
72.5°	5025.2	1094.7	486.5	646.4	736.7	677.7	622.1	597.7	573.5	573.5	559.6
75°	3621.2	816.7	389.2	538.7	691.6	674.2	587.3	556.1	528.3	524.8	507.4
77.5°	2064.3	573.5	316.3	420.5	615.1	656.8	556.1	507.4	476.1	465.6	455.2
80°	1060.0	385.8	257.2	330.1	510.9	608.1	531.7	451.7	417.1	399.7	382.3
82.5°	503.9	257.2	198.0	243.3	385.8	531.7	500.4	389.2	351.0	330.1	309.3
85°	225.9	152.9	132.1	156.4	274.6	413.6	441.4	319.8	274.6	344.0	253.7
87.5°	72.9	69.5	69.5	72.9	132.1	180.8	323.2	236.3	218.9	180.8	152.9
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)