

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: P842106

Luminaire Tested: **ARCH4-270-730-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842106
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-270-730-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 1045mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37551 lumens
Efficiency: N/A
Efficacy: 139.6 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G4

Input Watts (W): 269
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: 24 FT

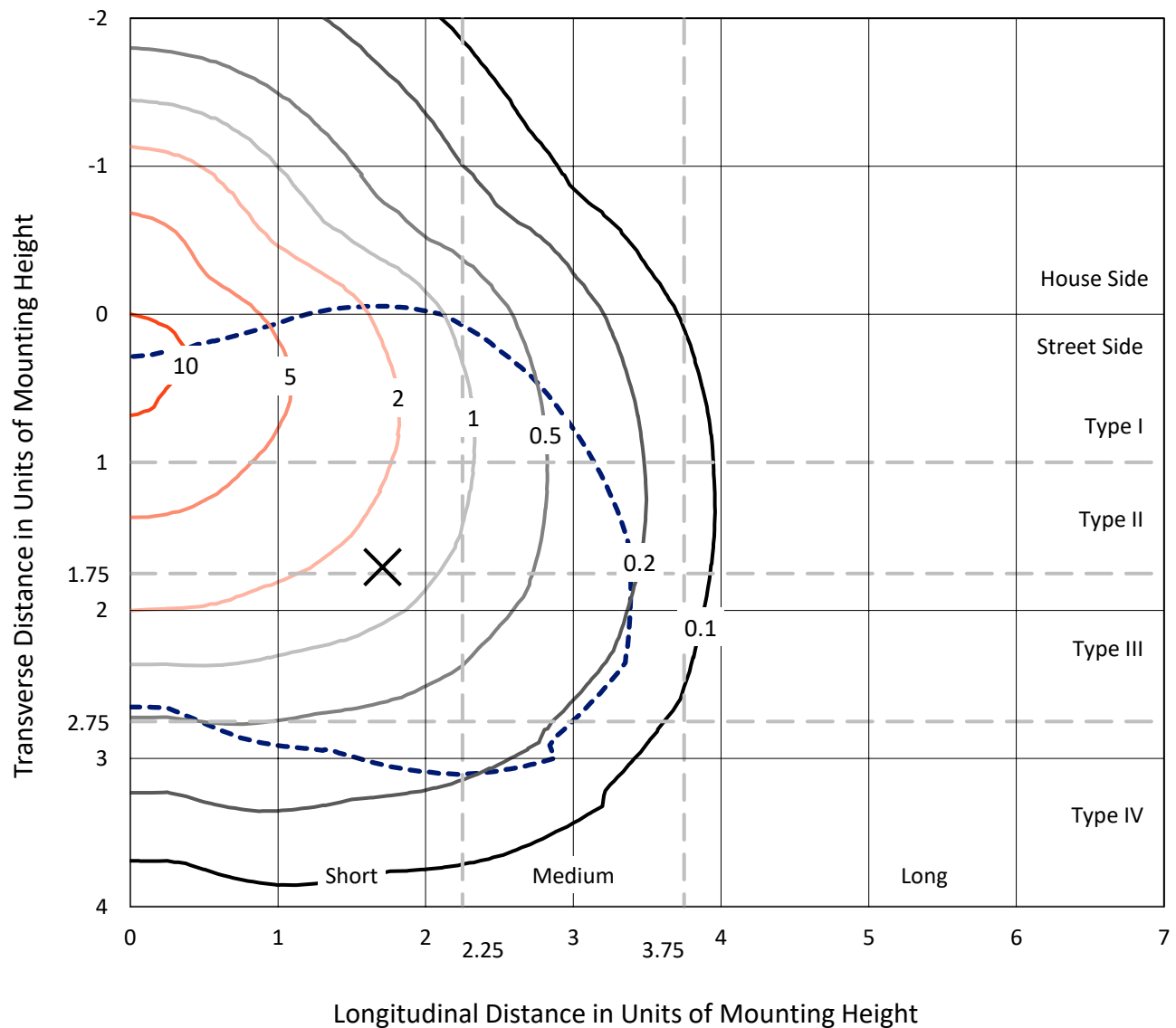


REPORT NUMBER: P842106

CATALOG NUMBER: ARCH4-270-730-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

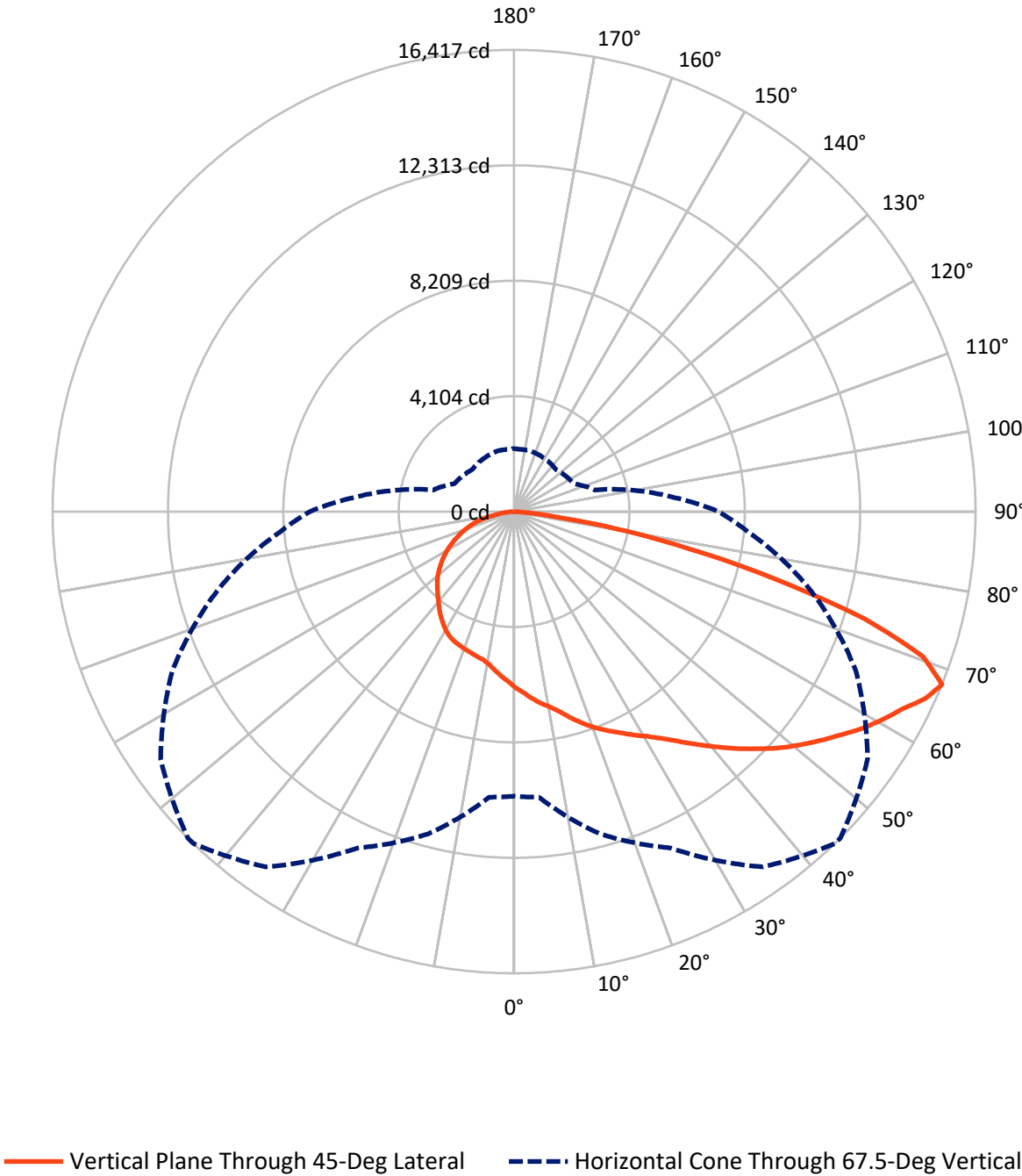
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.6 fc
Type IV - Short - N/A

REPORT NUMBER: P842106
CATALOG NUMBER: ARCH4-270-730-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P842106

CATALOG NUMBER: ARCH4-270-730-U-T4W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10031.8	0.0	10031.8
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	27519.2	0.0	27519.2
	% Fixture	73.3	0.0	73.3
Total	Lumens	37551.0	0.0	37551.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	599.6	1.6
10°-20°	1852.3	4.9
20°-30°	3197.3	8.5
30°-40°	4715.0	12.6
40°-50°	6387.9	17.0
50°-60°	7807.5	20.8
60°-70°	8052.3	21.4
70°-80°	4410.5	11.7
80°-90°	528.6	1.4
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°	37551.0	100.0
0°-180°	37551.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842106

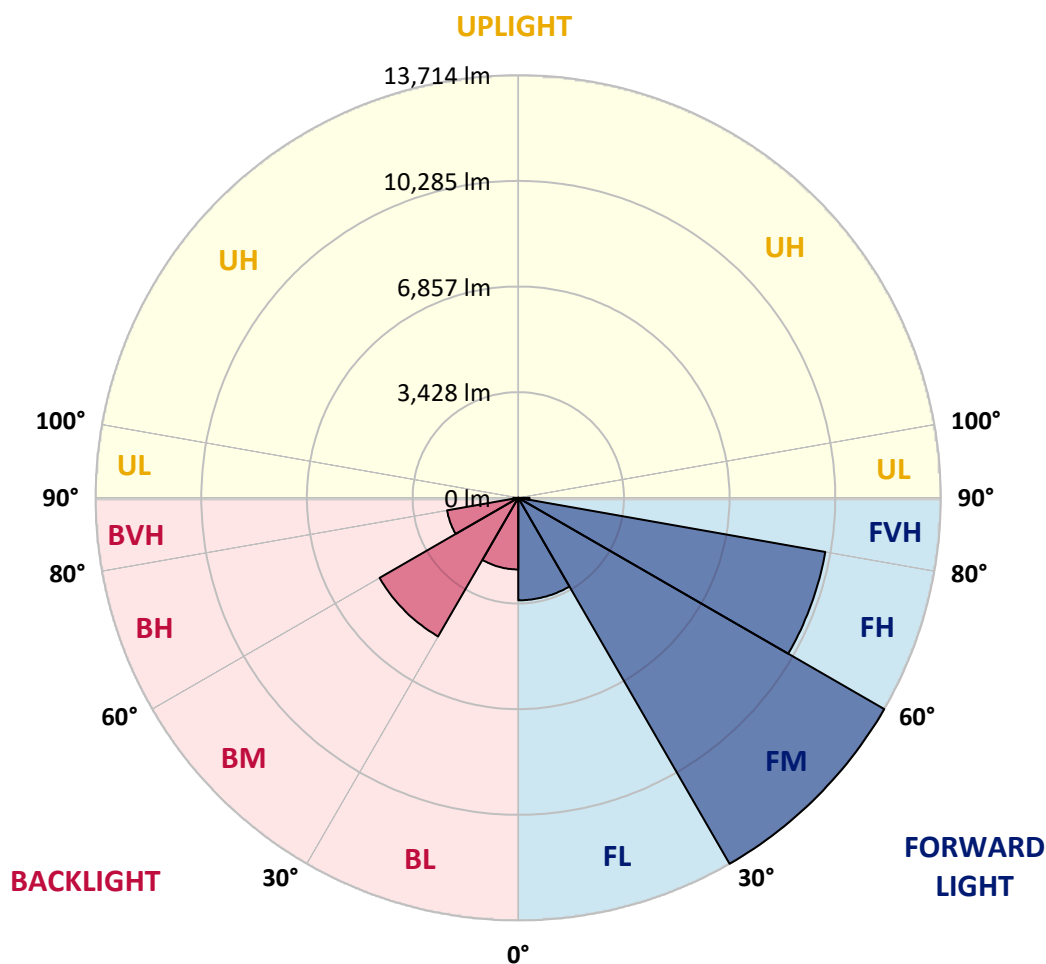
CATALOG NUMBER: ARCH4-270-730-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3324.3	8.9			
FM	(30°-60°)	13714.0	36.5			
FH	(60°-80°)	10116.8	26.9			G4/12000
FVH	(80°-90°)	364.2	1.0			G3/500
BL	(0°-30°)	2325.0	6.2	B3/2500		
BM	(30°-60°)	5196.3	13.8	B4/8500		
BH	(60°-80°)	2346.0	6.2	B3/2500		G3/2500
BVH	(80°-90°)	164.5	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type IV Short



REPORT NUMBER: P842106

CATALOG NUMBER: ARCH4-270-730-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	6262.8	6262.8	6262.8	6262.8	6262.8	6262.8	6262.8	6262.8	6262.8	6262.8	6262.8
2.5°	6537.1	6531.4	6542.8	6502.8	6451.4	6445.6	6445.6	6411.4	6371.4	6291.4	6228.5
5°	6845.6	6834.2	6839.9	6782.8	6714.2	6679.9	6674.2	6599.9	6508.5	6382.8	6268.5
7.5°	7131.4	7119.9	7114.2	7051.4	6948.5	6891.4	6885.6	6777.1	6668.5	6474.2	6308.5
10°	7399.9	7388.5	7377.1	7291.4	7165.6	7079.9	7068.5	6931.4	6794.2	6554.2	6342.8
12.5°	7742.8	7719.9	7708.5	7605.6	7422.8	7331.4	7314.2	7131.4	6959.9	6668.5	6411.4
15°	8102.8	8085.6	8068.5	7971.3	7765.6	7645.6	7617.1	7388.5	7154.2	6817.1	6514.2
17.5°	8371.3	8354.2	8354.2	8268.5	8079.9	7942.8	7919.9	7645.6	7354.2	6954.2	6594.2
20°	8537.1	8519.9	8537.1	8485.6	8342.8	8228.5	8205.6	7902.8	7554.2	7079.9	6662.8
22.5°	8657.1	8639.9	8668.5	8645.6	8542.8	8474.2	8457.1	8159.9	7759.9	7211.4	6731.4
25°	8868.5	8868.5	8868.5	8828.5	8731.3	8708.5	8708.5	8451.3	8022.8	7382.8	6834.2
27.5°	9291.3	9268.5	9239.9	9125.6	8959.9	8954.2	8988.5	8748.5	8325.6	7605.6	6959.9
30°	9914.2	9902.8	9794.2	9554.2	9274.2	9245.6	9268.5	9068.5	8651.3	7839.9	7102.8
32.5°	10719.9	10679.9	10457.0	10097.0	9697.0	9565.6	9611.3	9399.9	8994.2	8079.9	7239.9
35°	11291.3	11302.7	11142.7	10817.0	10342.8	9994.2	10028.5	9771.3	9365.6	8348.5	7411.4
37.5°	11948.5	11988.5	11748.5	11502.7	11062.7	10468.5	10502.8	10154.2	9737.0	8685.6	7594.2
40°	12857.0	12777.0	12371.3	12079.9	11594.2	10965.6	10994.2	10582.8	10165.6	9005.6	7805.6
42.5°	13617.0	13474.2	12982.7	12611.3	12028.5	11491.3	11519.9	11045.6	10599.9	9359.9	8039.9
45°	14708.4	14314.1	13605.6	13422.7	12474.2	12005.6	12034.2	11537.0	11057.0	9737.0	8291.3
47.5°	15342.7	14714.1	14262.7	14165.6	12965.6	12537.0	12571.3	12057.0	11548.5	10165.6	8554.2
50°	15302.7	14897.0	14765.6	14525.6	13399.9	13034.2	13068.4	12594.2	12045.6	10588.5	8805.6
52.5°	15039.8	15114.1	15045.6	14645.6	13834.1	13514.2	13554.2	13125.6	12554.2	10982.7	9039.9
55°	15445.6	15497.0	15365.6	14839.9	14314.1	13994.1	14039.9	13685.6	13057.0	11331.3	9239.9
57.5°	15931.3	15748.4	15617.0	15182.7	14811.3	14514.1	14565.6	14257.0	13491.3	11611.3	9394.2
60°	15908.4	15525.6	15657.0	15205.6	15148.4	14994.1	15039.8	14725.6	13822.7	11817.0	9457.0
62.5°	14737.0	14531.3	15194.1	15039.8	15422.7	15422.7	15479.8	15011.3	14022.7	11902.7	9422.8
65°	12702.7	12714.2	13879.9	14519.9	15748.4	16011.3	16057.0	15188.4	13908.4	11651.3	9102.8
67.5°	10119.9	10194.2	11868.5	13199.9	15422.7	16411.3	16417.0	15348.4	13417.0	10942.7	8359.9
70°	7405.6	7462.8	9439.9	11057.0	13885.6	15525.6	15434.1	14897.0	12348.4	9708.5	7199.9
72.5°	5005.7	5057.1	7091.4	8491.3	11394.2	13222.7	13022.7	13165.6	10525.6	7977.1	5788.5
75°	3365.7	3428.5	5045.7	6074.2	8382.8	10039.9	9594.2	9971.3	8142.8	6039.9	4222.8
77.5°	2120.0	2160.0	3205.7	3982.8	5725.7	6834.2	6388.5	6394.2	4691.4	3251.4	2268.5
80°	1348.6	1360.0	1942.8	2297.1	3314.3	4108.5	3634.2	2954.3	2114.3	1725.7	1354.3
82.5°	782.8	765.7	1160.0	1297.1	1577.1	1560.0	1291.4	1222.8	925.7	862.8	691.4
85°	314.3	291.4	508.6	474.3	480.0	508.6	377.1	377.1	302.9	234.3	171.4
87.5°	62.9	62.9	68.6	62.9	62.9	68.6	51.4	51.4	45.7	45.7	45.7
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: P842106

CATALOG NUMBER: ARCH4-270-730-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6262.8	6262.8	6262.8	6262.8	6262.8	6262.8	6262.8	6262.8	6262.8	6262.8	6262.8
2.5°	6217.1	6205.7	6177.1	6102.8	6062.8	6039.9	6005.7	5994.2	5988.5	5994.2	6011.4
5°	6234.2	6194.2	6114.2	5994.2	5914.2	5862.8	5805.7	5782.8	5765.7	5765.7	5782.8
7.5°	6245.7	6182.8	6045.7	5868.5	5754.2	5674.2	5605.7	5577.1	5571.4	5588.5	5594.2
10°	6251.4	6159.9	5965.7	5742.8	5594.2	5491.4	5422.8	5405.7	5422.8	5457.1	5462.8
12.5°	6291.4	6165.7	5919.9	5657.1	5479.9	5377.1	5325.7	5325.7	5371.4	5434.2	5439.9
15°	6359.9	6205.7	5897.1	5588.5	5405.7	5314.2	5297.1	5325.7	5394.2	5491.4	5502.8
17.5°	6411.4	6228.5	5845.7	5497.1	5308.5	5251.4	5279.9	5348.5	5445.7	5577.1	5588.5
20°	6445.6	6228.5	5771.4	5388.5	5211.4	5199.9	5279.9	5388.5	5491.4	5645.7	5662.8
22.5°	6479.9	6217.1	5685.7	5257.1	5102.8	5137.1	5285.7	5422.8	5525.7	5691.4	5719.9
25°	6542.8	6234.2	5599.9	5125.7	4988.5	5085.7	5279.9	5445.7	5554.2	5725.7	5771.4
27.5°	6628.5	6274.2	5537.1	5005.7	4874.2	5005.7	5239.9	5439.9	5554.2	5719.9	5771.4
30°	6719.9	6319.9	5462.8	4874.2	4742.8	4891.4	5154.2	5377.1	5508.5	5662.8	5725.7
32.5°	6817.1	6371.4	5399.9	4731.4	4582.8	4737.1	5028.5	5279.9	5422.8	5565.7	5634.2
35°	6948.5	6462.8	5365.7	4617.1	4440.0	4577.1	4868.5	5154.2	5308.5	5439.9	5519.9
37.5°	7108.5	6577.1	5348.5	4502.8	4285.7	4400.0	4697.1	5000.0	5165.7	5274.2	5348.5
40°	7291.4	6719.9	5342.8	4394.2	4131.4	4217.1	4520.0	4822.8	4982.8	5068.5	5131.4
42.5°	7497.1	6879.9	5331.4	4285.7	3977.1	4045.7	4348.5	4645.7	4782.8	4857.1	4914.2
45°	7714.2	7039.9	5308.5	4154.2	3811.4	3891.4	4171.4	4434.2	4577.1	4640.0	4702.8
47.5°	7931.3	7199.9	5262.8	4005.7	3662.8	3737.1	3982.8	4211.4	4325.7	4382.8	4445.7
50°	8142.8	7342.8	5154.2	3834.2	3508.5	3577.1	3765.7	3920.0	4005.7	4051.4	4114.2
52.5°	8331.3	7439.9	5000.0	3634.2	3354.3	3388.5	3514.3	3645.7	3714.2	3720.0	3777.1
55°	8491.3	7491.4	4777.1	3428.5	3188.5	3194.3	3262.8	3365.7	3394.3	3371.4	3411.4
57.5°	8582.8	7462.8	4531.4	3217.1	3017.1	2994.3	3045.7	3097.1	3102.8	3045.7	3085.7
60°	8605.6	7331.4	4211.4	3005.7	2845.7	2782.8	2800.0	2788.5	2777.1	2754.3	2788.5
62.5°	8491.3	7051.4	3857.1	2800.0	2662.8	2565.7	2560.0	2554.3	2571.4	2577.1	2582.8
65°	8074.2	6525.6	3434.3	2588.5	2468.5	2337.1	2331.4	2400.0	2422.8	2388.5	2400.0
67.5°	7268.5	5719.9	2971.4	2342.8	2222.8	2108.6	2154.3	2194.3	2234.3	2222.8	2234.3
70°	6125.7	4697.1	2548.5	2068.6	1954.3	1891.4	1942.8	1977.1	1982.8	1971.4	1982.8
72.5°	4817.1	3668.5	2154.3	1788.6	1685.7	1657.1	1720.0	1748.6	1800.0	1822.8	1828.6
75°	3480.0	2708.5	1765.7	1485.7	1400.0	1400.0	1457.1	1508.6	1554.3	1525.7	1508.6
77.5°	1942.8	1617.1	1268.6	1022.8	1040.0	1120.0	1142.8	1200.0	1245.7	1240.0	1228.6
80°	1177.1	1011.4	857.1	662.9	657.1	720.0	868.6	965.7	988.6	937.1	931.4
82.5°	611.4	531.4	457.1	371.4	411.4	480.0	502.9	605.7	668.6	645.7	674.3
85°	154.3	148.6	165.7	171.4	211.4	234.3	257.1	302.9	200.0	97.1	97.1
87.5°	45.7	45.7	57.1	57.1	74.3	91.4	85.7	85.7	45.7	5.7	0.0
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)