

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: P841410

Luminaire Tested: **ARCH4-170-750-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841410
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-170-750-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1380mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19404 lumens
Efficiency: N/A
Efficacy: 114.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 169.8
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

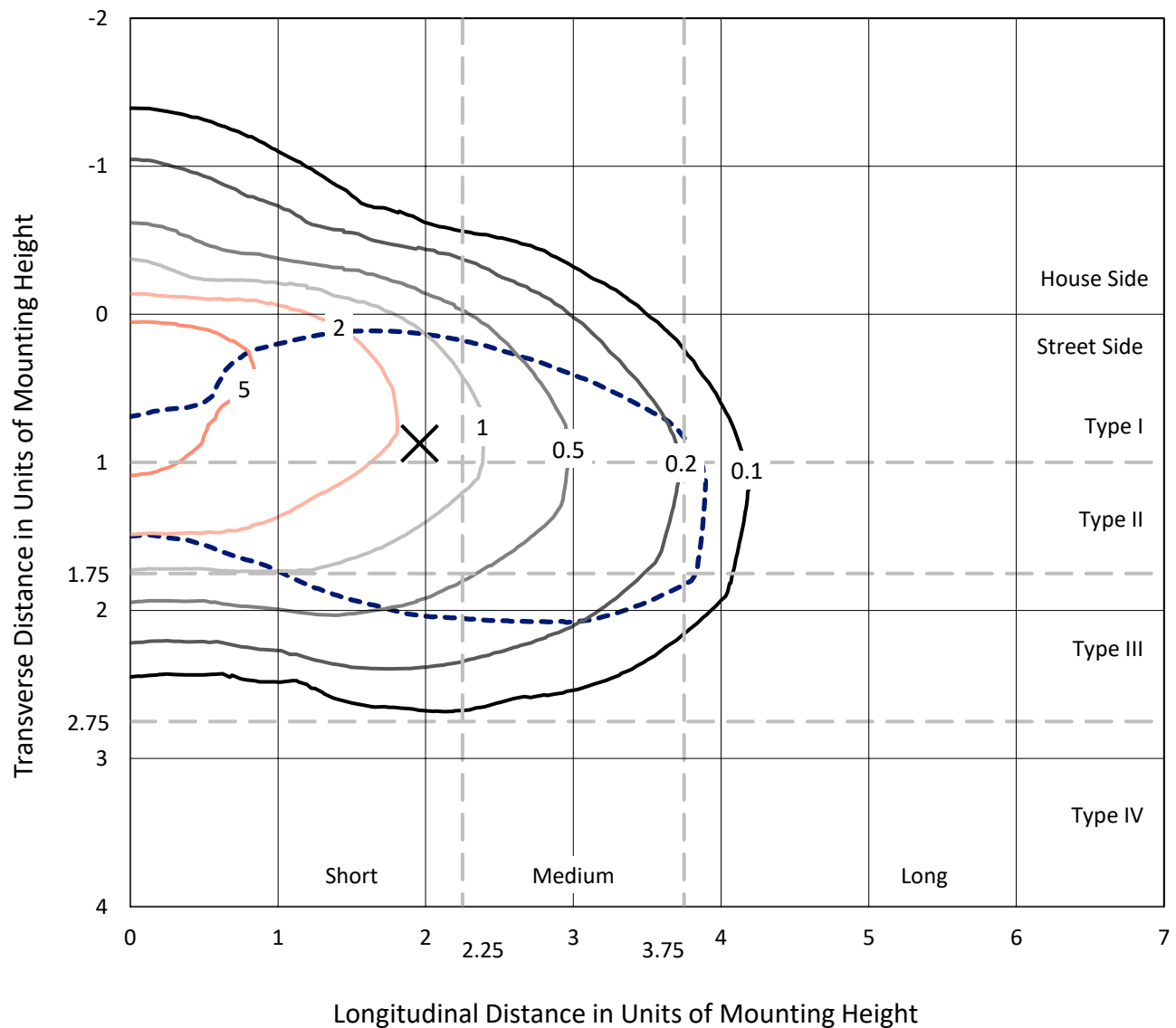


REPORT NUMBER: P841410

CATALOG NUMBER: ARCH4-170-750-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

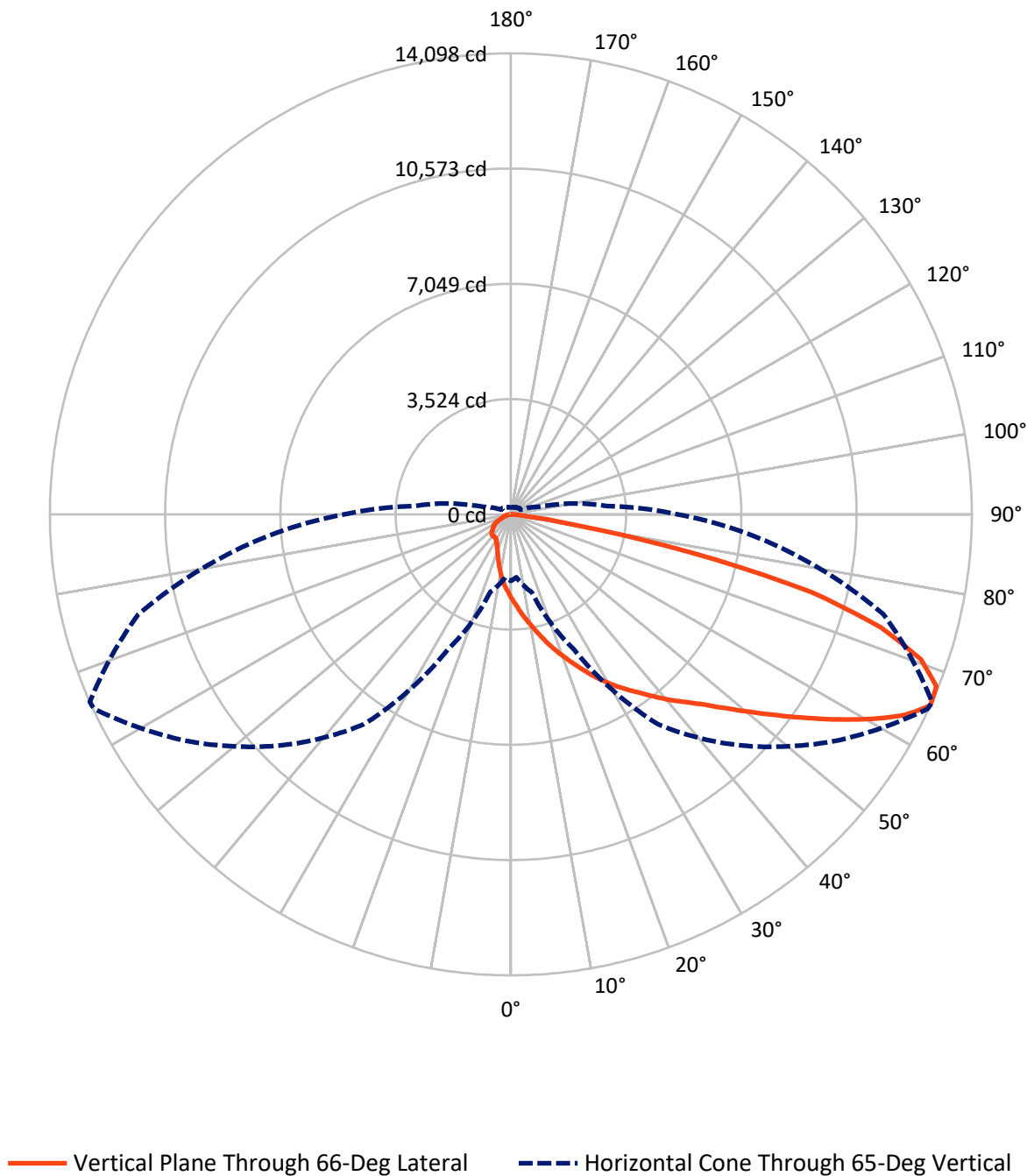
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 fc
Type III - Short - N/A

REPORT NUMBER: P841410
CATALOG NUMBER: ARCH4-170-750-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P841410

CATALOG NUMBER: ARCH4-170-750-U-T3-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2052.4	0.0	2052.4
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	17351.6	0.0	17351.6
	% Fixture	89.4	0.0	89.4
Total	Lumens	19404.0	0.0	19404.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.5	1.3
10°-20°	826.1	4.3
20°-30°	1494.7	7.7
30°-40°	2337.3	12.0
40°-50°	3545.7	18.3
50°-60°	4504.9	23.2
60°-70°	4209.3	21.7
70°-80°	2092.0	10.8
80°-90°	140.6	0.7
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°	19404.0	100.0
0°-180°	19404.0	100.0

Coefficient of Utilization



REPORT NUMBER: P841410

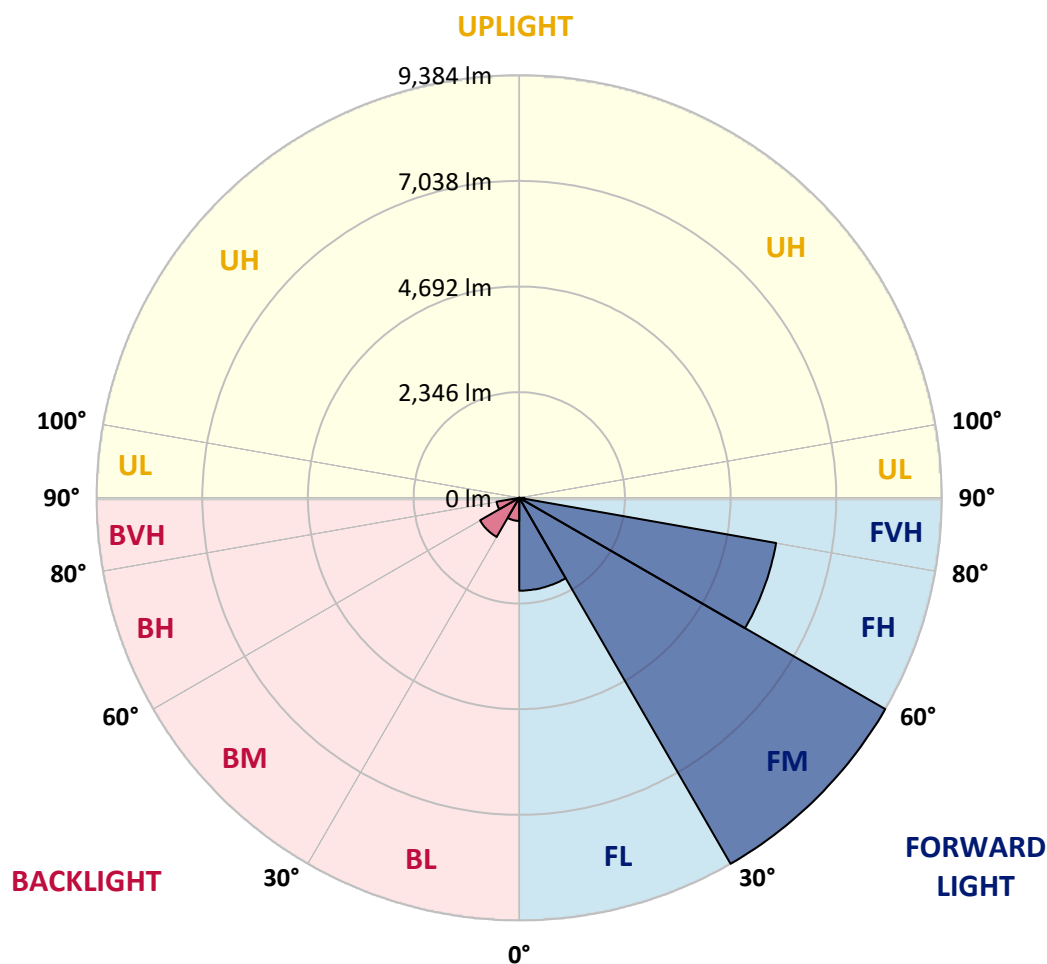
CATALOG NUMBER: ARCH4-170-750-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2061.7	10.6			
FM	(30°-60°)	9384.0	48.4			
FH	(60°-80°)	5790.2	29.8			G3/7500
FVH	(80°-90°)	115.7	0.6			G2/225
BL	(0°-30°)	512.6	2.6	B2/1000		
BM	(30°-60°)	1003.8	5.2	B2/2500		
BH	(60°-80°)	511.1	2.6	B2/1000		G2/1000
BVH	(80°-90°)	24.9	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Short



REPORT NUMBER: P841410

CATALOG NUMBER: ARCH4-170-750-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2568.0	2568.0	2568.0	2568.0	2568.0	2568.0	2568.0	2568.0	2568.0	2568.0	2568.0
2.5°	2999.4	3023.8	3036.0	3040.1	2946.5	2905.8	2865.1	2771.5	2751.2	2698.2	2629.1
5°	3528.5	3561.0	3552.9	3536.6	3422.7	3292.4	3186.6	3011.6	2983.1	2857.0	2702.3
7.5°	4049.4	4077.9	4069.8	4008.7	3882.5	3699.4	3524.4	3268.0	3227.3	3023.8	2775.6
10°	4484.9	4509.3	4505.2	4444.2	4293.6	4069.8	3858.1	3516.3	3467.4	3178.5	2836.6
12.5°	4843.0	4875.6	4871.5	4830.8	4696.5	4452.3	4212.2	3801.1	3740.1	3365.7	2922.1
15°	5123.8	5164.5	5164.5	5148.2	5054.6	4851.1	4578.5	4114.5	4041.3	3581.4	3027.9
17.5°	5294.7	5327.3	5355.8	5384.3	5319.2	5164.5	4916.3	4427.9	4350.6	3793.0	3137.8
20°	5384.3	5416.8	5437.2	5498.2	5510.4	5433.1	5237.8	4737.2	4655.8	4033.1	3263.9
22.5°	5530.8	5559.3	5563.3	5616.3	5640.7	5661.0	5538.9	5042.4	4977.3	4297.7	3406.4
25°	5775.0	5807.5	5795.3	5819.7	5823.8	5848.2	5836.0	5392.4	5327.3	4598.8	3577.3
27.5°	6088.3	6129.0	6120.9	6096.5	6059.9	6039.5	6092.4	5746.5	5685.4	4900.0	3752.3
30°	6426.1	6475.0	6462.8	6413.9	6316.3	6230.8	6304.0	6080.2	6023.2	5209.3	3947.7
32.5°	6768.0	6825.0	6820.9	6739.5	6572.6	6426.1	6536.0	6393.6	6352.9	5543.0	4159.3
35°	6991.8	7065.1	7056.9	7008.1	6792.4	6666.3	6800.6	6715.1	6686.6	5950.0	4464.5
37.5°	7354.0	7431.4	7362.2	7240.1	6991.8	6926.7	7089.5	7077.3	7056.9	6381.4	4786.0
40°	8233.1	8347.1	8163.9	7663.3	7256.4	7199.4	7431.4	7480.2	7459.9	6808.7	5075.0
42.5°	9152.9	9323.8	9038.9	8347.1	7736.6	7529.0	7805.8	7875.0	7850.5	7175.0	5335.4
45°	9710.4	9783.7	9498.8	8961.6	8587.2	7927.9	8204.6	8318.6	8298.2	7614.5	5669.2
47.5°	10166.2	10137.7	9812.2	9450.0	9519.1	8489.5	8656.4	8880.2	8863.9	8098.8	6035.4
50°	10263.9	10198.8	10068.6	9840.7	10023.8	9059.3	9132.5	9519.1	9502.9	8636.0	6405.8
52.5°	9576.1	9490.7	9844.7	10036.0	9975.0	9474.4	9657.5	10219.1	10211.0	9218.0	6759.9
55°	7858.7	7789.5	8741.8	9730.8	9922.1	9767.4	10239.5	10947.6	10992.4	9836.6	7081.4
57.5°	6182.0	6108.7	7044.7	8965.7	9726.7	10036.0	10919.1	11781.9	11838.9	10508.1	7386.6
60°	4928.5	4818.6	5534.9	7761.0	9360.4	10243.6	11574.4	12697.6	12705.8	11122.6	7573.8
62.5°	3349.4	3227.3	4020.9	6234.9	8745.9	10276.1	12079.0	13487.2	13519.7	11582.5	7606.4
65°	2034.9	1933.1	2470.3	4554.1	7838.3	9999.4	12087.2	14069.1	14097.6	11794.1	7411.0
67.5°	1180.2	1139.5	1412.2	2836.6	6332.5	9254.6	11578.4	13979.6	14032.5	11704.6	6967.4
70°	687.8	683.7	785.5	1404.1	4468.6	7777.3	10443.0	13226.7	13304.0	11236.6	6287.8
72.5°	504.6	512.8	553.5	752.9	2588.4	5600.0	8843.6	11712.7	11830.8	10320.9	5319.2
75°	398.8	402.9	439.5	512.8	1359.3	3166.3	6625.6	9401.1	9494.7	8688.9	4155.2
77.5°	297.1	305.2	333.7	362.2	630.8	1452.9	3727.9	5791.3	5636.6	4769.7	2006.4
80°	215.7	236.0	248.3	260.5	333.7	561.6	1119.2	2018.6	2002.3	2083.7	948.3
82.5°	138.4	154.7	166.9	175.0	199.4	268.6	333.7	451.7	488.4	809.9	378.5
85°	61.0	69.2	77.3	93.6	85.5	93.6	138.4	89.5	77.3	122.1	69.2
87.5°	0.0	0.0	12.2	20.3	16.3	8.1	24.4	16.3	12.2	12.2	12.2
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: P841410

CATALOG NUMBER: ARCH4-170-750-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2568.0	2568.0	2568.0	2568.0	2568.0	2568.0	2568.0	2568.0	2568.0	2568.0	2568.0
2.5°	2592.4	2547.7	2454.1	2364.5	2311.6	2242.4	2181.4	2124.4	2120.3	2104.1	2075.6
5°	2625.0	2539.5	2364.5	2197.7	2071.5	1937.2	1823.2	1733.7	1701.2	1676.7	1644.2
7.5°	2657.5	2523.2	2262.8	2018.6	1819.2	1632.0	1497.7	1375.6	1338.9	1306.4	1286.0
10°	2669.8	2494.8	2144.8	1819.2	1558.7	1359.3	1216.9	1127.3	1094.8	1078.5	1066.3
12.5°	2706.4	2478.5	2034.9	1632.0	1330.8	1147.7	1045.9	993.0	980.8	968.6	956.4
15°	2755.2	2478.5	1925.0	1448.8	1151.7	1005.2	944.2	907.6	899.4	895.3	887.2
17.5°	2808.1	2478.5	1819.2	1294.2	1021.5	911.6	866.9	846.5	842.4	838.4	834.3
20°	2881.4	2482.5	1705.2	1159.9	927.9	842.4	805.8	781.4	777.3	773.3	773.3
22.5°	2954.6	2490.7	1595.3	1058.1	866.9	789.5	744.8	720.3	712.2	712.2	712.2
25°	3048.2	2515.1	1493.6	972.7	814.0	740.7	683.7	663.4	659.3	659.3	655.2
27.5°	3158.1	2543.6	1404.1	907.6	761.0	683.7	626.7	606.4	598.3	598.3	594.2
30°	3276.1	2572.1	1330.8	858.7	708.1	626.7	573.8	549.4	541.3	545.3	541.3
32.5°	3406.4	2612.8	1273.8	826.2	659.3	577.9	529.1	500.6	496.5	496.5	492.4
35°	3626.1	2726.7	1265.7	809.9	618.6	541.3	492.4	464.0	459.9	459.9	455.8
37.5°	3862.2	2857.0	1302.3	801.7	586.0	508.7	464.0	435.5	431.4	431.4	431.4
40°	4061.6	2954.6	1343.0	801.7	565.7	480.2	439.5	415.1	415.1	415.1	415.1
42.5°	4195.9	2962.8	1334.9	801.7	549.4	459.9	423.3	398.8	398.8	402.9	398.8
45°	4395.3	3003.5	1302.3	789.5	537.2	443.6	407.0	386.6	382.6	386.6	386.6
47.5°	4631.4	3076.7	1269.8	740.7	533.1	427.3	394.8	370.3	366.3	370.3	366.3
50°	4855.2	3141.8	1253.5	675.6	525.0	411.0	378.5	354.1	350.0	354.1	350.0
52.5°	5042.4	3170.3	1225.0	630.8	504.6	394.8	362.2	337.8	329.6	333.7	333.7
55°	5193.0	3162.2	1184.3	594.2	468.0	378.5	341.9	321.5	309.3	309.3	305.2
57.5°	5331.4	3166.3	1147.7	557.6	427.3	354.1	325.6	301.2	284.9	280.8	276.7
60°	5384.3	3145.9	1082.6	508.7	386.6	333.7	305.2	276.7	260.5	256.4	252.3
62.5°	5311.0	3072.7	997.1	423.3	350.0	309.3	284.9	256.4	240.1	236.0	232.0
65°	5103.5	2934.3	866.9	333.7	317.4	280.8	260.5	240.1	219.8	211.6	207.6
67.5°	4749.4	2734.9	704.1	268.6	280.8	256.4	244.2	219.8	195.3	187.2	183.1
70°	4244.8	2470.3	529.1	227.9	248.3	227.9	219.8	195.3	175.0	166.9	162.8
72.5°	3536.6	2043.0	370.3	195.3	215.7	199.4	191.3	175.0	154.7	142.4	142.4
75°	2673.8	1465.1	244.2	166.9	179.1	170.9	158.7	146.5	134.3	126.2	122.1
77.5°	1151.7	569.8	150.6	126.2	146.5	142.4	126.2	118.0	114.0	105.8	105.8
80°	496.5	232.0	93.6	93.6	105.8	101.7	97.7	89.5	89.5	85.5	81.4
82.5°	183.1	93.6	57.0	69.2	77.3	69.2	69.2	69.2	69.2	65.1	65.1
85°	44.8	28.5	28.5	40.7	44.8	40.7	44.8	40.7	40.7	40.7	36.6
87.5°	12.2	12.2	16.3	16.3	16.3	16.3	16.3	12.2	0.0	0.0	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)