

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: P836142

Luminaire Tested: **ARCH3-140-750-U-T4W**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836142
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-140-750-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1110mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20958 lumens
Efficiency: N/A
Efficacy: 147.1 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 142.5
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

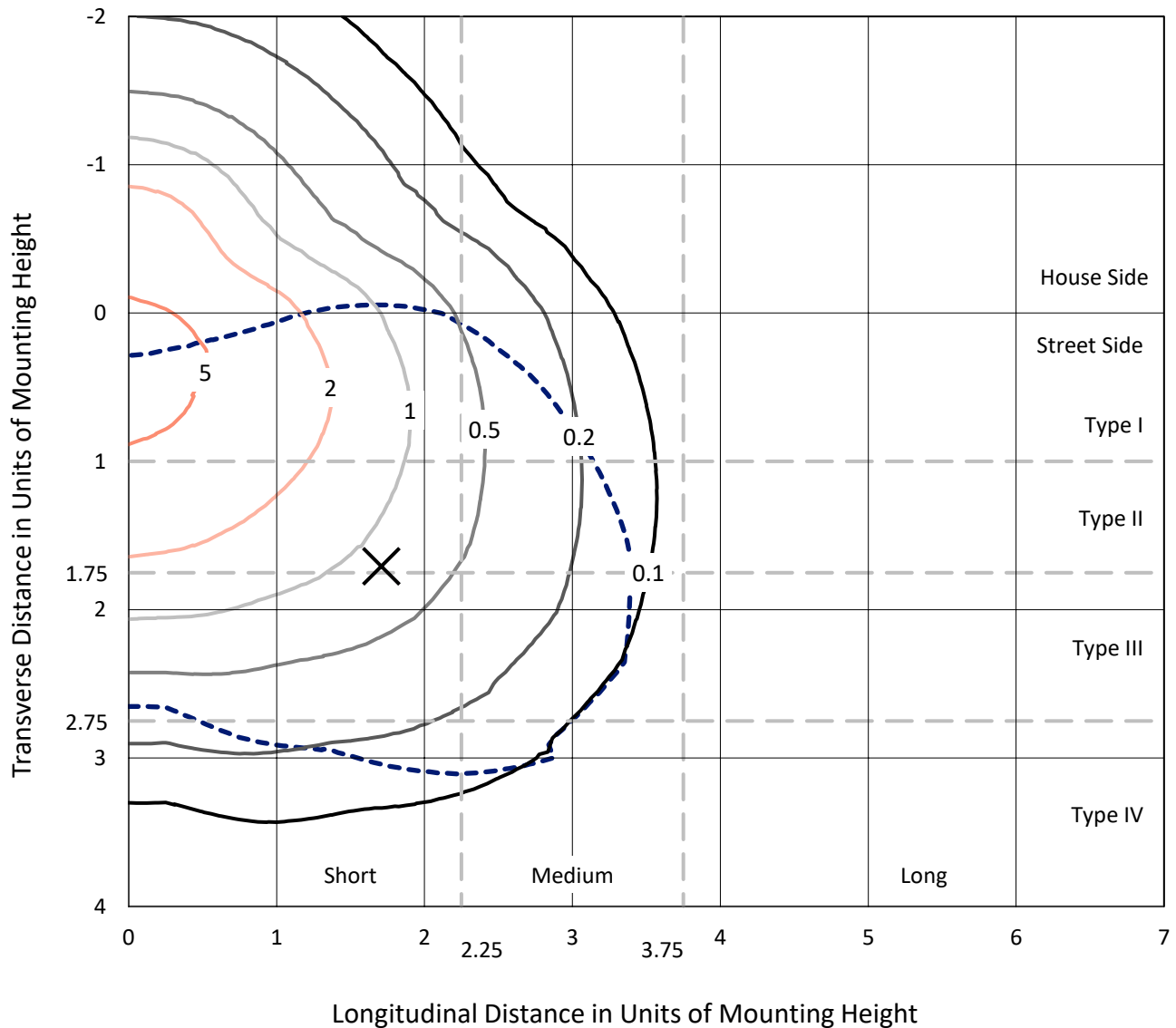


REPORT NUMBER: P836142

CATALOG NUMBER: ARCH3-140-750-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

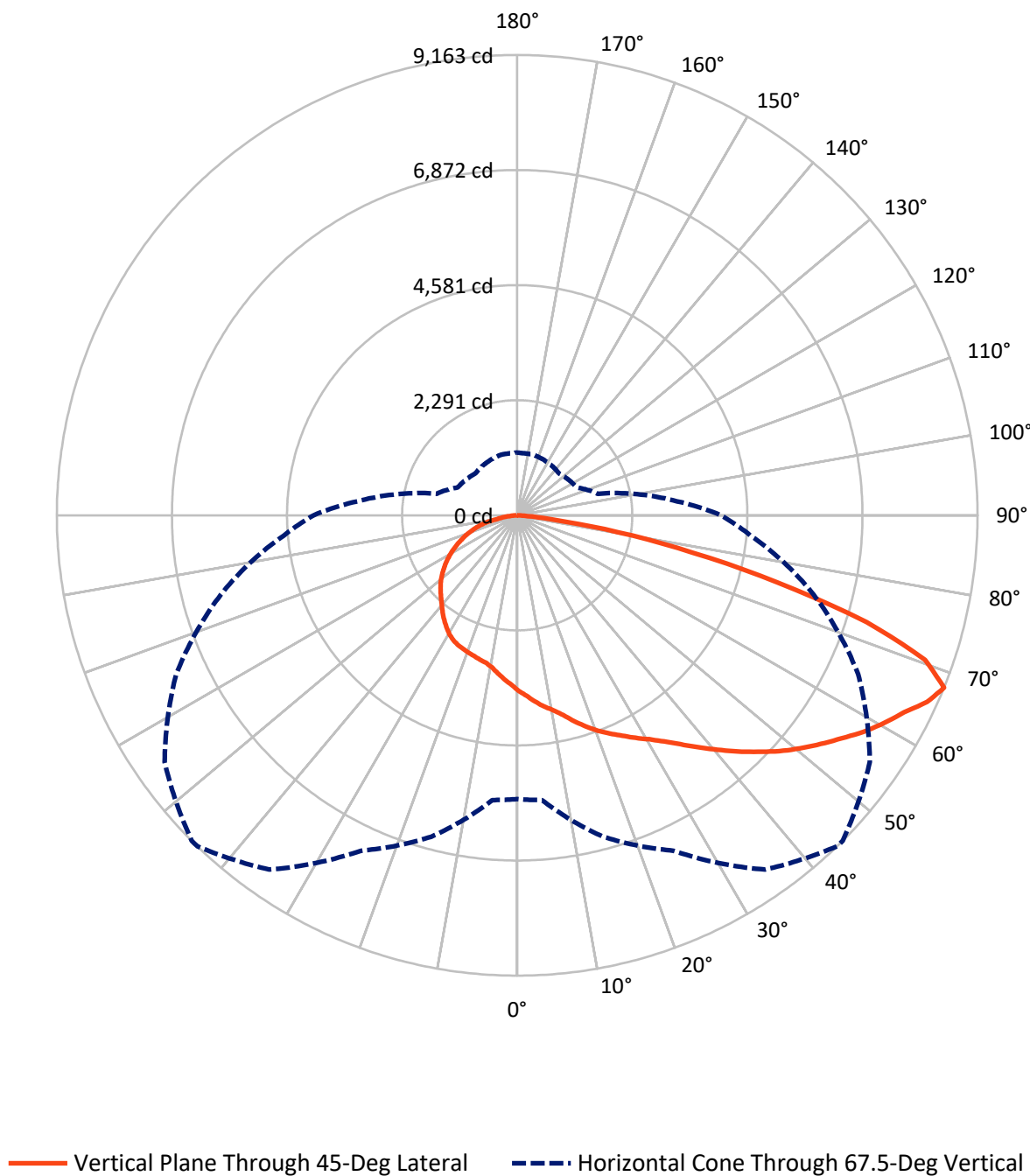
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 fc
Type IV - Short - N/A

REPORT NUMBER: P836142
CATALOG NUMBER: ARCH3-140-750-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P836142

CATALOG NUMBER: ARCH3-140-750-U-T4W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5599.0	0.0	5599.0
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	15359.0	0.0	15359.0
	% Fixture	73.3	0.0	73.3
Total	Lumens	20958.0	0.0	20958.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	334.7	1.6
10°-20°	1033.8	4.9
20°-30°	1784.5	8.5
30°-40°	2631.5	12.6
40°-50°	3565.2	17.0
50°-60°	4357.5	20.8
60°-70°	4494.2	21.4
70°-80°	2461.6	11.7
80°-90°	295.0	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°	20958.0	100.0
0°-180°	20958.0	100.0

Coefficient of Utilization



REPORT NUMBER: P836142

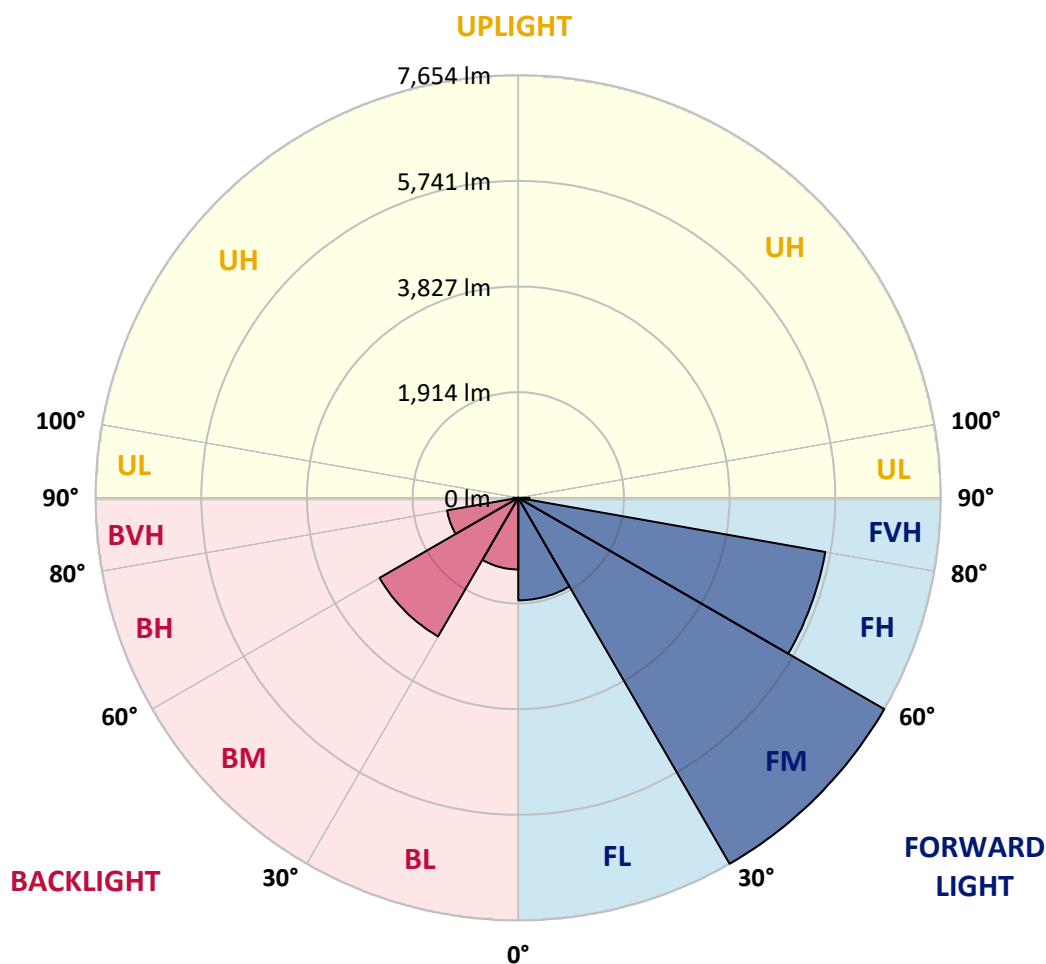
CATALOG NUMBER: ARCH3-140-750-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1855.3	8.9			
FM	(30°-60°)	7654.1	36.5			
FH	(60°-80°)	5646.4	26.9			G3/7500
FVH	(80°-90°)	203.3	1.0			G2/225
BL	(0°-30°)	1297.6	6.2	B3/2500		
BM	(30°-60°)	2900.2	13.8	B3/5000		
BH	(60°-80°)	1309.4	6.2	B3/2500		G3/2500
BVH	(80°-90°)	91.8	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type IV Short



REPORT NUMBER: P836142

CATALOG NUMBER: ARCH3-140-750-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	3495.4	3495.4	3495.4	3495.4	3495.4	3495.4	3495.4	3495.4	3495.4	3495.4	3495.4
2.5°	3648.5	3645.3	3651.7	3629.3	3600.6	3597.5	3597.5	3578.3	3556.0	3511.3	3476.3
5°	3820.7	3814.3	3817.5	3785.6	3747.3	3728.2	3725.0	3683.6	3632.5	3562.4	3498.6
7.5°	3980.2	3973.8	3970.6	3935.5	3878.1	3846.2	3843.0	3782.4	3721.8	3613.4	3520.9
10°	4130.1	4123.7	4117.3	4069.5	3999.3	3951.5	3945.1	3868.5	3792.0	3658.0	3540.0
12.5°	4321.4	4308.7	4302.3	4244.9	4142.8	4091.8	4082.2	3980.2	3884.5	3721.8	3578.3
15°	4522.3	4512.8	4503.2	4449.0	4334.2	4267.2	4251.2	4123.7	3992.9	3804.8	3635.7
17.5°	4672.2	4662.7	4662.7	4614.8	4509.6	4433.0	4420.3	4267.2	4104.5	3881.3	3680.4
20°	4764.7	4755.1	4764.7	4736.0	4656.3	4592.5	4579.7	4410.7	4216.2	3951.5	3718.6
22.5°	4831.7	4822.1	4838.1	4825.3	4767.9	4729.6	4720.1	4554.2	4331.0	4024.8	3756.9
25°	4949.7	4949.7	4949.7	4927.4	4873.1	4860.4	4860.4	4716.9	4477.7	4120.5	3814.3
27.5°	5185.7	5172.9	5157.0	5093.2	5000.7	4997.5	5016.7	4882.7	4646.7	4244.9	3884.5
30°	5533.3	5526.9	5466.3	5332.4	5176.1	5160.2	5172.9	5061.3	4828.5	4375.6	3964.2
32.5°	5983.0	5960.7	5836.3	5635.4	5412.1	5338.8	5364.3	5246.3	5019.8	4509.6	4040.8
35°	6301.9	6308.3	6219.0	6037.2	5772.5	5578.0	5597.1	5453.6	5227.1	4659.5	4136.4
37.5°	6668.7	6691.0	6557.1	6419.9	6174.4	5842.7	5861.8	5667.3	5434.4	4847.6	4238.5
40°	7175.8	7131.1	6904.7	6742.0	6470.9	6120.1	6136.1	5906.5	5673.6	5026.2	4356.5
42.5°	7599.9	7520.2	7245.9	7038.6	6713.3	6413.5	6429.5	6164.8	5916.0	5224.0	4487.2
45°	8209.1	7989.0	7593.6	7491.5	6962.1	6700.6	6716.5	6439.1	6171.2	5434.4	4627.6
47.5°	8563.1	8212.3	7960.3	7906.1	7236.4	6997.2	7016.3	6729.3	6445.4	5673.6	4774.3
50°	8540.8	8314.3	8241.0	8107.0	7478.7	7274.6	7293.8	7029.1	6722.9	5909.6	4914.6
52.5°	8394.1	8435.5	8397.2	8174.0	7721.1	7542.5	7564.9	7325.7	7006.7	6129.7	5045.4
55°	8620.5	8649.2	8575.8	8282.4	7989.0	7810.4	7835.9	7638.2	7287.4	6324.2	5157.0
57.5°	8891.6	8789.5	8716.2	8473.8	8266.5	8100.6	8129.3	7957.1	7529.8	6480.5	5243.1
60°	8878.8	8665.1	8738.5	8486.5	8454.7	8368.5	8394.1	8218.6	7714.7	6595.3	5278.2
62.5°	8225.0	8110.2	8480.2	8394.1	8607.7	8607.7	8639.6	8378.1	7826.4	6643.2	5259.0
65°	7089.7	7096.0	7746.6	8103.8	8789.5	8936.2	8961.7	8477.0	7762.6	6502.8	5080.4
67.5°	5648.1	5689.6	6624.0	7367.1	8607.7	9159.5	9162.7	8566.3	7488.3	6107.4	4665.8
70°	4133.2	4165.1	5268.6	6171.2	7749.8	8665.1	8614.1	8314.3	6891.9	5418.5	4018.4
72.5°	2793.8	2822.5	3957.8	4739.2	6359.3	7379.9	7268.3	7348.0	5874.6	4452.2	3230.7
75°	1878.5	1913.5	2816.1	3390.2	4678.6	5603.5	5354.7	5565.2	4544.7	3371.0	2356.8
77.5°	1183.2	1205.5	1789.2	2222.9	3195.6	3814.3	3565.6	3568.7	2618.4	1814.7	1266.1
80°	752.7	759.0	1084.3	1282.1	1849.8	2293.1	2028.4	1648.8	1180.0	963.1	755.8
82.5°	436.9	427.4	647.4	724.0	880.2	870.7	720.8	682.5	516.7	481.6	385.9
85°	175.4	162.7	283.8	264.7	267.9	283.8	210.5	210.5	169.0	130.8	95.7
87.5°	35.1	35.1	38.3	35.1	35.1	38.3	28.7	28.7	25.5	25.5	25.5
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: P836142

CATALOG NUMBER: ARCH3-140-750-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3495.4	3495.4	3495.4	3495.4	3495.4	3495.4	3495.4	3495.4	3495.4	3495.4	3495.4
2.5°	3469.9	3463.5	3447.6	3406.1	3383.8	3371.0	3351.9	3345.5	3342.3	3345.5	3355.1
5°	3479.5	3457.1	3412.5	3345.5	3300.9	3272.2	3240.3	3227.5	3217.9	3217.9	3227.5
7.5°	3485.8	3450.7	3374.2	3275.3	3211.6	3166.9	3128.6	3112.7	3109.5	3119.1	3122.3
10°	3489.0	3438.0	3329.6	3205.2	3122.3	3064.9	3026.6	3017.0	3026.6	3045.7	3048.9
12.5°	3511.3	3441.2	3304.0	3157.3	3058.5	3001.1	2972.4	2972.4	2997.9	3033.0	3036.1
15°	3549.6	3463.5	3291.3	3119.1	3017.0	2966.0	2956.4	2972.4	3010.6	3064.9	3071.2
17.5°	3578.3	3476.3	3262.6	3068.0	2962.8	2930.9	2946.8	2985.1	3039.3	3112.7	3119.1
20°	3597.5	3476.3	3221.1	3007.4	2908.6	2902.2	2946.8	3007.4	3064.9	3151.0	3160.5
22.5°	3616.6	3469.9	3173.3	2934.1	2848.0	2867.1	2950.0	3026.6	3084.0	3176.5	3192.4
25°	3651.7	3479.5	3125.4	2860.7	2784.2	2838.4	2946.8	3039.3	3099.9	3195.6	3221.1
27.5°	3699.5	3501.8	3090.4	2793.8	2720.4	2793.8	2924.5	3036.1	3099.9	3192.4	3221.1
30°	3750.5	3527.3	3048.9	2720.4	2647.1	2730.0	2876.7	3001.1	3074.4	3160.5	3195.6
32.5°	3804.8	3556.0	3013.8	2640.7	2557.8	2643.9	2806.5	2946.8	3026.6	3106.3	3144.6
35°	3878.1	3607.0	2994.7	2576.9	2478.0	2554.6	2717.2	2876.7	2962.8	3036.1	3080.8
37.5°	3967.4	3670.8	2985.1	2513.1	2391.9	2455.7	2621.5	2790.6	2883.1	2943.7	2985.1
40°	4069.5	3750.5	2981.9	2452.5	2305.8	2353.7	2522.7	2691.7	2781.0	2828.8	2863.9
42.5°	4184.3	3839.8	2975.6	2391.9	2219.7	2258.0	2427.0	2592.8	2669.4	2710.8	2742.7
45°	4305.5	3929.1	2962.8	2318.6	2127.2	2171.9	2328.1	2474.8	2554.6	2589.7	2624.7
47.5°	4426.7	4018.4	2937.3	2235.7	2044.3	2085.8	2222.9	2350.5	2414.2	2446.1	2481.2
50°	4544.7	4098.2	2876.7	2140.0	1958.2	1996.5	2101.7	2187.8	2235.7	2261.2	2296.2
52.5°	4649.9	4152.4	2790.6	2028.4	1872.1	1891.2	1961.4	2034.7	2073.0	2076.2	2108.1
55°	4739.2	4181.1	2666.2	1913.5	1779.6	1782.8	1821.1	1878.5	1894.4	1881.6	1904.0
57.5°	4790.2	4165.1	2529.1	1795.5	1683.9	1671.2	1699.9	1728.6	1731.8	1699.9	1722.2
60°	4803.0	4091.8	2350.5	1677.5	1588.2	1553.2	1562.7	1556.3	1550.0	1537.2	1556.3
62.5°	4739.2	3935.5	2152.7	1562.7	1486.2	1432.0	1428.8	1425.6	1435.2	1438.3	1441.5
65°	4506.4	3642.1	1916.7	1444.7	1377.7	1304.4	1301.2	1339.5	1352.2	1333.1	1339.5
67.5°	4056.7	3192.4	1658.4	1307.6	1240.6	1176.8	1202.3	1224.7	1247.0	1240.6	1247.0
70°	3418.9	2621.5	1422.4	1154.5	1090.7	1055.6	1084.3	1103.5	1106.7	1100.3	1106.7
72.5°	2688.5	2047.5	1202.3	998.2	940.8	924.9	960.0	975.9	1004.6	1017.4	1020.6
75°	1942.2	1511.7	985.5	829.2	781.4	781.4	813.3	842.0	867.5	851.5	842.0
77.5°	1084.3	902.6	708.0	570.9	580.4	625.1	637.8	669.7	695.3	692.1	685.7
80°	657.0	564.5	478.4	370.0	366.8	401.8	484.8	539.0	551.7	523.0	519.8
82.5°	341.2	296.6	255.1	207.3	229.6	267.9	280.7	338.1	373.1	360.4	376.3
85°	86.1	82.9	92.5	95.7	118.0	130.8	143.5	169.0	111.6	54.2	54.2
87.5°	25.5	25.5	31.9	31.9	41.5	51.0	47.8	47.8	25.5	3.2	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)