

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: P840945

Luminaire Tested: **ARCH4-110-727-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840945
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: ARCH4-110-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 920mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17990 lumens
Efficiency: N/A
Efficacy: 159.8 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 112.6
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



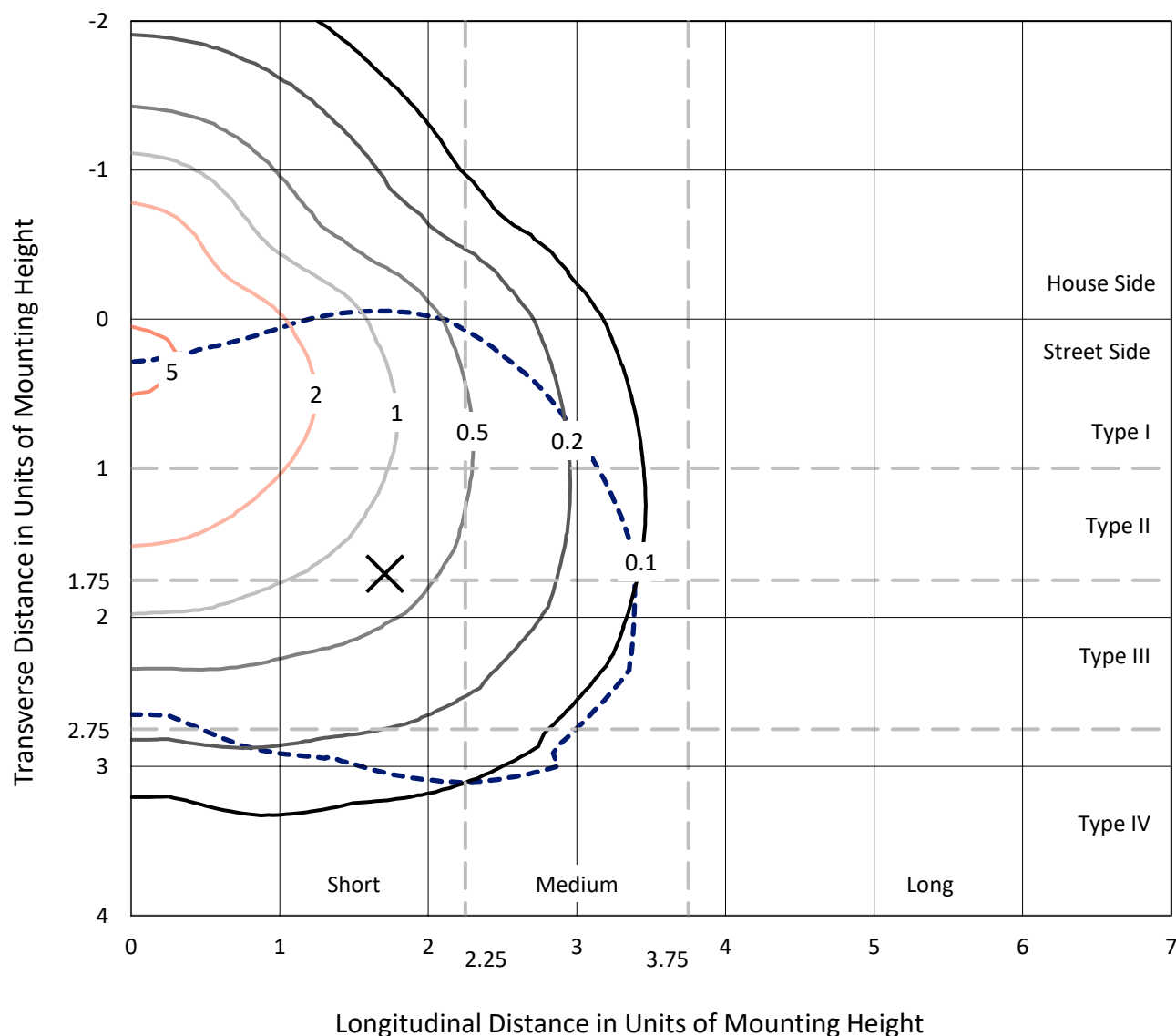
REPORT NUMBER: P840945

CATALOG NUMBER: ARCH4-110-727-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

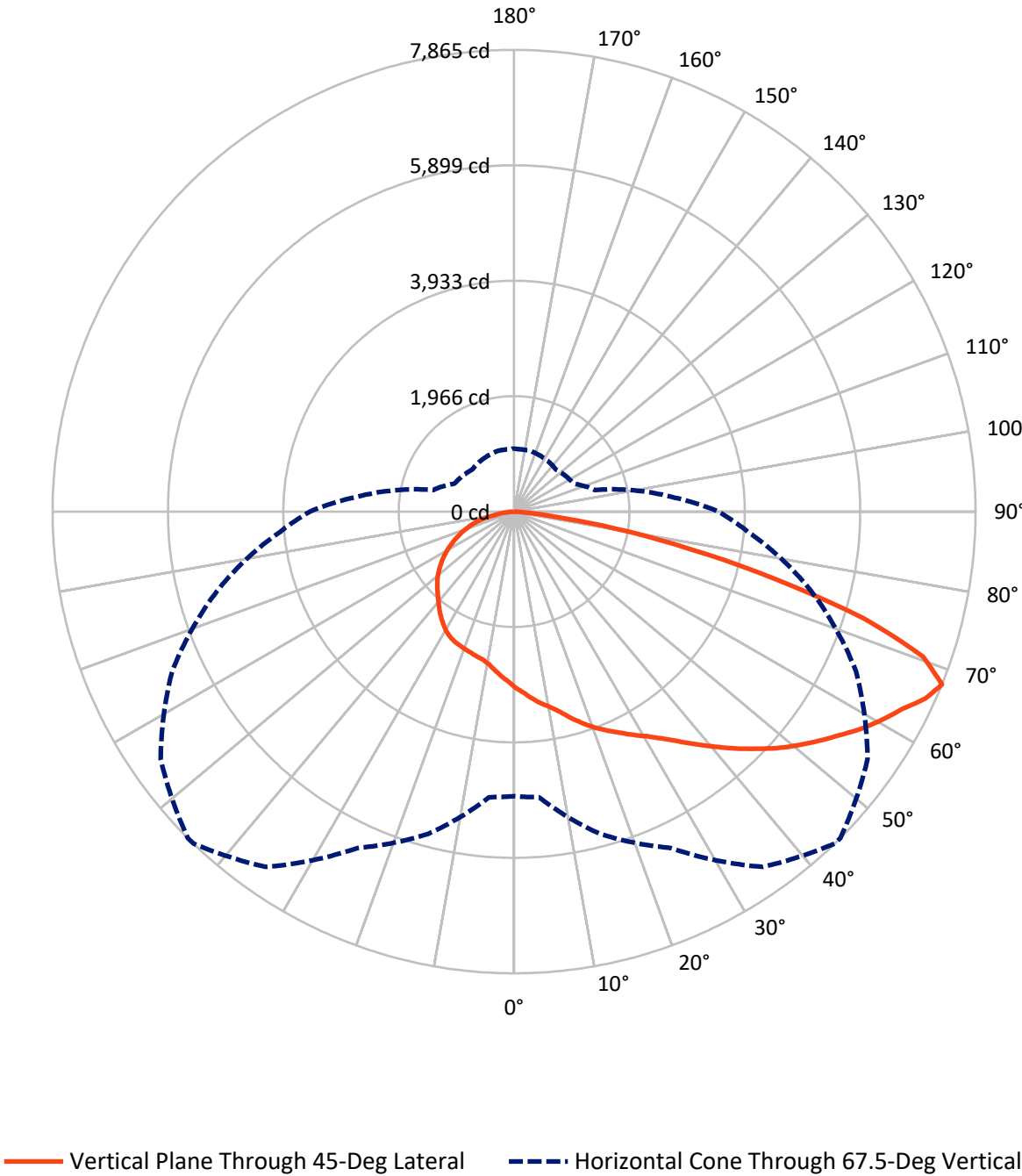


Based on 25 foot mounting height. Maximum calculated value = 5.6 fc

Type IV - Short - N/A

REPORT NUMBER: P840945
CATALOG NUMBER: ARCH4-110-727-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P840945

CATALOG NUMBER: ARCH4-110-727-U-T4W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4806.0	0.0	4806.0
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	13183.9	0.0	13183.9
	% Fixture	73.3	0.0	73.3
Total	Lumens	17990.0	0.0	17990.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	287.3	1.6
10°-20°	887.4	4.9
20°-30°	1531.8	8.5
30°-40°	2258.9	12.6
40°-50°	3060.3	17.0
50°-60°	3740.4	20.8
60°-70°	3857.7	21.4
70°-80°	2113.0	11.7
80°-90°	253.3	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°	17990.0	100.0
0°-180°	17990.0	100.0

Coefficient of Utilization



REPORT NUMBER: P840945

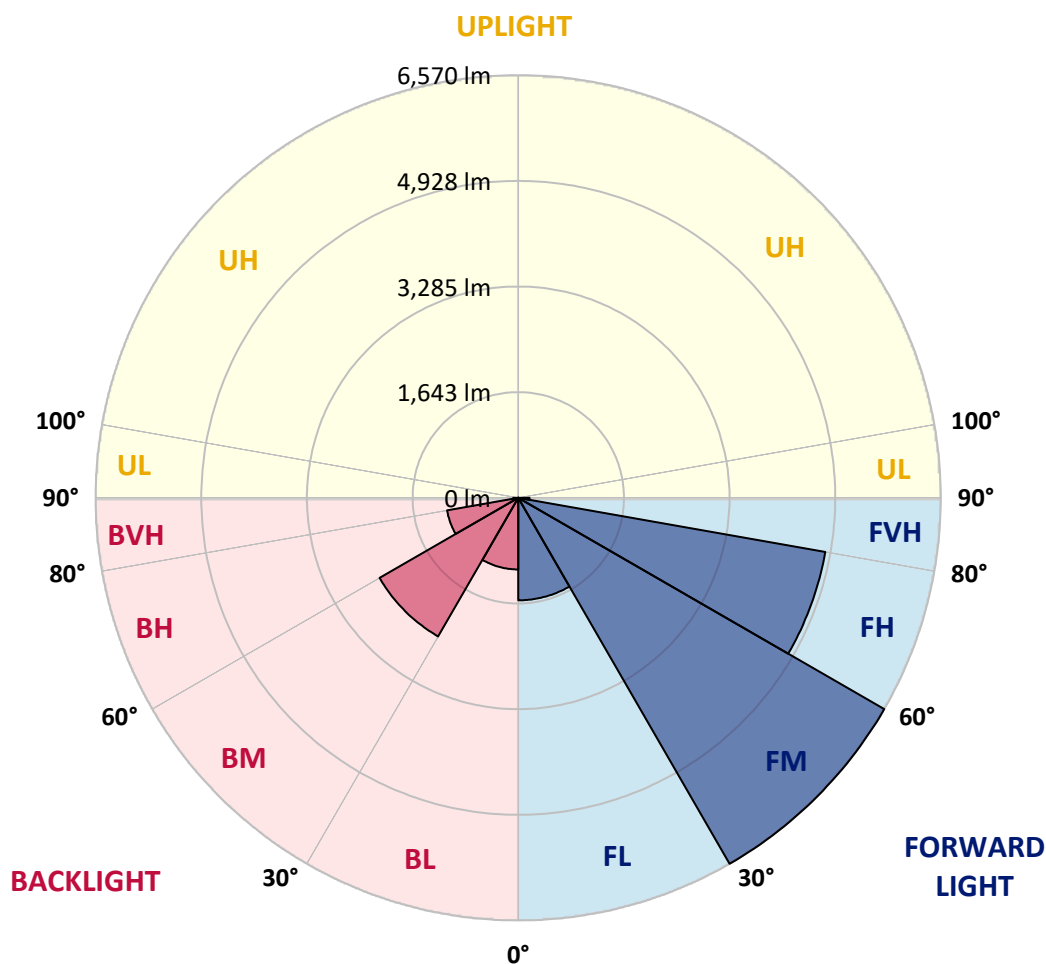
CATALOG NUMBER: ARCH4-110-727-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1592.6	8.9			
FM	(30°-60°)	6570.1	36.5			
FH	(60°-80°)	4846.8	26.9			G2/5000
FVH	(80°-90°)	174.5	1.0			G2/225
BL	(0°-30°)	1113.9	6.2	B3/2500		
BM	(30°-60°)	2489.5	13.8	B2/2500		
BH	(60°-80°)	1123.9	6.2	B3/2500		G3/2500
BVH	(80°-90°)	78.8	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: P840945

CATALOG NUMBER: ARCH4-110-727-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	3000.4	3000.4	3000.4	3000.4	3000.4	3000.4	3000.4	3000.4	3000.4	3000.4	3000.4
2.5°	3131.8	3129.1	3134.5	3115.4	3090.7	3088.0	3088.0	3071.6	3052.4	3014.1	2984.0
5°	3279.6	3274.1	3276.9	3249.5	3216.7	3200.2	3197.5	3161.9	3118.1	3057.9	3003.1
7.5°	3416.5	3411.0	3408.3	3378.2	3328.9	3301.5	3298.8	3246.8	3194.8	3101.7	3022.3
10°	3545.2	3539.7	3534.2	3493.2	3432.9	3391.9	3386.4	3320.7	3255.0	3140.0	3038.7
12.5°	3709.4	3698.5	3693.0	3643.7	3556.1	3512.3	3504.1	3416.5	3334.4	3194.8	3071.6
15°	3881.9	3873.7	3865.5	3818.9	3720.4	3662.9	3649.2	3539.7	3427.5	3265.9	3120.8
17.5°	4010.6	4002.3	4002.3	3961.3	3870.9	3805.2	3794.3	3662.9	3523.3	3331.6	3159.2
20°	4089.9	4081.7	4089.9	4065.3	3996.9	3942.1	3931.2	3786.1	3619.1	3391.9	3192.0
22.5°	4147.4	4139.2	4152.9	4142.0	4092.7	4059.8	4051.6	3909.3	3717.6	3454.8	3224.9
25°	4248.7	4248.7	4248.7	4229.6	4183.0	4172.1	4172.1	4048.9	3843.6	3537.0	3274.1
27.5°	4451.3	4440.4	4426.7	4371.9	4292.5	4289.8	4306.2	4191.2	3988.7	3643.7	3334.4
30°	4749.7	4744.2	4692.2	4577.2	4443.1	4429.4	4440.4	4344.5	4144.7	3756.0	3402.8
32.5°	5135.7	5116.5	5009.8	4837.3	4645.7	4582.7	4604.6	4503.3	4309.0	3870.9	3468.5
35°	5409.5	5414.9	5338.3	5182.2	4955.0	4788.0	4804.5	4681.3	4486.9	3999.6	3550.6
37.5°	5724.3	5743.4	5628.5	5510.8	5300.0	5015.3	5031.7	4864.7	4664.8	4161.1	3638.2
40°	6159.6	6121.2	5926.9	5787.3	5554.6	5253.4	5267.1	5070.0	4870.2	4314.4	3739.5
42.5°	6523.7	6455.2	6219.8	6041.8	5762.6	5505.3	5519.0	5291.7	5078.2	4484.2	3851.8
45°	7046.5	6857.6	6518.2	6430.6	5976.1	5751.7	5765.3	5527.2	5297.2	4664.8	3972.2
47.5°	7350.4	7049.3	6833.0	6786.5	6211.6	6006.3	6022.7	5776.3	5532.7	4870.2	4098.2
50°	7331.2	7136.9	7073.9	6958.9	6419.6	6244.4	6260.9	6033.6	5770.8	5072.7	4218.6
52.5°	7205.3	7240.9	7208.1	7016.4	6627.7	6474.4	6493.5	6288.2	6014.5	5261.6	4330.9
55°	7399.7	7424.3	7361.4	7109.5	6857.6	6704.3	6726.2	6556.5	6255.4	5428.6	4426.7
57.5°	7632.4	7544.8	7481.8	7273.8	7095.8	6953.5	6978.1	6830.3	6463.4	5562.8	4500.6
60°	7621.4	7438.0	7501.0	7284.7	7257.3	7183.4	7205.3	7054.8	6622.2	5661.3	4530.7
62.5°	7060.2	6961.7	7279.2	7205.3	7388.7	7388.7	7416.1	7191.6	6718.0	5702.4	4514.3
65°	6085.6	6091.1	6649.6	6956.2	7544.8	7670.7	7692.6	7276.5	6663.3	5581.9	4361.0
67.5°	4848.3	4883.8	5686.0	6323.8	7388.7	7862.3	7865.1	7353.1	6427.8	5242.5	4005.1
70°	3547.9	3575.3	4522.5	5297.2	6652.3	7438.0	7394.2	7136.9	5915.9	4651.2	3449.4
72.5°	2398.1	2422.8	3397.3	4068.0	5458.7	6334.8	6239.0	6307.4	5042.6	3821.7	2773.2
75°	1612.4	1642.5	2417.3	2910.1	4016.0	4809.9	4596.4	4777.1	3901.1	2893.6	2023.1
77.5°	1015.6	1034.8	1535.8	1908.1	2743.1	3274.1	3060.6	3063.4	2247.6	1557.7	1086.8
80°	646.1	651.5	930.8	1100.5	1587.8	1968.3	1741.1	1415.3	1012.9	826.8	648.8
82.5°	375.0	366.8	555.7	621.4	755.6	747.4	618.7	585.8	443.5	413.4	331.2
85°	150.6	139.6	243.6	227.2	230.0	243.6	180.7	180.7	145.1	112.2	82.1
87.5°	30.1	30.1	32.9	30.1	30.1	32.9	24.6	24.6	21.9	21.9	21.9
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: P840945

CATALOG NUMBER: ARCH4-110-727-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3000.4	3000.4	3000.4	3000.4	3000.4	3000.4	3000.4	3000.4	3000.4	3000.4	3000.4
2.5°	2978.5	2973.0	2959.3	2923.7	2904.6	2893.6	2877.2	2871.7	2869.0	2871.7	2879.9
5°	2986.7	2967.5	2929.2	2871.7	2833.4	2808.8	2781.4	2770.4	2762.2	2762.2	2770.4
7.5°	2992.2	2962.1	2896.4	2811.5	2756.7	2718.4	2685.6	2671.9	2669.1	2677.4	2680.1
10°	2994.9	2951.1	2858.0	2751.3	2680.1	2630.8	2598.0	2589.8	2598.0	2614.4	2617.1
12.5°	3014.1	2953.9	2836.1	2710.2	2625.3	2576.1	2551.4	2551.4	2573.3	2603.4	2606.2
15°	3046.9	2973.0	2825.2	2677.4	2589.8	2546.0	2537.7	2551.4	2584.3	2630.8	2636.3
17.5°	3071.6	2984.0	2800.5	2633.6	2543.2	2515.8	2529.5	2562.4	2608.9	2671.9	2677.4
20°	3088.0	2984.0	2765.0	2581.5	2496.7	2491.2	2529.5	2581.5	2630.8	2704.7	2712.9
22.5°	3104.4	2978.5	2723.9	2518.6	2444.7	2461.1	2532.3	2598.0	2647.2	2726.6	2740.3
25°	3134.5	2986.7	2682.8	2455.6	2389.9	2436.4	2529.5	2608.9	2660.9	2743.1	2765.0
27.5°	3175.6	3005.9	2652.7	2398.1	2335.2	2398.1	2510.4	2606.2	2660.9	2740.3	2765.0
30°	3219.4	3027.8	2617.1	2335.2	2272.2	2343.4	2469.3	2576.1	2639.0	2712.9	2743.1
32.5°	3265.9	3052.4	2587.0	2266.7	2195.5	2269.5	2409.1	2529.5	2598.0	2666.4	2699.3
35°	3328.9	3096.2	2570.6	2212.0	2127.1	2192.8	2332.4	2469.3	2543.2	2606.2	2644.5
37.5°	3405.6	3151.0	2562.4	2157.2	2053.2	2107.9	2250.3	2395.4	2474.8	2526.8	2562.4
40°	3493.2	3219.4	2559.6	2105.2	1979.3	2020.3	2165.4	2310.5	2387.2	2428.2	2458.3
42.5°	3591.7	3296.0	2554.2	2053.2	1905.4	1938.2	2083.3	2225.7	2291.4	2326.9	2354.3
45°	3695.7	3372.7	2543.2	1990.2	1826.0	1864.3	1998.4	2124.4	2192.8	2222.9	2253.0
47.5°	3799.8	3449.4	2521.3	1919.0	1754.8	1790.4	1908.1	2017.6	2072.4	2099.7	2129.8
50°	3901.1	3517.8	2469.3	1836.9	1680.9	1713.7	1804.1	1878.0	1919.0	1940.9	1971.1
52.5°	3991.4	3564.3	2395.4	1741.1	1607.0	1623.4	1683.6	1746.6	1779.4	1782.2	1809.5
55°	4068.0	3589.0	2288.6	1642.5	1527.6	1530.3	1563.2	1612.4	1626.1	1615.2	1634.3
57.5°	4111.8	3575.3	2170.9	1541.3	1445.4	1434.5	1459.1	1483.8	1486.5	1459.1	1478.3
60°	4122.8	3512.3	2017.6	1440.0	1363.3	1333.2	1341.4	1335.9	1330.5	1319.5	1335.9
62.5°	4068.0	3378.2	1847.9	1341.4	1275.7	1229.2	1226.4	1223.7	1231.9	1234.6	1237.4
65°	3868.2	3126.3	1645.3	1240.1	1182.6	1119.7	1116.9	1149.8	1160.7	1144.3	1149.8
67.5°	3482.2	2740.3	1423.5	1122.4	1064.9	1010.2	1032.1	1051.2	1070.4	1064.9	1070.4
70°	2934.7	2250.3	1221.0	991.0	936.3	906.1	930.8	947.2	949.9	944.5	949.9
72.5°	2307.8	1757.5	1032.1	856.9	807.6	793.9	824.0	837.7	862.3	873.3	876.0
75°	1667.2	1297.6	845.9	711.8	670.7	670.7	698.1	722.7	744.6	730.9	722.7
77.5°	930.8	774.7	607.7	490.0	498.2	536.6	547.5	574.9	596.8	594.1	588.6
80°	563.9	484.6	410.6	317.6	314.8	344.9	416.1	462.7	473.6	449.0	446.2
82.5°	292.9	254.6	219.0	177.9	197.1	230.0	240.9	290.2	320.3	309.3	323.0
85°	73.9	71.2	79.4	82.1	101.3	112.2	123.2	145.1	95.8	46.5	46.5
87.5°	21.9	21.9	27.4	27.4	35.6	43.8	41.1	41.1	21.9	2.7	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)