

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: P842671

Luminaire Tested: **ARCH4-80-727-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842671
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-80-727-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 685mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13959 lumens
Efficiency: N/A
Efficacy: 167.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G2

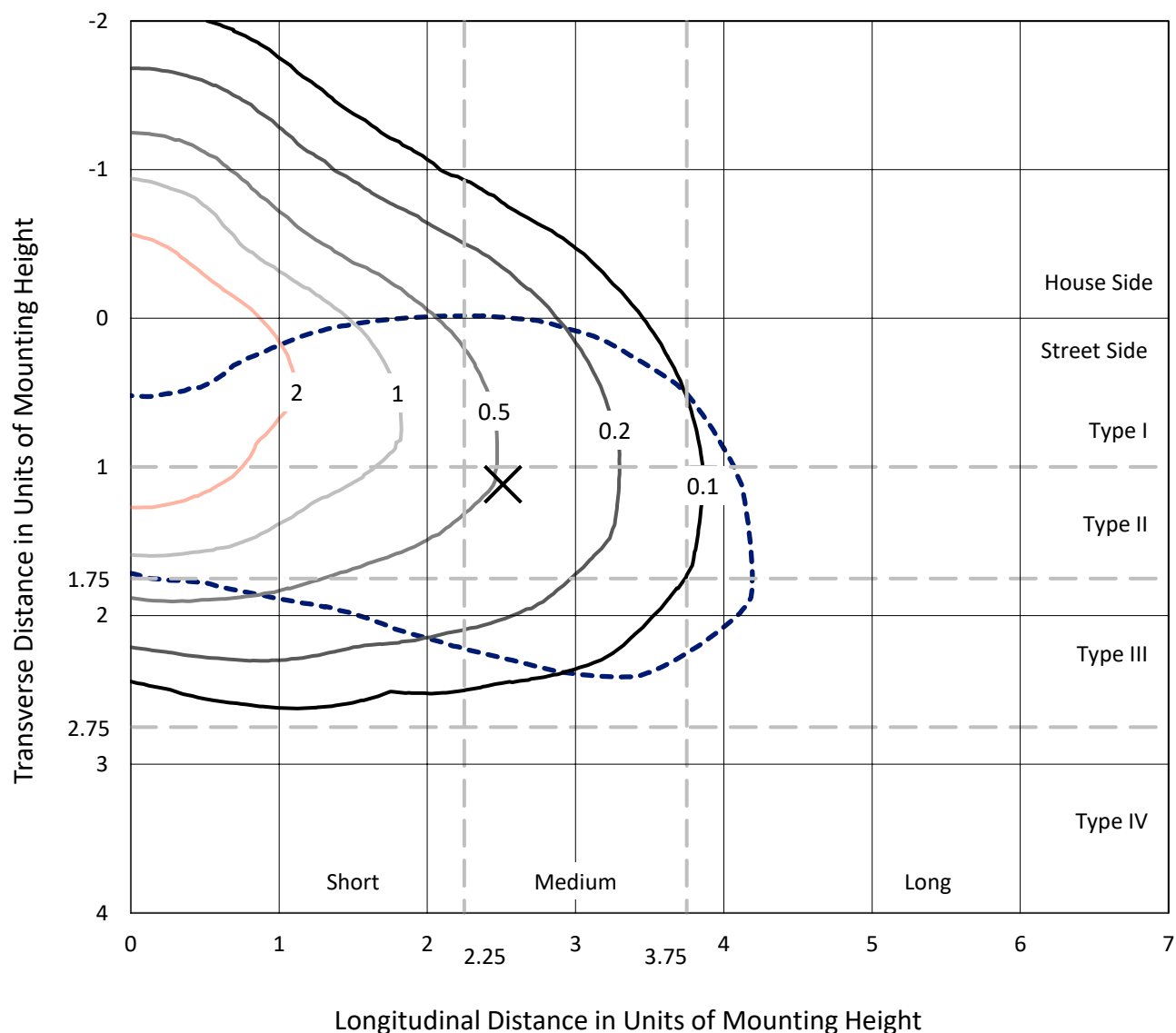
Input Watts (W): 83.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P842671
CATALOG NUMBER: ARCH4-80-727-U-T3

Iso-Footcandle Lines of Horizontal Illumination

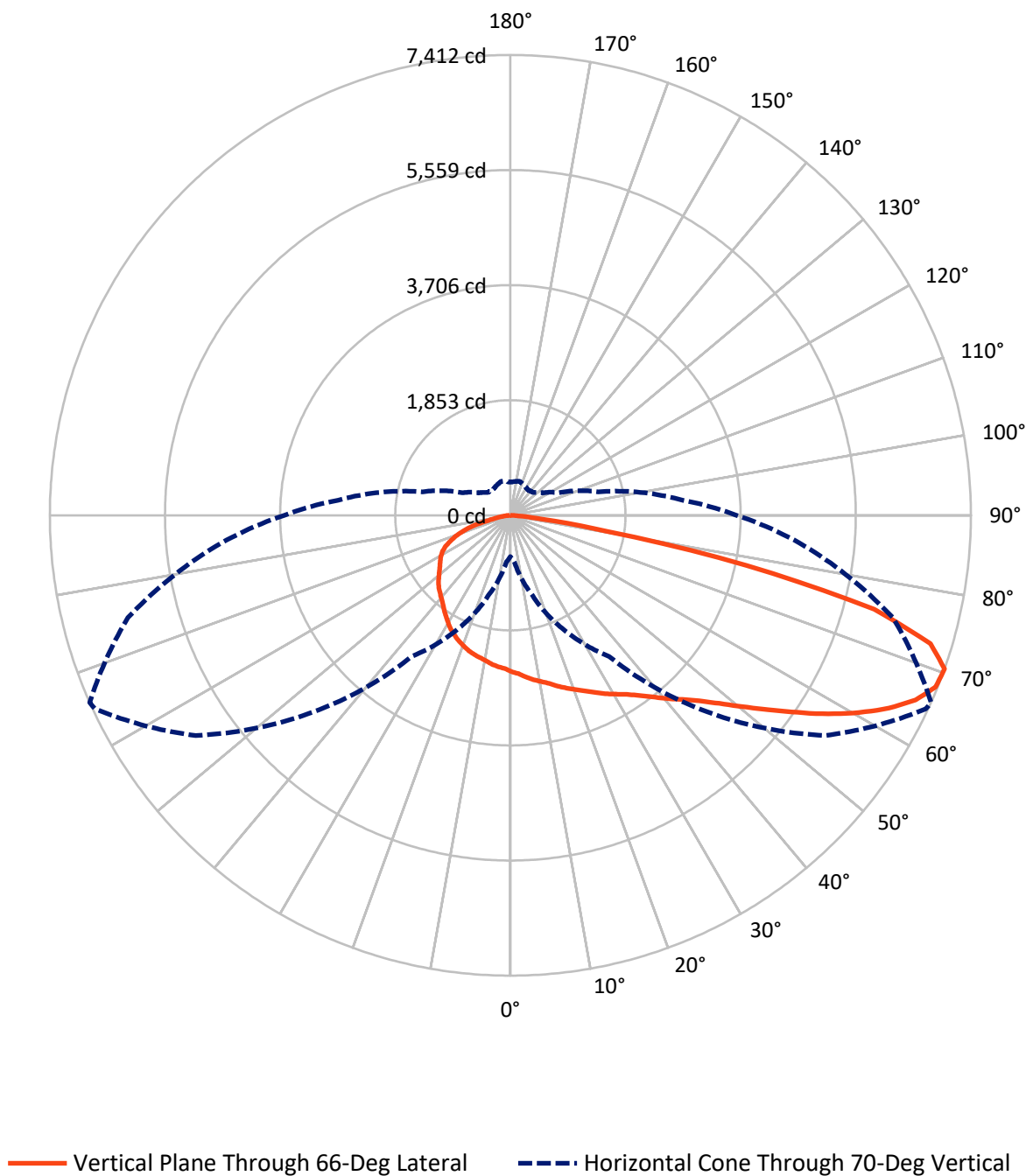
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc
Type III - Medium - N/A

REPORT NUMBER: P842671
CATALOG NUMBER: ARCH4-80-727-U-T3

Luminous Intensity Polar Plot



REPORT NUMBER: P842671

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3698.8	0.0	3698.8
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	10260.2	0.0	10260.2
	% Fixture	73.5	0.0	73.5
Total	Lumens	13959.0	0.0	13959.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.1	1.7
10°-20°	726.1	5.2
20°-30°	1217.3	8.7
30°-40°	1822.6	13.1
40°-50°	2436.9	17.5
50°-60°	2845.1	20.4
60°-70°	2829.0	20.3
70°-80°	1674.8	12.0
80°-90°	165.1	1.2
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°	13959.0	100.0
0°-180°	13959.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842671

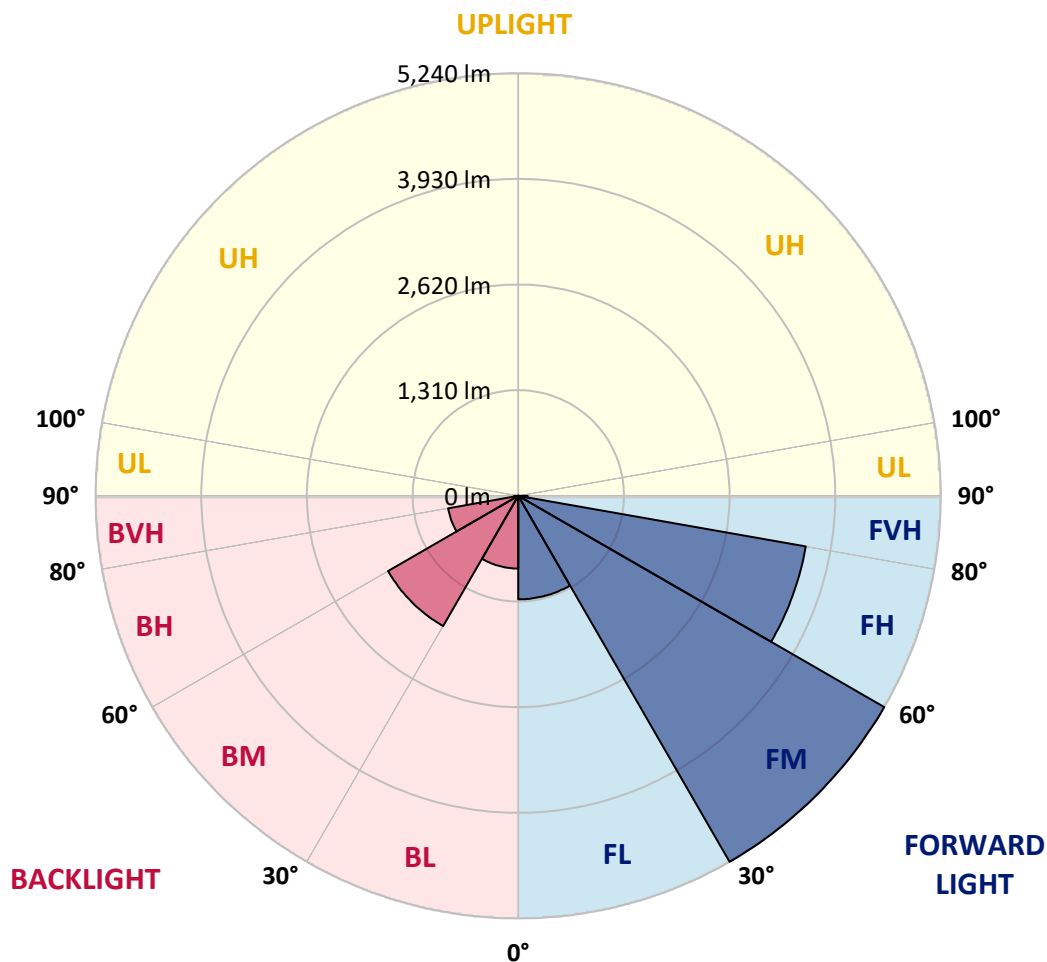
CATALOG NUMBER: ARCH4-80-727-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1283.9	9.2			
FM	(30°-60°)	5240.0	37.5			
FH	(60°-80°)	3620.3	25.9			G2/5000
FVH	(80°-90°)	116.0	0.8			G2/225
BL	(0°-30°)	901.6	6.5	B2/1000		
BM	(30°-60°)	1864.6	13.4	B2/2500		
BH	(60°-80°)	883.6	6.3	B2/1000		G2/1000
BVH	(80°-90°)	49.1	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Medium



REPORT NUMBER: P842671

CATALOG NUMBER: ARCH4-80-727-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2519.3	2519.3	2519.3	2519.3	2519.3	2519.3	2519.3	2519.3	2519.3	2519.3	2519.3
2.5°	2611.9	2607.8	2605.7	2597.5	2579.0	2587.2	2568.7	2556.3	2554.3	2525.5	2509.0
5°	2718.9	2716.9	2712.8	2700.4	2671.6	2675.7	2644.8	2622.2	2616.0	2570.7	2535.7
7.5°	2809.5	2805.4	2803.3	2786.9	2756.0	2753.9	2716.9	2683.9	2673.6	2611.9	2558.4
10°	2879.5	2873.3	2877.4	2860.9	2828.0	2821.8	2774.5	2731.3	2721.0	2642.8	2568.7
12.5°	2939.2	2935.0	2941.2	2926.8	2900.1	2893.9	2846.5	2791.0	2778.6	2688.1	2591.3
15°	3005.0	2990.6	3003.0	2996.8	2978.3	2976.2	2933.0	2871.2	2854.8	2745.7	2626.3
17.5°	3040.0	3031.8	3046.2	3048.2	3040.0	3054.4	3013.3	2939.2	2924.8	2799.2	2657.2
20°	3064.7	3052.4	3068.8	3081.2	3087.4	3116.2	3083.2	3011.2	2994.7	2850.7	2686.0
22.5°	3149.1	3122.3	3124.4	3132.6	3136.8	3177.9	3157.3	3087.4	3070.9	2914.5	2721.0
25°	3361.1	3307.6	3272.6	3247.9	3219.1	3254.1	3241.7	3173.8	3159.4	2990.6	2764.2
27.5°	3690.4	3622.5	3552.5	3480.5	3367.3	3352.9	3332.3	3270.5	3254.1	3066.8	2807.4
30°	4065.0	3997.1	3914.8	3799.5	3587.5	3476.4	3429.0	3361.1	3342.6	3134.7	2848.6
32.5°	4437.6	4377.9	4295.5	4155.6	3853.0	3626.6	3525.8	3455.8	3437.3	3208.8	2898.0
35°	4727.8	4690.7	4637.2	4462.3	4116.5	3803.6	3665.7	3581.3	3560.7	3326.1	2988.6
37.5°	4962.4	4935.7	4890.4	4707.2	4307.9	3980.6	3826.3	3729.5	3706.9	3453.7	3085.3
40°	5308.2	5238.2	5201.2	4935.7	4474.6	4141.2	4007.4	3906.5	3881.8	3589.6	3163.5
42.5°	5602.5	5551.1	5505.8	5139.4	4633.1	4279.1	4178.2	4085.6	4052.7	3723.4	3247.9
45°	5651.9	5672.5	5649.9	5240.3	4884.2	4414.9	4351.1	4291.4	4260.5	3904.5	3375.5
47.5°	5654.0	5654.0	5520.2	5297.9	5195.0	4567.2	4536.4	4556.9	4524.0	4135.0	3527.8
50°	5505.8	5532.5	5462.6	5312.3	5277.3	4719.5	4762.8	4873.9	4841.0	4379.9	3692.5
52.5°	5199.1	5287.6	5285.6	5289.7	5157.9	4849.2	5001.5	5254.7	5199.1	4655.7	3867.4
55°	4657.8	4834.8	4993.3	5129.1	5055.0	4927.4	5293.8	5660.2	5602.5	4964.5	4044.4
57.5°	4194.7	4307.9	4505.5	4890.4	4933.6	4995.3	5567.5	6084.1	6032.7	5306.1	4229.7
60°	3665.7	3822.1	4019.7	4567.2	4785.4	5083.8	5868.0	6497.9	6448.5	5651.9	4408.7
62.5°	2852.7	3054.4	3449.6	4071.2	4569.3	5139.4	6104.7	6862.2	6839.5	5979.2	4569.3
65°	1988.3	2167.3	2721.0	3462.0	4225.6	5114.7	6294.1	7187.4	7166.8	6246.7	4682.5
67.5°	1160.8	1368.7	1994.4	2786.9	3618.4	4943.9	6355.8	7378.8	7378.8	6409.3	4713.4
70°	662.8	759.5	1315.2	2031.5	2774.5	4472.5	6182.9	7376.7	7411.7	6372.3	4585.8
72.5°	463.1	506.3	885.0	1366.7	1881.2	3618.4	5730.1	7020.6	7068.0	6022.4	4149.4
75°	360.2	391.1	623.6	932.4	1185.5	2457.5	4740.1	5919.5	6045.0	5133.2	3354.9
77.5°	273.7	296.4	364.3	582.5	759.5	1412.0	3128.5	3881.8	3890.1	3142.9	1798.9
80°	199.6	222.3	242.9	356.1	403.4	660.7	1181.4	1621.9	1576.6	1521.0	973.5
82.5°	119.4	142.0	148.2	193.5	197.6	282.0	413.7	522.8	502.2	668.9	456.9
85°	51.5	72.0	76.2	88.5	84.4	115.3	164.7	137.9	123.5	142.0	98.8
87.5°	12.3	20.6	20.6	22.6	18.5	28.8	30.9	22.6	20.6	24.7	24.7
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: P842671

CATALOG NUMBER: ARCH4-80-727-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2519.3	2519.3	2519.3	2519.3	2519.3	2519.3	2519.3	2519.3	2519.3	2519.3	2519.3
2.5°	2504.9	2498.7	2500.8	2465.8	2455.5	2445.2	2439.0	2434.9	2430.8	2437.0	2443.1
5°	2523.4	2509.0	2492.5	2441.1	2420.5	2397.8	2381.4	2367.0	2360.8	2360.8	2367.0
7.5°	2537.8	2513.1	2478.1	2410.2	2373.1	2342.3	2315.5	2297.0	2286.7	2286.7	2292.9
10°	2539.9	2504.9	2449.3	2367.0	2317.6	2272.3	2241.4	2220.8	2206.4	2206.4	2210.5
12.5°	2552.2	2504.9	2432.8	2334.0	2272.3	2216.7	2179.7	2148.8	2142.6	2142.6	2146.7
15°	2572.8	2515.2	2422.5	2305.2	2231.1	2167.3	2126.2	2093.2	2080.9	2089.1	2091.2
17.5°	2591.3	2521.3	2404.0	2268.2	2179.7	2109.7	2064.4	2035.6	2019.1	2037.7	2037.7
20°	2603.7	2521.3	2377.3	2220.8	2124.1	2045.9	2002.7	1967.7	1955.3	1978.0	1980.0
22.5°	2622.2	2519.3	2348.4	2173.5	2064.4	1982.1	1938.9	1912.1	1905.9	1930.6	1938.9
25°	2642.8	2523.4	2317.6	2120.0	1998.5	1918.3	1885.3	1873.0	1877.1	1908.0	1918.3
27.5°	2665.4	2531.6	2286.7	2060.3	1926.5	1854.5	1835.9	1842.1	1858.6	1897.7	1910.0
30°	2686.0	2533.7	2243.5	1990.3	1844.2	1776.3	1784.5	1811.2	1835.9	1875.1	1889.5
32.5°	2712.8	2535.7	2198.2	1914.2	1755.7	1706.3	1743.3	1786.5	1811.2	1848.3	1864.8
35°	2778.6	2570.7	2163.2	1840.1	1673.3	1646.6	1708.3	1763.9	1778.3	1811.2	1825.7
37.5°	2854.8	2628.4	2144.7	1763.9	1593.1	1586.9	1665.1	1720.7	1724.8	1745.4	1759.8
40°	2902.1	2653.1	2124.1	1700.1	1521.0	1525.2	1605.4	1648.6	1640.4	1654.8	1665.1
42.5°	2949.5	2661.3	2080.9	1646.6	1453.1	1457.2	1519.0	1549.9	1554.0	1584.8	1599.2
45°	3029.7	2683.9	2033.5	1597.2	1391.4	1377.0	1414.0	1455.2	1508.7	1568.4	1584.8
47.5°	3136.8	2731.3	1984.1	1537.5	1331.7	1284.3	1298.7	1370.8	1426.4	1481.9	1492.2
50°	3245.8	2778.6	1938.9	1465.5	1272.0	1185.5	1191.7	1257.6	1302.9	1346.1	1352.3
52.5°	3352.9	2819.8	1899.8	1397.5	1204.1	1068.2	1092.9	1160.8	1191.7	1212.3	1218.5
55°	3459.9	2854.8	1864.8	1339.9	1125.9	975.6	998.2	1062.1	1092.9	1103.2	1107.3
57.5°	3571.0	2895.9	1838.0	1290.5	1037.4	893.3	907.7	953.0	981.8	994.1	990.0
60°	3663.7	2930.9	1823.6	1239.1	948.8	817.1	813.0	854.2	895.3	907.7	903.6
62.5°	3735.7	2953.6	1801.0	1173.2	870.6	741.0	720.4	773.9	817.1	825.4	831.5
65°	3774.8	2955.6	1745.4	1088.8	790.4	658.6	644.2	697.7	724.5	732.7	732.7
67.5°	3768.6	2922.7	1636.3	975.6	716.3	584.5	572.2	605.1	644.2	650.4	644.2
70°	3641.0	2786.9	1461.3	856.2	627.8	518.7	496.0	529.0	566.0	543.4	533.1
72.5°	3278.8	2434.9	1204.1	724.5	529.0	436.3	426.1	459.0	461.0	465.2	454.9
75°	2587.2	1813.3	901.5	564.0	428.1	366.4	364.3	358.1	366.4	382.8	370.5
77.5°	1358.4	905.6	487.8	345.8	310.8	294.3	279.9	277.9	302.6	312.9	300.5
80°	736.8	508.4	279.9	207.9	189.4	191.4	209.9	205.8	232.6	238.8	228.5
82.5°	321.1	240.8	137.9	125.6	125.6	123.5	129.7	144.1	172.9	172.9	137.9
85°	70.0	59.7	53.5	61.7	70.0	70.0	70.0	70.0	49.4	26.8	18.5
87.5°	22.6	22.6	22.6	24.7	26.8	26.8	22.6	16.5	10.3	2.1	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)