

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: P842635

Luminaire Tested: **ARCH4-70-750-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842635
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: ARCH4-70-750-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 605mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13511 lumens
Efficiency: N/A
Efficacy: 183.1 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

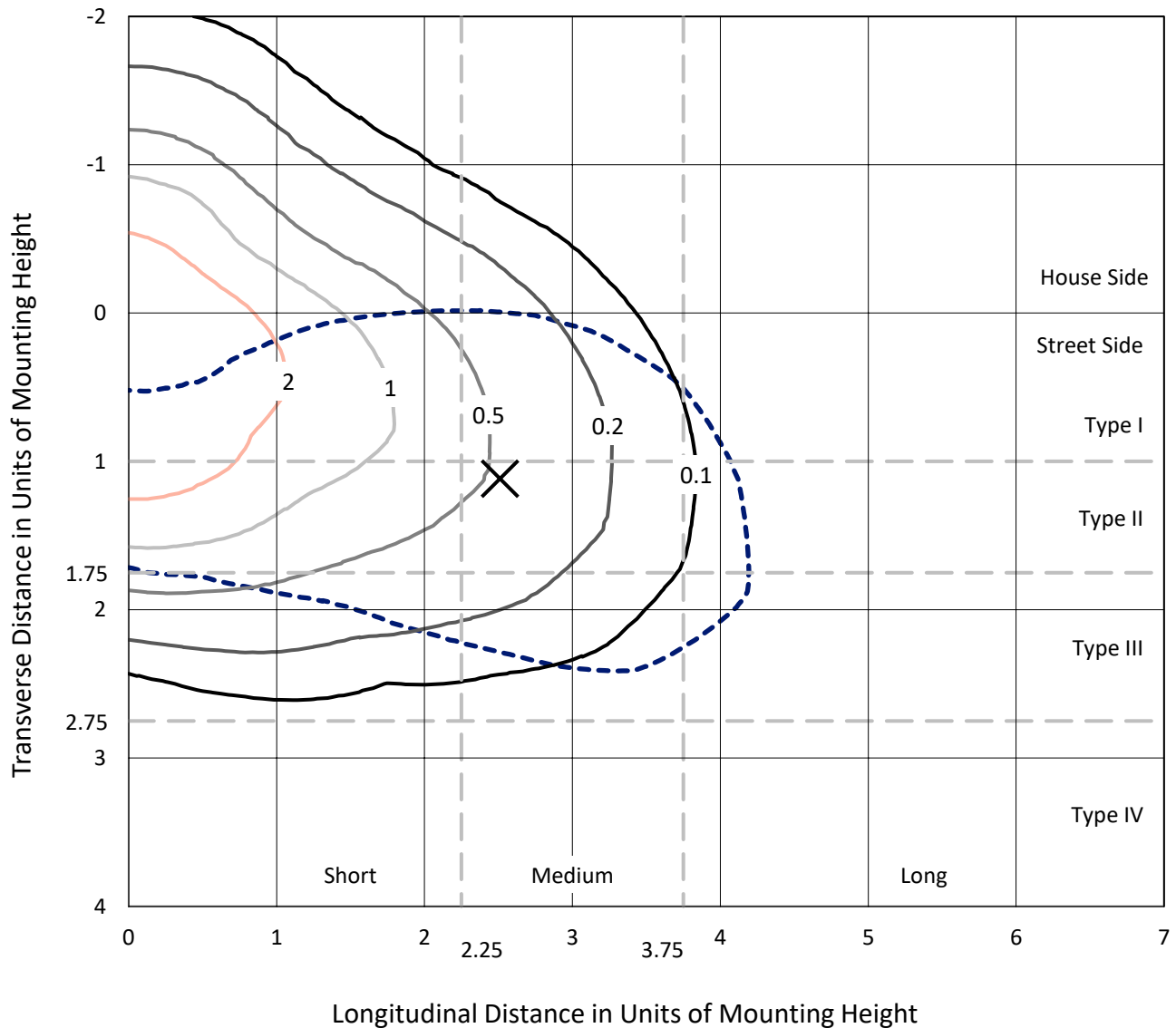
Input Watts (W): 73.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P842635
 CATALOG NUMBER: ARCH4-70-750-U-T3

Iso-Footcandle Lines of Horizontal Illumination

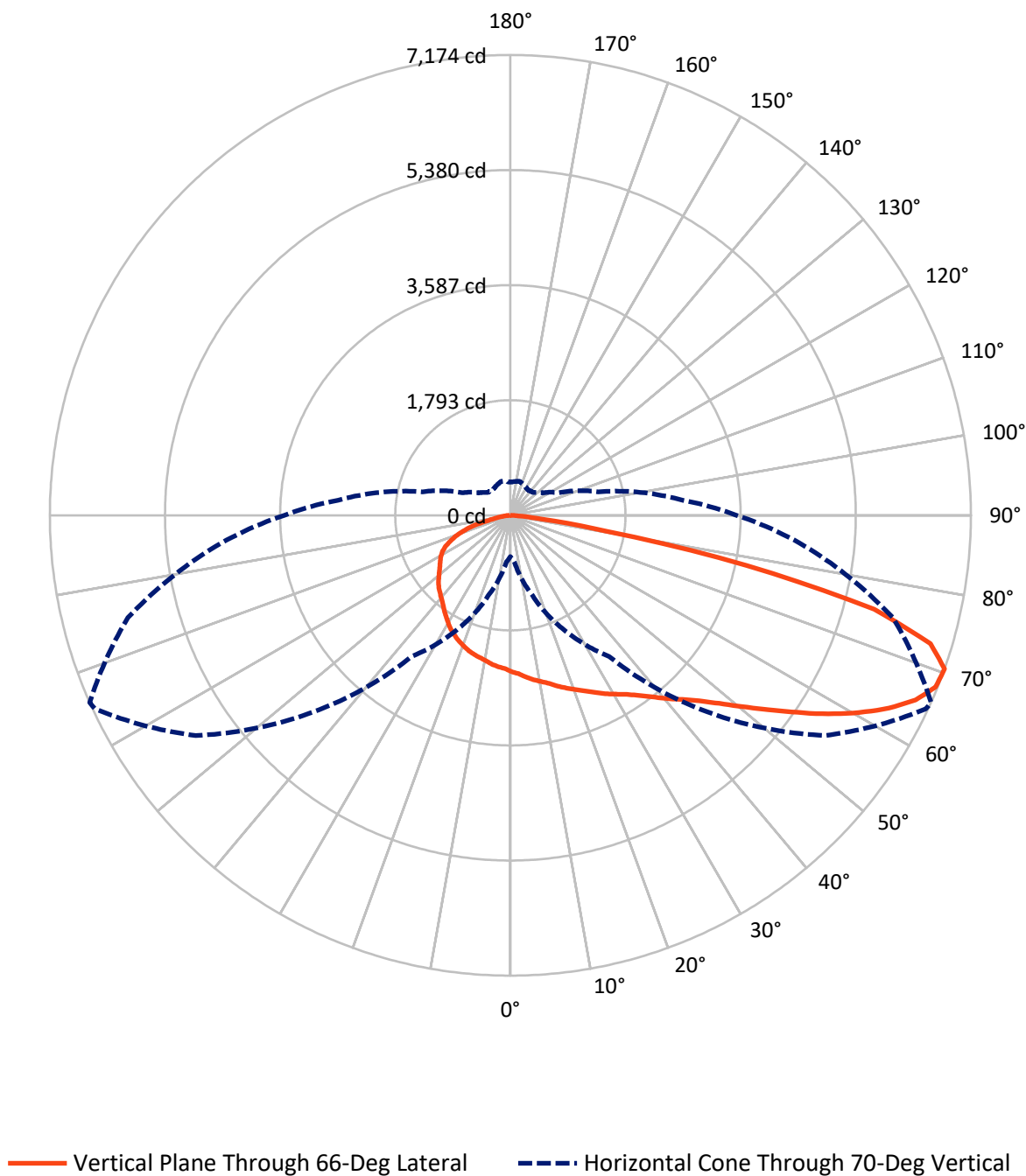
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc
 Type III - Medium - N/A

REPORT NUMBER: P842635
CATALOG NUMBER: ARCH4-70-750-U-T3

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3580.1	0.0	3580.1
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	9930.9	0.0	9930.9
	% Fixture	73.5	0.0	73.5
Total	Lumens	13511.0	0.0	13511.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.3	1.7
10°-20°	702.8	5.2
20°-30°	1178.2	8.7
30°-40°	1764.1	13.1
40°-50°	2358.6	17.5
50°-60°	2753.8	20.4
60°-70°	2738.2	20.3
70°-80°	1621.1	12.0
80°-90°	159.8	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°	13511.0	100.0
0°-180°	13511.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842635

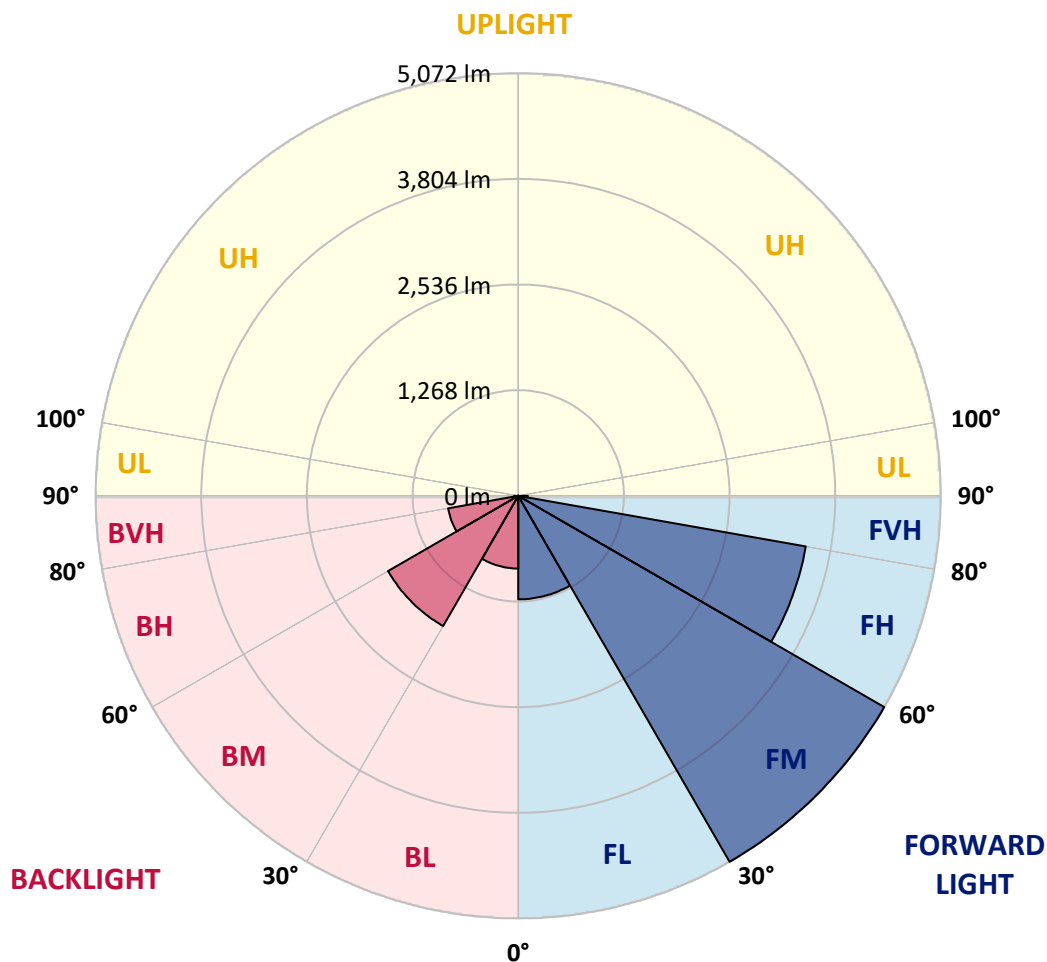
CATALOG NUMBER: ARCH4-70-750-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1242.7	9.2			
FM	(30°-60°)	5071.8	37.5			
FH	(60°-80°)	3504.1	25.9			G2/5000
FVH	(80°-90°)	112.3	0.8			G2/225
BL	(0°-30°)	872.7	6.5	B2/1000		
BM	(30°-60°)	1804.7	13.4	B2/2500		
BH	(60°-80°)	855.2	6.3	B2/1000		G2/1000
BVH	(80°-90°)	47.5	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: P842635

CATALOG NUMBER: ARCH4-70-750-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2438.4	2438.4	2438.4	2438.4	2438.4	2438.4	2438.4	2438.4	2438.4	2438.4	2438.4
2.5°	2528.1	2524.1	2522.1	2514.1	2496.2	2504.2	2486.2	2474.3	2472.3	2444.4	2428.5
5°	2631.7	2629.7	2625.7	2613.7	2585.8	2589.8	2560.0	2538.0	2532.1	2488.2	2454.4
7.5°	2719.3	2715.3	2713.3	2697.4	2667.5	2665.5	2629.7	2597.8	2587.8	2528.1	2476.3
10°	2787.1	2781.1	2785.1	2769.1	2737.3	2731.3	2685.5	2643.6	2633.7	2558.0	2486.2
12.5°	2844.8	2840.8	2846.8	2832.9	2807.0	2801.0	2755.2	2701.4	2689.4	2601.8	2508.2
15°	2908.6	2894.6	2906.6	2900.6	2882.7	2880.7	2838.9	2779.1	2763.2	2657.6	2542.0
17.5°	2942.4	2934.5	2948.4	2950.4	2942.4	2956.4	2916.6	2844.8	2830.9	2709.4	2571.9
20°	2966.4	2954.4	2970.3	2982.3	2988.3	3016.2	2984.3	2914.6	2898.6	2759.2	2599.8
22.5°	3048.0	3022.1	3024.1	3032.1	3036.1	3075.9	3056.0	2988.3	2972.3	2820.9	2633.7
25°	3253.2	3201.4	3167.6	3143.7	3115.8	3149.6	3137.7	3071.9	3058.0	2894.6	2675.5
27.5°	3572.0	3506.2	3438.5	3368.8	3259.2	3245.3	3225.3	3165.6	3149.6	2968.3	2717.3
30°	3934.6	3868.8	3789.1	3677.6	3472.4	3364.8	3319.0	3253.2	3235.3	3034.1	2757.2
32.5°	4295.1	4237.4	4157.7	4022.2	3729.4	3510.2	3412.6	3344.9	3326.9	3105.8	2805.0
35°	4576.0	4540.2	4488.4	4319.0	3984.4	3681.5	3548.1	3466.4	3446.5	3219.4	2892.6
37.5°	4803.1	4777.2	4733.4	4556.1	4169.6	3852.9	3703.5	3609.8	3587.9	3342.9	2986.3
40°	5137.8	5070.1	5034.2	4777.2	4331.0	4008.3	3878.8	3781.2	3757.3	3474.4	3062.0
42.5°	5422.7	5372.9	5329.1	4974.5	4484.4	4141.7	4044.1	3954.5	3922.6	3603.9	3143.7
45°	5470.5	5490.4	5468.5	5072.1	4727.4	4273.2	4211.5	4153.7	4123.8	3779.2	3267.2
47.5°	5472.5	5472.5	5343.0	5127.9	5028.3	4420.6	4390.8	4410.7	4378.8	4002.3	3414.6
50°	5329.1	5355.0	5287.2	5141.8	5107.9	4568.1	4609.9	4717.5	4685.6	4239.4	3574.0
52.5°	5032.2	5117.9	5115.9	5119.9	4992.4	4693.6	4841.0	5086.0	5032.2	4506.3	3743.3
55°	4508.3	4679.6	4833.0	4964.5	4892.8	4769.3	5123.9	5478.5	5422.7	4805.1	3914.6
57.5°	4060.1	4169.6	4360.9	4733.4	4775.3	4835.0	5388.8	5888.9	5839.1	5135.8	4093.9
60°	3548.1	3699.5	3890.7	4420.6	4631.8	4920.7	5679.7	6289.3	6241.5	5470.5	4267.2
62.5°	2761.2	2956.4	3338.9	3940.5	4422.6	4974.5	5908.8	6641.9	6620.0	5787.3	4422.6
65°	1924.4	2097.8	2633.7	3350.8	4089.9	4950.6	6092.1	6956.7	6936.8	6046.3	4532.2
67.5°	1123.6	1324.8	1930.4	2697.4	3502.3	4785.2	6151.9	7142.0	7142.0	6203.6	4562.1
70°	641.5	735.1	1273.0	1966.3	2685.5	4329.0	5984.5	7140.0	7173.8	6167.8	4438.6
72.5°	448.2	490.1	856.6	1322.8	1820.9	3502.3	5546.2	6795.3	6841.1	5829.1	4016.2
75°	348.6	378.5	603.6	902.5	1147.5	2378.7	4588.0	5729.5	5851.0	4968.5	3247.3
77.5°	265.0	286.9	352.6	563.8	735.1	1366.6	3028.1	3757.3	3765.2	3042.1	1741.2
80°	193.2	215.2	235.1	344.6	390.5	639.5	1143.5	1569.8	1526.0	1472.2	942.3
82.5°	115.5	137.5	143.4	187.3	191.2	272.9	400.4	506.0	486.1	647.5	442.3
85°	49.8	69.7	73.7	85.7	81.7	111.6	159.4	133.5	119.5	137.5	95.6
87.5°	12.0	19.9	19.9	21.9	17.9	27.9	29.9	21.9	19.9	23.9	23.9
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: P842635

CATALOG NUMBER: ARCH4-70-750-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2438.4	2438.4	2438.4	2438.4	2438.4	2438.4	2438.4	2438.4	2438.4	2438.4	2438.4
2.5°	2424.5	2418.5	2420.5	2386.6	2376.7	2366.7	2360.7	2356.7	2352.8	2358.7	2364.7
5°	2442.4	2428.5	2412.5	2362.7	2342.8	2320.9	2305.0	2291.0	2285.0	2285.0	2291.0
7.5°	2456.4	2432.5	2398.6	2332.8	2297.0	2267.1	2241.2	2223.3	2213.3	2213.3	2219.3
10°	2458.3	2424.5	2370.7	2291.0	2243.2	2199.4	2169.5	2149.6	2135.6	2135.6	2139.6
12.5°	2470.3	2424.5	2354.8	2259.1	2199.4	2145.6	2109.7	2079.8	2073.9	2073.9	2077.8
15°	2490.2	2434.4	2344.8	2231.2	2159.5	2097.8	2057.9	2026.0	2014.1	2022.1	2024.1
17.5°	2508.2	2440.4	2326.9	2195.4	2109.7	2042.0	1998.2	1970.3	1954.3	1972.3	1972.3
20°	2520.1	2440.4	2301.0	2149.6	2055.9	1980.2	1938.4	1904.5	1892.6	1914.5	1916.5
22.5°	2538.0	2438.4	2273.1	2103.7	1998.2	1918.5	1876.6	1850.7	1844.8	1868.7	1876.6
25°	2558.0	2442.4	2243.2	2051.9	1934.4	1856.7	1824.8	1812.9	1816.9	1846.8	1856.7
27.5°	2579.9	2450.4	2213.3	1994.2	1864.7	1795.0	1777.0	1783.0	1798.9	1836.8	1848.7
30°	2599.8	2452.4	2171.5	1926.4	1785.0	1719.3	1727.2	1753.1	1777.0	1814.9	1828.8
32.5°	2625.7	2454.4	2127.6	1852.7	1699.3	1651.5	1687.4	1729.2	1753.1	1789.0	1804.9
35°	2689.4	2488.2	2093.8	1781.0	1619.6	1593.7	1653.5	1707.3	1721.2	1753.1	1767.1
37.5°	2763.2	2544.0	2075.9	1707.3	1541.9	1536.0	1611.7	1665.5	1669.4	1689.4	1703.3
40°	2809.0	2567.9	2055.9	1645.5	1472.2	1476.2	1553.9	1595.7	1587.8	1601.7	1611.7
42.5°	2854.8	2575.9	2014.1	1593.7	1406.5	1410.5	1470.2	1500.1	1504.1	1534.0	1547.9
45°	2932.5	2597.8	1968.3	1545.9	1346.7	1332.8	1368.6	1408.5	1460.3	1518.0	1534.0
47.5°	3036.1	2643.6	1920.5	1488.2	1288.9	1243.1	1257.1	1326.8	1380.6	1434.4	1444.3
50°	3141.7	2689.4	1876.6	1418.4	1231.2	1147.5	1153.5	1217.2	1261.0	1302.9	1308.9
52.5°	3245.3	2729.3	1838.8	1352.7	1165.4	1033.9	1057.8	1123.6	1153.5	1173.4	1179.4
55°	3348.9	2763.2	1804.9	1296.9	1089.7	944.3	966.2	1028.0	1057.8	1067.8	1071.8
57.5°	3456.4	2803.0	1779.0	1249.1	1004.1	864.6	878.6	922.4	950.3	962.2	958.2
60°	3546.1	2836.9	1765.1	1199.3	918.4	790.9	786.9	826.8	866.6	878.6	874.6
62.5°	3615.8	2858.8	1743.2	1135.5	842.7	717.2	697.3	749.1	790.9	798.9	804.8
65°	3653.7	2860.8	1689.4	1053.9	765.0	637.5	623.6	675.3	701.2	709.2	709.2
67.5°	3647.7	2828.9	1583.8	944.3	693.3	565.8	553.8	585.7	623.6	629.5	623.6
70°	3524.2	2697.4	1414.4	828.7	607.6	502.0	480.1	512.0	547.8	525.9	516.0
72.5°	3173.5	2356.7	1165.4	701.2	512.0	422.3	412.4	444.3	446.2	450.2	440.3
75°	2504.2	1755.1	872.6	545.9	414.4	354.6	352.6	346.6	354.6	370.5	358.6
77.5°	1314.8	876.6	472.1	334.7	300.8	284.9	270.9	268.9	292.9	302.8	290.9
80°	713.2	492.1	270.9	201.2	183.3	185.3	203.2	199.2	225.1	231.1	221.1
82.5°	310.8	233.1	133.5	121.5	121.5	119.5	125.5	139.5	167.3	167.3	133.5
85°	67.7	57.8	51.8	59.8	67.7	67.7	67.7	67.7	47.8	25.9	17.9
87.5°	21.9	21.9	21.9	23.9	25.9	25.9	21.9	15.9	10.0	2.0	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)