

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: P841303

Luminaire Tested: **ARCH4-160-727-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841303
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: ARCH4-160-727-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1305mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25157 lumens
Efficiency: N/A
Efficacy: 156.5 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

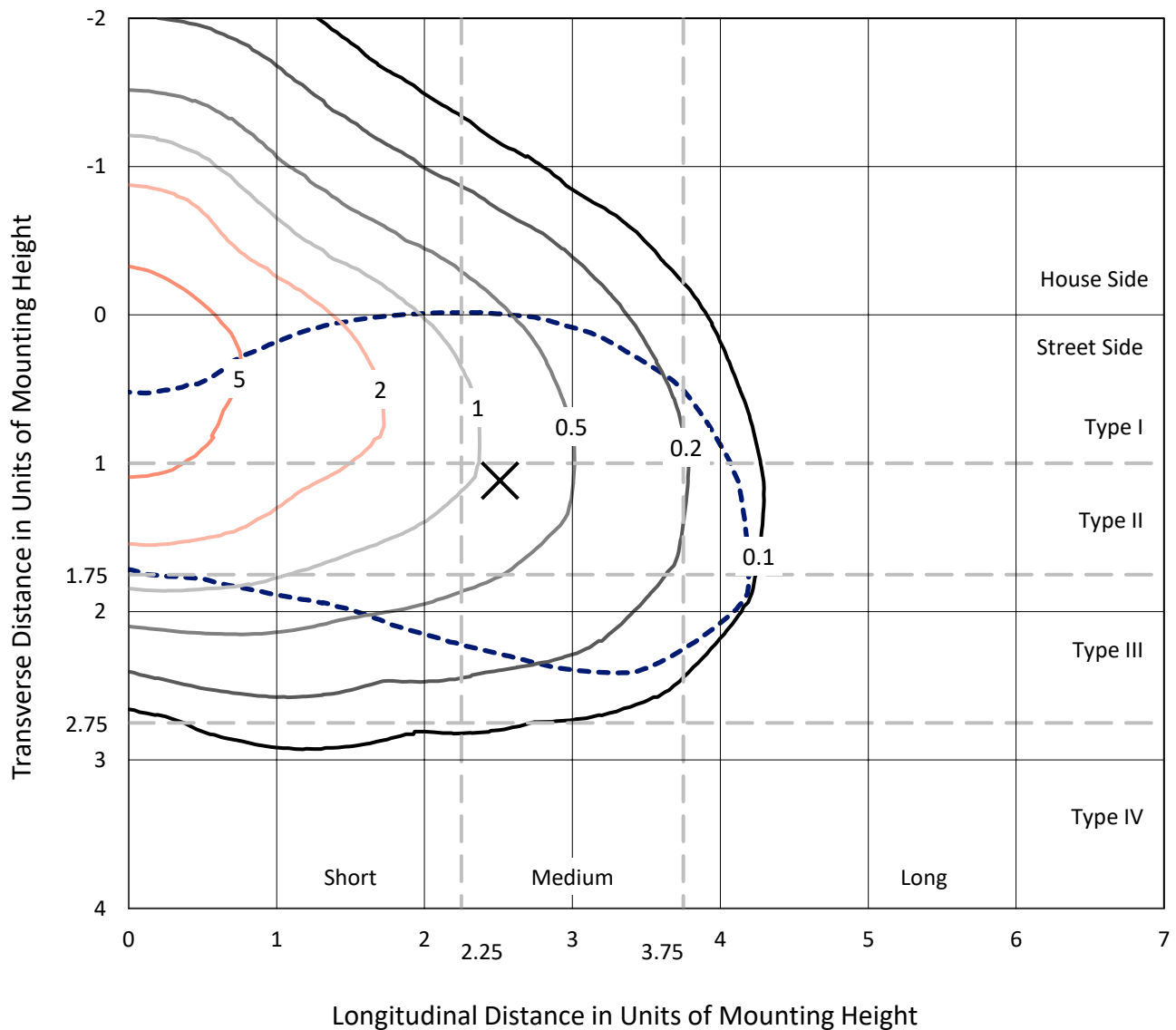
Input Watts (W): 160.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P841303
CATALOG NUMBER: ARCH4-160-727-U-T3

Iso-Footcandle Lines of Horizontal Illumination

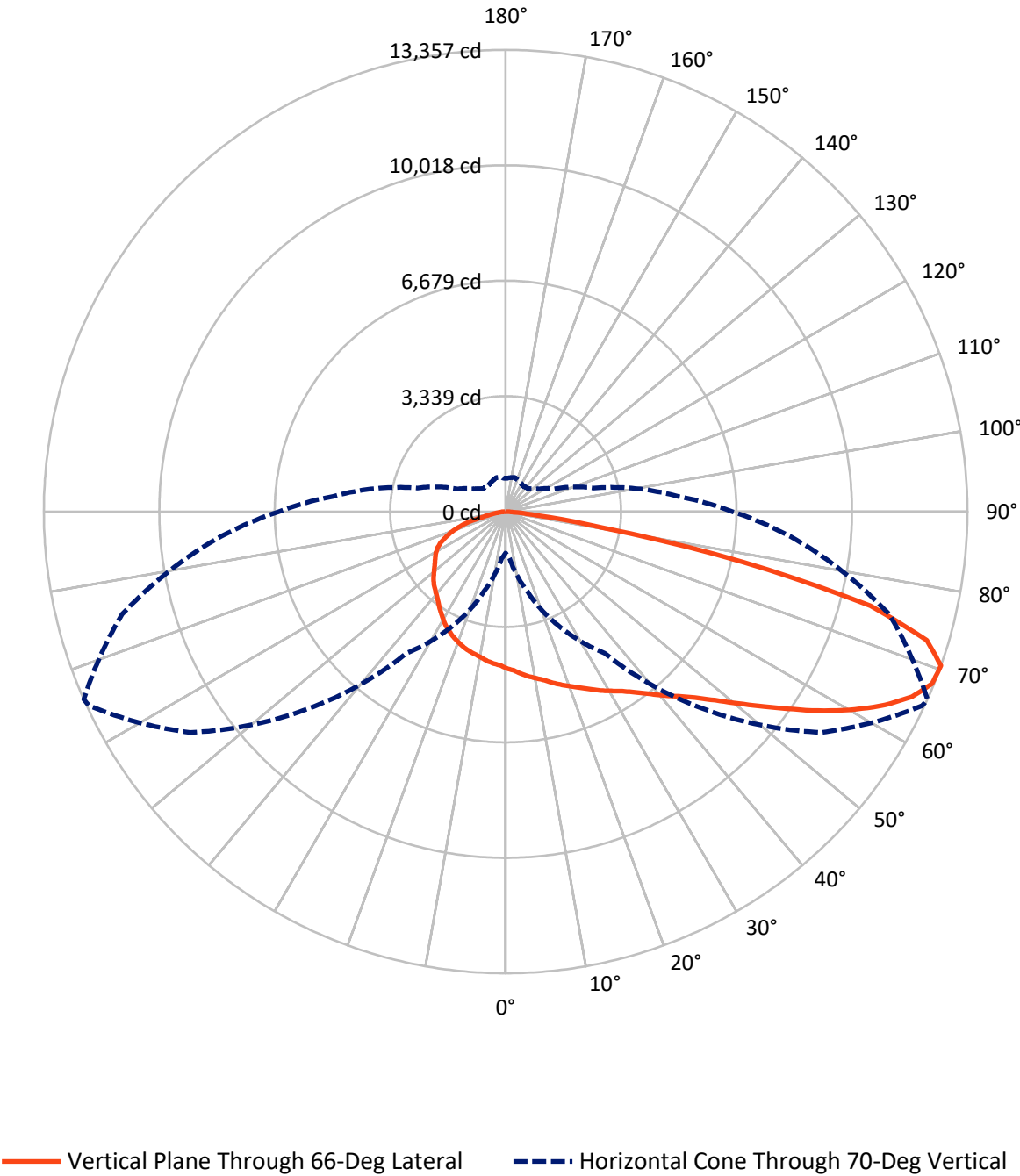
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 fc
Type III - Medium - N/A

REPORT NUMBER: P841303
CATALOG NUMBER: ARCH4-160-727-U-T3

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6666.0	0.0	6666.0
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	18491.0	0.0	18491.0
	% Fixture	73.5	0.0	73.5
Total	Lumens	25157.0	0.0	25157.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	436.3	1.7
10°-20°	1308.7	5.2
20°-30°	2193.7	8.7
30°-40°	3284.8	13.1
40°-50°	4391.7	17.5
50°-60°	5127.5	20.4
60°-70°	5098.5	20.3
70°-80°	3018.4	12.0
80°-90°	297.5	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°	25157.0	100.0
0°-180°	25157.0	100.0

Coefficient of Utilization



REPORT NUMBER: P841303

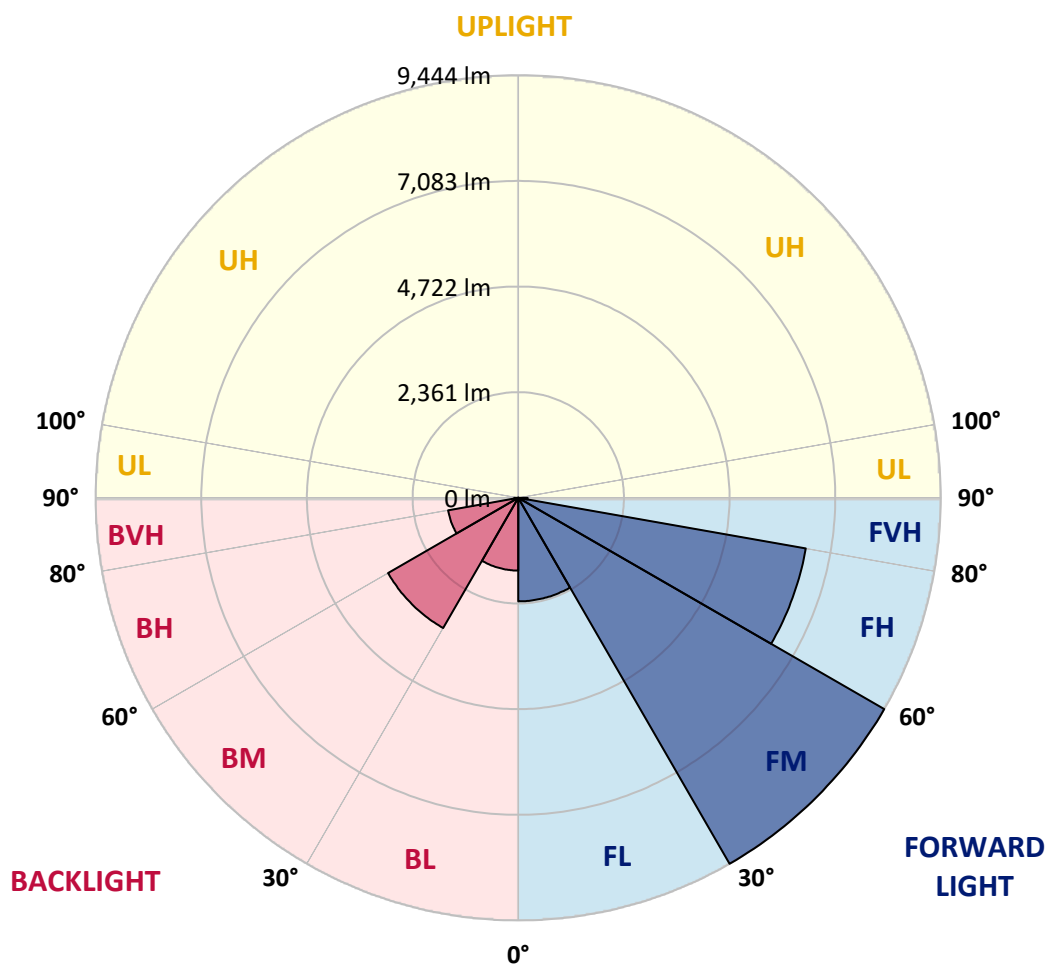
CATALOG NUMBER: ARCH4-160-727-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2313.8	9.2			
FM	(30°-60°)	9443.6	37.5			
FH	(60°-80°)	6524.5	25.9			G3/7500
FVH	(80°-90°)	209.1	0.8			G2/225
BL	(0°-30°)	1624.9	6.5	B3/2500		
BM	(30°-60°)	3360.4	13.4	B3/5000		
BH	(60°-80°)	1592.4	6.3	B3/2500		G3/2500
BVH	(80°-90°)	88.4	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 III Medium



REPORT NUMBER: P841303

CATALOG NUMBER: ARCH4-160-727-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3
2.5°	4707.2	4699.8	4696.1	4681.2	4647.8	4662.7	4629.3	4607.0	4603.3	4551.4	4521.7
5°	4900.1	4896.4	4888.9	4866.7	4814.8	4822.2	4766.5	4725.7	4714.6	4633.0	4569.9
7.5°	5063.3	5055.9	5052.2	5022.5	4966.8	4963.1	4896.4	4837.0	4818.5	4707.2	4610.7
10°	5189.4	5178.3	5185.7	5156.0	5096.7	5085.5	5000.2	4922.3	4903.8	4762.8	4629.3
12.5°	5297.0	5289.6	5300.7	5274.7	5226.5	5215.4	5130.1	5029.9	5007.6	4844.4	4670.1
15°	5415.7	5389.7	5412.0	5400.8	5367.5	5363.7	5285.8	5174.6	5144.9	4948.3	4733.2
17.5°	5478.7	5463.9	5489.9	5493.6	5478.7	5504.7	5430.5	5297.0	5271.0	5044.7	4788.8
20°	5523.2	5501.0	5530.7	5552.9	5564.1	5616.0	5556.6	5426.8	5397.1	5137.5	4840.7
22.5°	5675.3	5627.1	5630.8	5645.7	5653.1	5727.3	5690.2	5564.1	5534.4	5252.5	4903.8
25°	6057.4	5961.0	5897.9	5853.4	5801.5	5864.5	5842.3	5719.8	5693.9	5389.7	4981.7
27.5°	6650.9	6528.5	6402.4	6272.5	6068.5	6042.6	6005.5	5894.2	5864.5	5527.0	5059.6
30°	7326.0	7203.6	7055.2	6847.5	6465.4	6265.1	6179.8	6057.4	6024.0	5649.4	5133.8
32.5°	7997.4	7889.8	7741.4	7489.2	6943.9	6535.9	6354.1	6228.0	6194.6	5782.9	5222.8
35°	8520.4	8453.6	8357.2	8041.9	7418.7	6854.9	6606.4	6454.3	6417.2	5994.3	5386.0
37.5°	8943.3	8895.1	8813.5	8483.3	7763.7	7173.9	6895.7	6721.4	6680.6	6224.3	5560.3
40°	9566.5	9440.3	9373.6	8895.1	8064.2	7463.2	7222.1	7040.4	6995.9	6469.1	5701.3
42.5°	10096.9	10004.2	9922.6	9262.3	8349.8	7711.8	7530.0	7363.1	7303.7	6710.2	5853.4
45°	10185.9	10223.0	10182.2	9444.0	8802.3	7956.6	7841.6	7734.0	7678.4	7036.7	6083.4
47.5°	10189.6	10189.6	9948.5	9547.9	9362.4	8231.1	8175.4	8212.5	8153.2	7452.1	6357.9
50°	9922.6	9970.8	9844.7	9573.9	9510.8	8505.6	8583.5	8783.8	8724.4	7893.5	6654.6
52.5°	9369.9	9529.4	9525.7	9533.1	9295.7	8739.3	9013.8	9470.0	9369.9	8390.6	6969.9
55°	8394.3	8713.3	8998.9	9243.7	9110.2	8880.2	9540.5	10200.8	10096.9	8947.0	7288.9
57.5°	7559.7	7763.7	8119.8	8813.5	8891.4	9002.6	10033.8	10964.9	10872.2	9562.7	7622.7
60°	6606.4	6888.3	7244.4	8231.1	8624.3	9162.1	10575.4	11710.5	11621.4	10185.9	7945.5
62.5°	5141.2	5504.7	6216.9	7337.1	8234.8	9262.3	11002.0	12367.0	12326.2	10775.7	8234.8
65°	3583.2	3906.0	4903.8	6239.2	7615.3	9217.8	11343.2	12953.1	12916.0	11257.9	8438.8
67.5°	2092.1	2466.7	3594.4	5022.5	6521.1	8909.9	11454.5	13298.1	13298.1	11551.0	8494.5
70°	1194.4	1368.8	2370.3	3661.1	5000.2	8060.5	11142.9	13294.4	13357.4	11484.2	8264.5
72.5°	834.6	912.5	1595.0	2463.0	3390.4	6521.1	10326.9	12652.7	12738.0	10853.6	7478.1
75°	649.1	704.8	1123.9	1680.3	2136.6	4429.0	8542.7	10668.1	10894.4	9251.2	6046.3
77.5°	493.3	534.1	656.6	1049.8	1368.8	2544.6	5638.2	6995.9	7010.7	5664.2	3242.0
80°	359.8	400.6	437.7	641.7	727.0	1190.7	2129.2	2923.0	2841.4	2741.2	1754.5
82.5°	215.1	255.9	267.1	348.7	356.1	508.2	745.6	942.2	905.1	1205.5	823.5
85°	92.7	129.8	137.2	159.5	152.1	207.7	296.7	248.5	222.6	255.9	178.0
87.5°	22.3	37.1	37.1	40.8	33.4	51.9	55.6	40.8	37.1	44.5	44.5
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: P841303

CATALOG NUMBER: ARCH4-160-727-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3
2.5°	4514.3	4503.2	4506.9	4443.8	4425.3	4406.7	4395.6	4388.2	4380.8	4391.9	4403.0
5°	4547.7	4521.7	4492.0	4399.3	4362.2	4321.4	4291.7	4265.8	4254.6	4254.6	4265.8
7.5°	4573.6	4529.1	4466.1	4343.7	4276.9	4221.3	4173.0	4139.7	4121.1	4121.1	4132.2
10°	4577.4	4514.3	4414.1	4265.8	4176.7	4095.1	4039.5	4002.4	3976.4	3976.4	3983.9
12.5°	4599.6	4514.3	4384.5	4206.4	4095.1	3995.0	3928.2	3872.6	3861.5	3861.5	3868.9
15°	4636.7	4532.8	4365.9	4154.5	4021.0	3906.0	3831.8	3772.4	3750.2	3765.0	3768.7
17.5°	4670.1	4544.0	4332.5	4087.7	3928.2	3802.1	3720.5	3668.6	3638.9	3672.3	3672.3
20°	4692.3	4544.0	4284.3	4002.4	3828.1	3687.1	3609.2	3546.2	3523.9	3564.7	3568.4
22.5°	4725.7	4540.3	4232.4	3917.1	3720.5	3572.1	3494.2	3446.0	3434.9	3479.4	3494.2
25°	4762.8	4547.7	4176.7	3820.6	3601.8	3457.1	3397.8	3375.5	3382.9	3438.6	3457.1
27.5°	4803.6	4562.5	4121.1	3713.1	3472.0	3342.1	3308.8	3319.9	3349.6	3420.0	3442.3
30°	4840.7	4566.2	4043.2	3587.0	3323.6	3201.2	3216.0	3264.2	3308.8	3379.2	3405.2
32.5°	4888.9	4569.9	3961.6	3449.7	3164.1	3075.1	3141.8	3219.7	3264.2	3331.0	3360.7
35°	5007.6	4633.0	3898.5	3316.2	3015.7	2967.5	3078.8	3178.9	3204.9	3264.2	3290.2
37.5°	5144.9	4736.9	3865.2	3178.9	2871.1	2859.9	3000.9	3101.0	3108.4	3145.5	3171.5
40°	5230.2	4781.4	3828.1	3063.9	2741.2	2748.6	2893.3	2971.2	2956.4	2982.3	3000.9
42.5°	5315.5	4796.2	3750.2	2967.5	2618.8	2626.2	2737.5	2793.2	2800.6	2856.2	2882.2
45°	5460.2	4837.0	3664.9	2878.5	2507.5	2481.6	2548.3	2622.5	2719.0	2826.5	2856.2
47.5°	5653.1	4922.3	3575.8	2770.9	2400.0	2314.6	2340.6	2470.4	2570.6	2670.7	2689.3
50°	5849.7	5007.6	3494.2	2641.1	2292.4	2136.6	2147.7	2266.4	2348.0	2425.9	2437.1
52.5°	6042.6	5081.8	3423.7	2518.7	2170.0	1925.2	1969.7	2092.1	2147.7	2184.8	2195.9
55°	6235.4	5144.9	3360.7	2414.8	2029.0	1758.2	1799.0	1914.0	1969.7	1988.2	1995.6
57.5°	6435.8	5219.1	3312.5	2325.8	1869.5	1609.9	1635.8	1717.4	1769.4	1791.6	1784.2
60°	6602.7	5282.1	3286.5	2233.0	1710.0	1472.6	1465.2	1539.4	1613.6	1635.8	1628.4
62.5°	6732.5	5322.9	3245.7	2114.3	1569.1	1335.4	1298.3	1394.7	1472.6	1487.5	1498.6
65°	6803.0	5326.7	3145.5	1962.3	1424.4	1187.0	1161.0	1257.5	1305.7	1320.5	1320.5
67.5°	6791.9	5267.3	2948.9	1758.2	1290.9	1053.5	1031.2	1090.6	1161.0	1172.2	1161.0
70°	6561.9	5022.5	2633.7	1543.1	1131.4	934.8	894.0	953.3	1020.1	979.3	960.7
72.5°	5909.0	4388.2	2170.0	1305.7	953.3	786.4	767.8	827.2	830.9	838.3	819.8
75°	4662.7	3268.0	1624.7	1016.4	771.5	660.3	656.6	645.4	660.3	689.9	667.7
77.5°	2448.2	1632.1	879.1	623.2	560.1	530.4	504.5	500.8	545.3	563.8	541.6
80°	1328.0	916.2	504.5	374.6	341.3	345.0	378.4	370.9	419.2	430.3	411.7
82.5°	578.7	434.0	248.5	226.3	226.3	222.6	233.7	259.7	311.6	311.6	248.5
85°	126.1	107.6	96.4	111.3	126.1	126.1	126.1	126.1	89.0	48.2	33.4
87.5°	40.8	40.8	40.8	44.5	48.2	48.2	40.8	29.7	18.5	3.7	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)