

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: P841438

Luminaire Tested: **ARCH4-180-722-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841438
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: ARCH4-180-722-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2200K, 1455mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25022 lumens
Efficiency: N/A
Efficacy: 139.0 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): 180
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

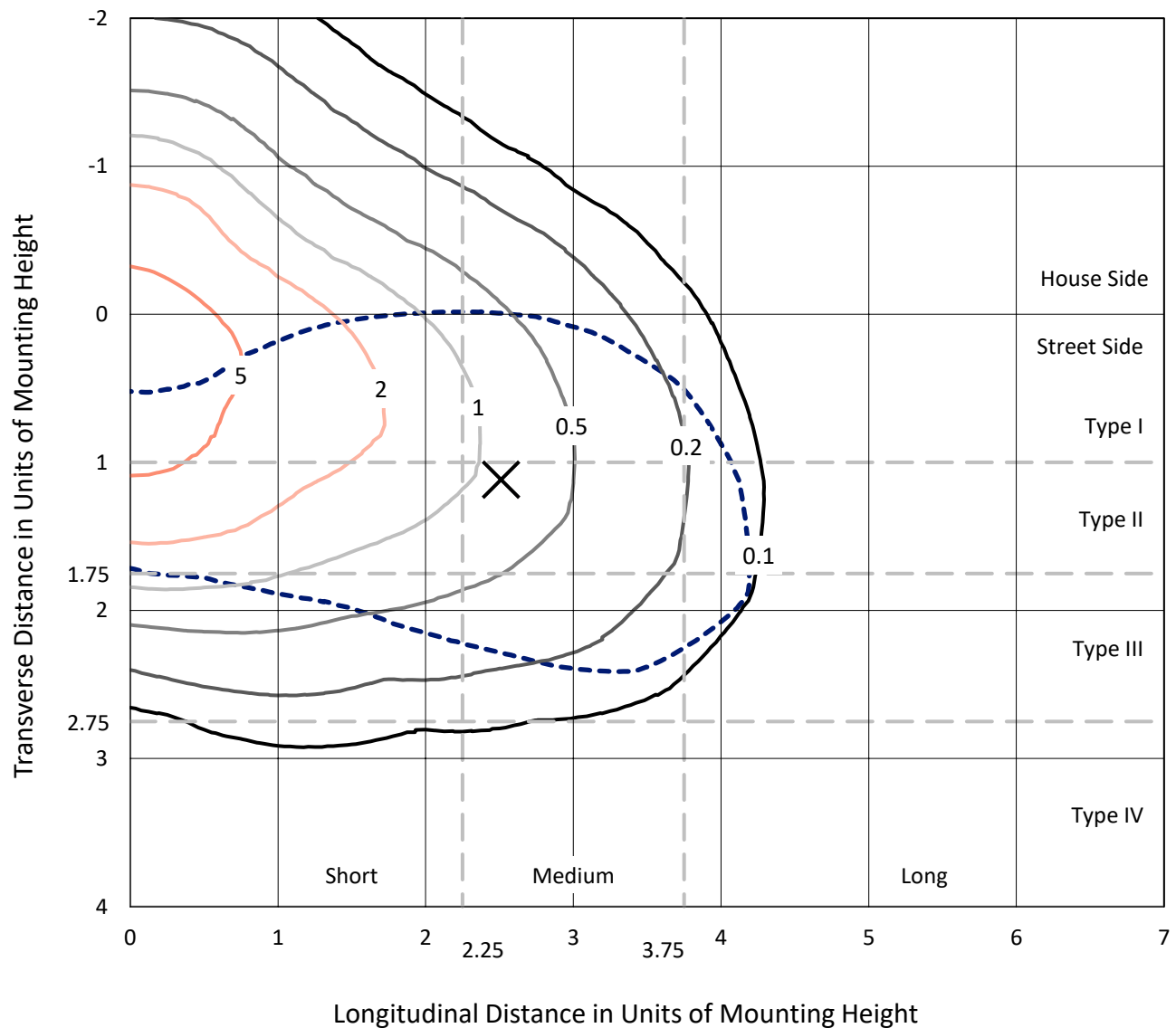


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Iso-Footcandle Lines of Horizontal Illumination

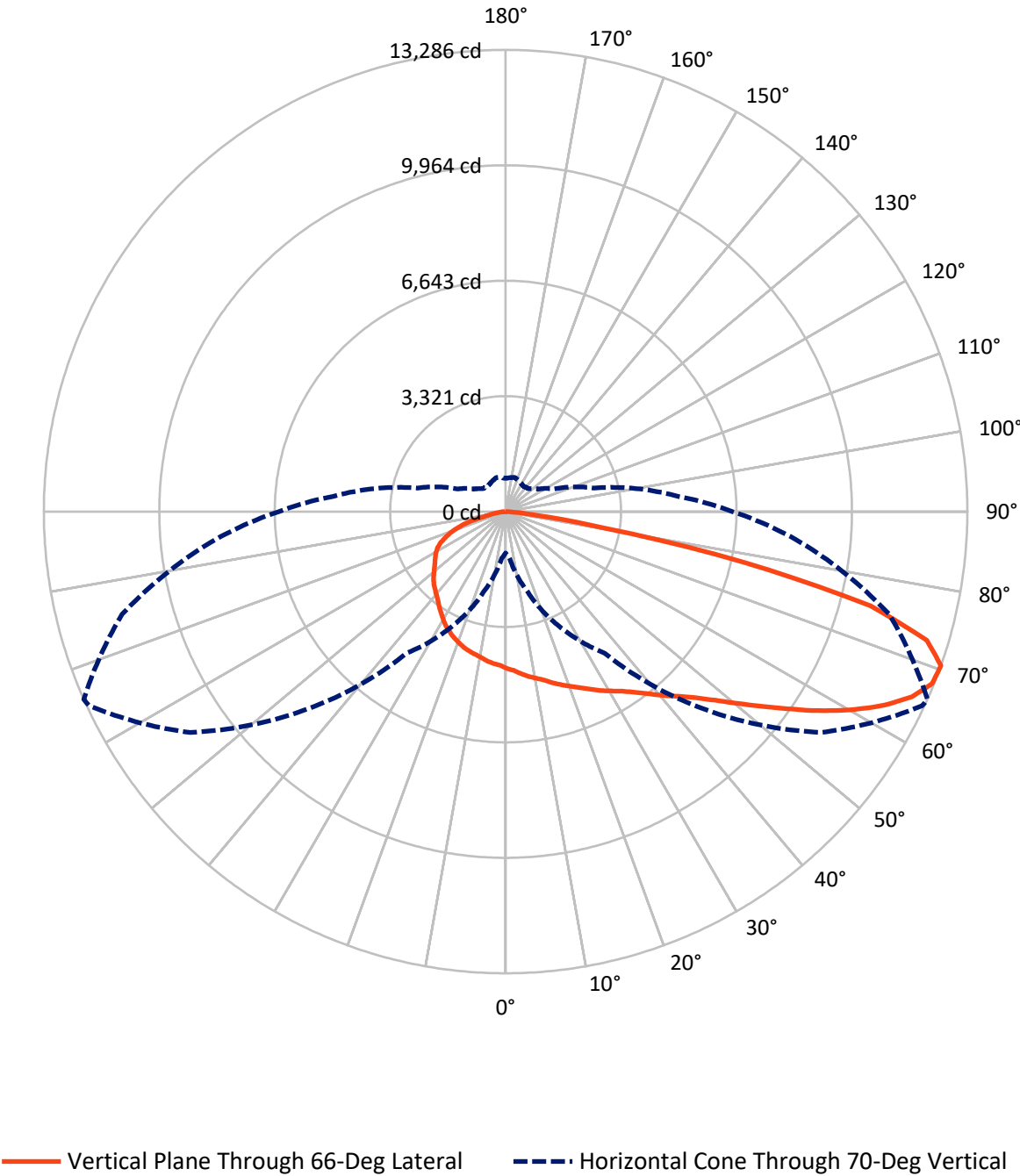
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.8 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6630.3	0.0	6630.3
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	18391.7	0.0	18391.7
	% Fixture	73.5	0.0	73.5
Total	Lumens	25022.0	0.0	25022.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	433.9	1.7
10°-20°	1301.6	5.2
20°-30°	2182.0	8.7
30°-40°	3267.1	13.1
40°-50°	4368.2	17.5
50°-60°	5100.0	20.4
60°-70°	5071.1	20.3
70°-80°	3002.2	12.0
80°-90°	295.9	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°	25022.0	100.0
0°-180°	25022.0	100.0

Coefficient of Utilization



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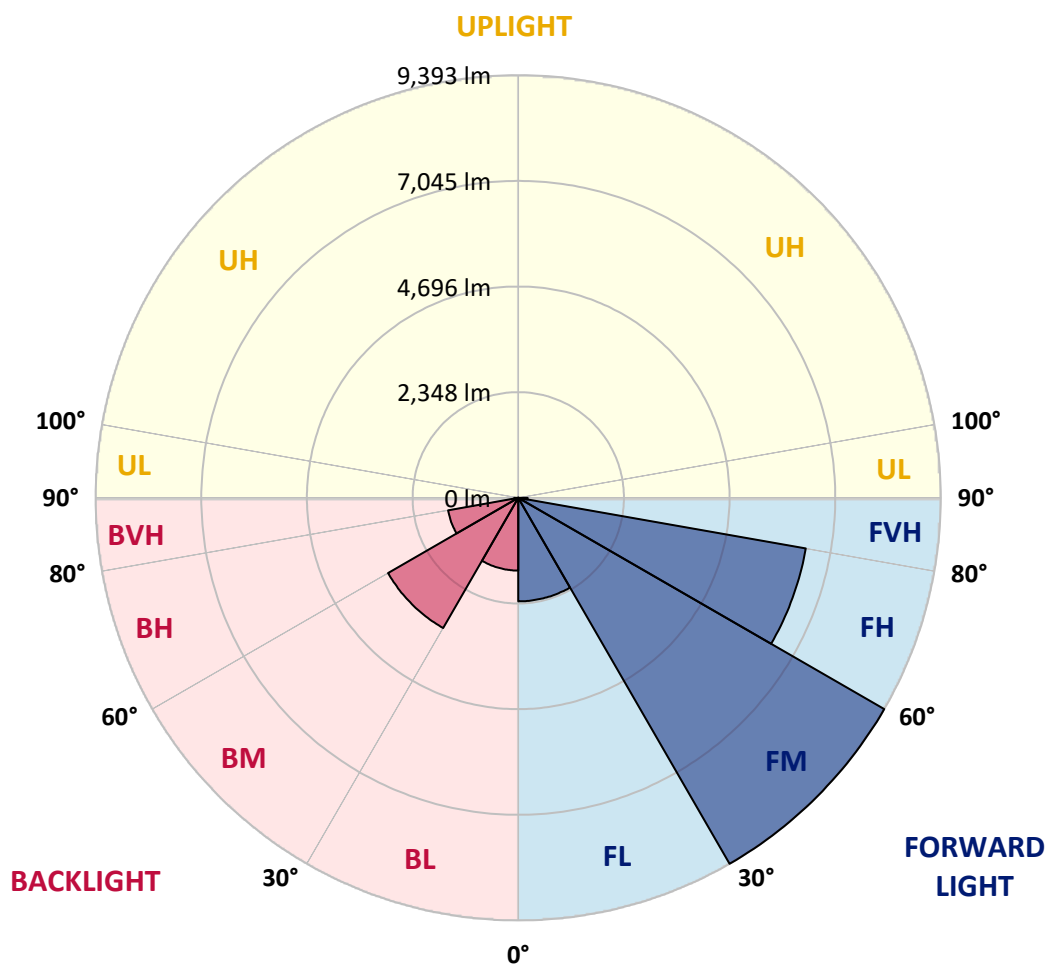
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2301.4	9.2			
FM	(30°-60°)	9392.9	37.5			
FH	(60°-80°)	6489.5	25.9			G3/7500
FVH	(80°-90°)	208.0	0.8			G2/225
BL	(0°-30°)	1616.2	6.5	B3/2500		
BM	(30°-60°)	3342.3	13.4	B3/5000		
BH	(60°-80°)	1583.8	6.3	B3/2500		G3/2500
BVH	(80°-90°)	87.9	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4515.9	4515.9	4515.9	4515.9	4515.9	4515.9	4515.9	4515.9	4515.9	4515.9	4515.9
2.5°	4681.9	4674.5	4670.9	4656.1	4622.9	4637.7	4604.4	4582.3	4578.6	4527.0	4497.5
5°	4873.8	4870.1	4862.7	4840.6	4788.9	4796.3	4741.0	4700.4	4689.3	4608.1	4545.4
7.5°	5036.1	5028.7	5025.0	4995.5	4940.2	4936.5	4870.1	4811.1	4792.6	4681.9	4586.0
10°	5161.6	5150.5	5157.9	5128.4	5069.3	5058.3	4973.4	4895.9	4877.5	4737.3	4604.4
12.5°	5268.6	5261.2	5272.2	5246.4	5198.5	5187.4	5102.5	5002.9	4980.8	4818.4	4645.0
15°	5386.6	5360.8	5382.9	5371.9	5338.7	5335.0	5257.5	5146.8	5117.3	4921.7	4707.8
17.5°	5449.3	5434.6	5460.4	5464.1	5449.3	5475.2	5401.4	5268.6	5242.7	5017.7	4763.1
20°	5493.6	5471.5	5501.0	5523.1	5534.2	5585.8	5526.8	5397.7	5368.2	5109.9	4814.7
22.5°	5644.9	5596.9	5600.6	5615.4	5622.7	5696.5	5659.6	5534.2	5504.7	5224.3	4877.5
25°	6024.9	5929.0	5866.2	5822.0	5770.3	5833.0	5810.9	5689.2	5663.3	5360.8	4954.9
27.5°	6615.2	6493.5	6368.0	6238.9	6036.0	6010.1	5973.2	5862.6	5833.0	5497.3	5032.4
30°	7286.7	7164.9	7017.4	6810.7	6430.7	6231.5	6146.6	6024.9	5991.7	5619.1	5106.2
32.5°	7954.5	7847.5	7699.9	7449.0	6906.7	6500.8	6320.0	6194.6	6161.4	5751.9	5194.8
35°	8474.7	8408.3	8312.4	7998.8	7378.9	6818.1	6570.9	6419.7	6382.8	5962.2	5357.1
37.5°	8895.3	8847.3	8766.2	8437.8	7722.0	7135.4	6858.7	6685.3	6644.7	6190.9	5530.5
40°	9515.1	9389.7	9323.3	8847.3	8020.9	7423.2	7183.4	7002.6	6958.3	6434.4	5670.7
42.5°	10042.7	9950.5	9869.3	9212.6	8305.0	7670.4	7489.6	7323.6	7264.6	6674.2	5822.0
45°	10131.3	10168.2	10127.6	9393.4	8755.1	7913.9	7799.5	7692.5	7637.2	6998.9	6050.7
47.5°	10135.0	10135.0	9895.1	9496.7	9312.2	8186.9	8131.6	8168.5	8109.4	7412.1	6323.7
50°	9869.3	9917.3	9791.8	9522.5	9459.8	8459.9	8537.4	8736.6	8677.6	7851.2	6618.9
52.5°	9319.6	9478.2	9474.5	9481.9	9245.8	8692.4	8965.4	9419.2	9319.6	8345.6	6932.5
55°	8349.3	8666.5	8950.6	9194.1	9061.3	8832.6	9489.3	10146.0	10042.7	8899.0	7249.8
57.5°	7519.1	7722.0	8076.2	8766.2	8843.6	8954.3	9980.0	10906.0	10813.8	9511.4	7581.8
60°	6570.9	6851.3	7205.5	8186.9	8578.0	9113.0	10518.7	11647.6	11559.1	10131.3	7902.8
62.5°	5113.6	5475.2	6183.5	7297.8	8190.6	9212.6	10942.9	12300.7	12260.1	10717.9	8190.6
65°	3564.0	3885.0	4877.5	6205.7	7574.5	9168.3	11282.4	12883.6	12846.7	11197.5	8393.5
67.5°	2080.9	2453.5	3575.1	4995.5	6486.1	8862.1	11393.1	13226.7	13226.7	11489.0	8448.9
70°	1188.0	1361.4	2357.6	3641.5	4973.4	8017.2	11083.1	13223.0	13285.8	11422.6	8220.1
72.5°	830.1	907.6	1586.5	2449.8	3372.2	6486.1	10271.5	12584.8	12669.6	10795.4	7438.0
75°	645.7	701.0	1117.9	1671.3	2125.1	4405.2	8496.8	10610.9	10835.9	9201.5	6013.8
77.5°	490.7	531.3	653.0	1044.1	1361.4	2531.0	5608.0	6958.3	6973.1	5633.8	3224.6
80°	357.9	398.5	435.4	638.3	723.1	1184.3	2117.8	2907.3	2826.1	2726.5	1745.1
82.5°	214.0	254.6	265.6	346.8	354.2	505.5	741.6	937.1	900.2	1199.1	819.1
85°	92.2	129.1	136.5	158.6	151.3	206.6	295.2	247.2	221.4	254.6	177.1
87.5°	22.1	36.9	36.9	40.6	33.2	51.7	55.3	40.6	36.9	44.3	44.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4515.9	4515.9	4515.9	4515.9	4515.9	4515.9	4515.9	4515.9	4515.9	4515.9	4515.9
2.5°	4490.1	4479.0	4482.7	4420.0	4401.5	4383.1	4372.0	4364.6	4357.3	4368.3	4379.4
5°	4523.3	4497.5	4467.9	4375.7	4338.8	4298.2	4268.7	4242.9	4231.8	4231.8	4242.9
7.5°	4549.1	4504.8	4442.1	4320.4	4253.9	4198.6	4150.6	4117.4	4099.0	4099.0	4110.1
10°	4552.8	4490.1	4390.5	4242.9	4154.3	4073.2	4017.8	3980.9	3955.1	3955.1	3962.5
12.5°	4574.9	4490.1	4360.9	4183.8	4073.2	3973.6	3907.1	3851.8	3840.7	3840.7	3848.1
15°	4611.8	4508.5	4342.5	4132.2	3999.4	3885.0	3811.2	3752.2	3730.0	3744.8	3748.5
17.5°	4645.0	4519.6	4309.3	4065.8	3907.1	3781.7	3700.5	3648.9	3619.4	3652.6	3652.6
20°	4667.2	4519.6	4261.3	3980.9	3807.5	3667.3	3589.8	3527.1	3505.0	3545.6	3549.3
22.5°	4700.4	4515.9	4209.7	3896.1	3700.5	3553.0	3475.5	3427.5	3416.4	3460.7	3475.5
25°	4737.3	4523.3	4154.3	3800.1	3582.5	3438.6	3379.5	3357.4	3364.8	3420.1	3438.6
27.5°	4777.9	4538.0	4099.0	3693.2	3453.3	3324.2	3291.0	3302.1	3331.6	3401.7	3423.8
30°	4814.7	4541.7	4021.5	3567.7	3305.8	3184.0	3198.8	3246.7	3291.0	3361.1	3386.9
32.5°	4862.7	4545.4	3940.3	3431.2	3147.1	3058.6	3125.0	3202.5	3246.7	3313.1	3342.7
35°	4980.8	4608.1	3877.6	3298.4	2999.5	2951.6	3062.3	3161.9	3187.7	3246.7	3272.6
37.5°	5117.3	4711.4	3844.4	3161.9	2855.6	2844.6	2984.8	3084.4	3091.8	3128.7	3154.5
40°	5202.1	4755.7	3807.5	3047.5	2726.5	2733.9	2877.8	2955.3	2940.5	2966.3	2984.8
42.5°	5287.0	4770.5	3730.0	2951.6	2604.8	2612.1	2722.8	2778.2	2785.5	2840.9	2866.7
45°	5430.9	4811.1	3645.2	2863.0	2494.1	2468.2	2534.7	2608.4	2704.4	2811.4	2840.9
47.5°	5622.7	4895.9	3556.6	2756.0	2387.1	2302.2	2328.1	2457.2	2556.8	2656.4	2674.9
50°	5818.3	4980.8	3475.5	2626.9	2280.1	2125.1	2136.2	2254.3	2335.4	2412.9	2424.0
52.5°	6010.1	5054.6	3405.4	2505.1	2158.3	1914.8	1959.1	2080.9	2136.2	2173.1	2184.2
55°	6202.0	5117.3	3342.7	2401.8	2018.1	1748.8	1789.4	1903.8	1959.1	1977.6	1984.9
57.5°	6401.2	5191.1	3294.7	2313.3	1859.5	1601.2	1627.1	1708.2	1759.9	1782.0	1774.6
60°	6567.2	5253.8	3268.9	2221.1	1700.8	1464.7	1457.3	1531.1	1604.9	1627.1	1619.7
62.5°	6696.4	5294.4	3228.3	2103.0	1560.6	1328.2	1291.3	1387.2	1464.7	1479.5	1490.5
65°	6766.5	5298.1	3128.7	1951.7	1416.8	1180.6	1154.8	1250.7	1298.7	1313.4	1313.4
67.5°	6755.4	5239.0	2933.1	1748.8	1283.9	1047.8	1025.7	1084.7	1154.8	1165.9	1154.8
70°	6526.7	4995.5	2619.5	1534.8	1125.3	929.7	889.2	948.2	1014.6	974.0	955.6
72.5°	5877.3	4364.6	2158.3	1298.7	948.2	782.2	763.7	822.7	826.4	833.8	815.4
75°	4637.7	3250.4	1616.0	1010.9	767.4	656.7	653.0	642.0	656.7	686.2	664.1
77.5°	2435.0	1623.4	874.4	619.8	557.1	527.6	501.8	498.1	542.4	560.8	538.7
80°	1320.8	911.3	501.8	372.6	339.4	343.1	376.3	368.9	416.9	428.0	409.5
82.5°	575.6	431.7	247.2	225.1	225.1	221.4	232.4	258.3	309.9	309.9	247.2
85°	125.4	107.0	95.9	110.7	125.4	125.4	125.4	125.4	88.5	48.0	33.2
87.5°	40.6	40.6	40.6	44.3	48.0	48.0	40.6	29.5	18.4	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)