

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: P841336

Luminaire Tested: **ARCH4-160-750-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841336
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-160-750-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1305mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19102 lumens
Efficiency: N/A
Efficacy: 118.9 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

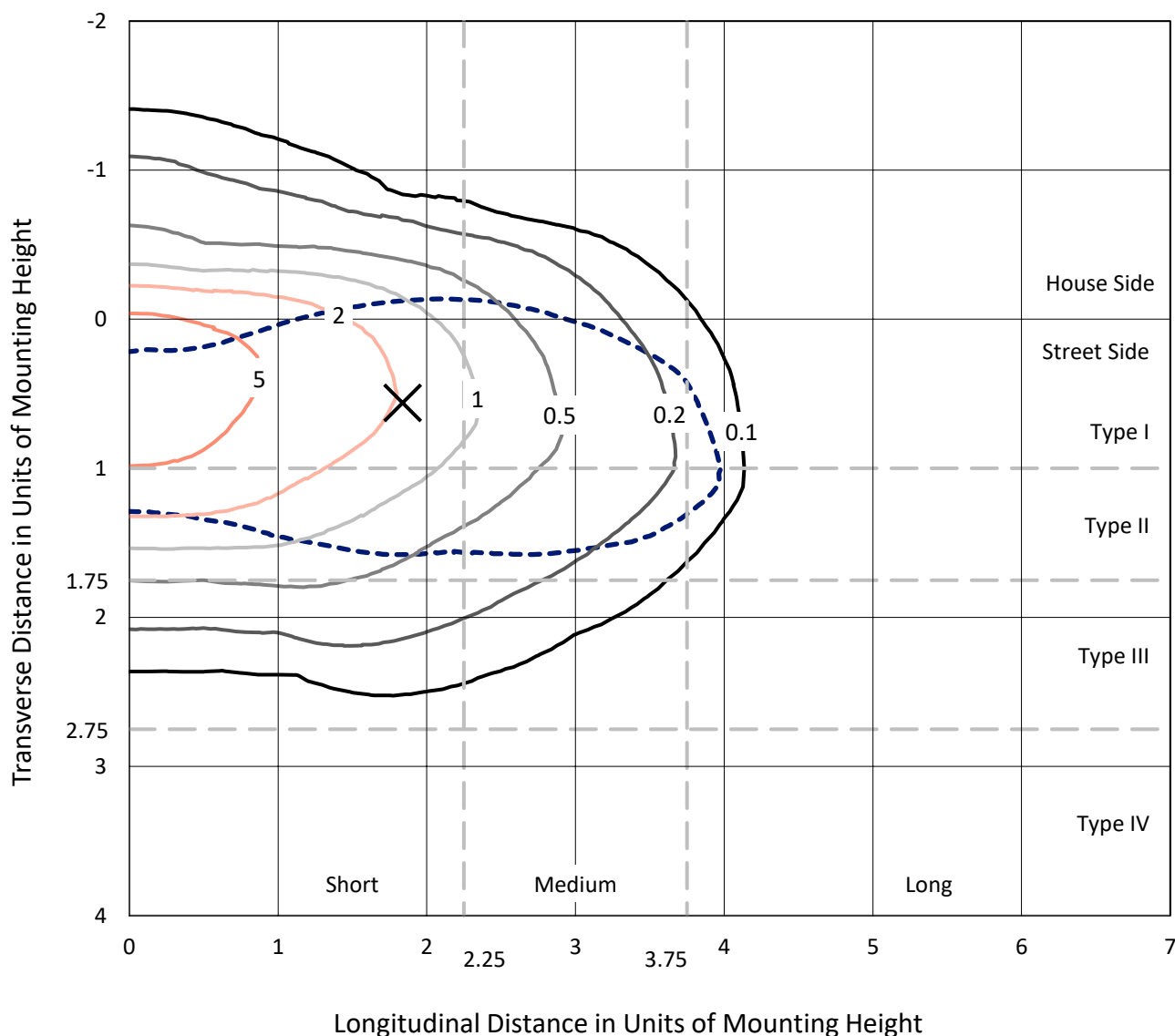
Input Watts (W): 160.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

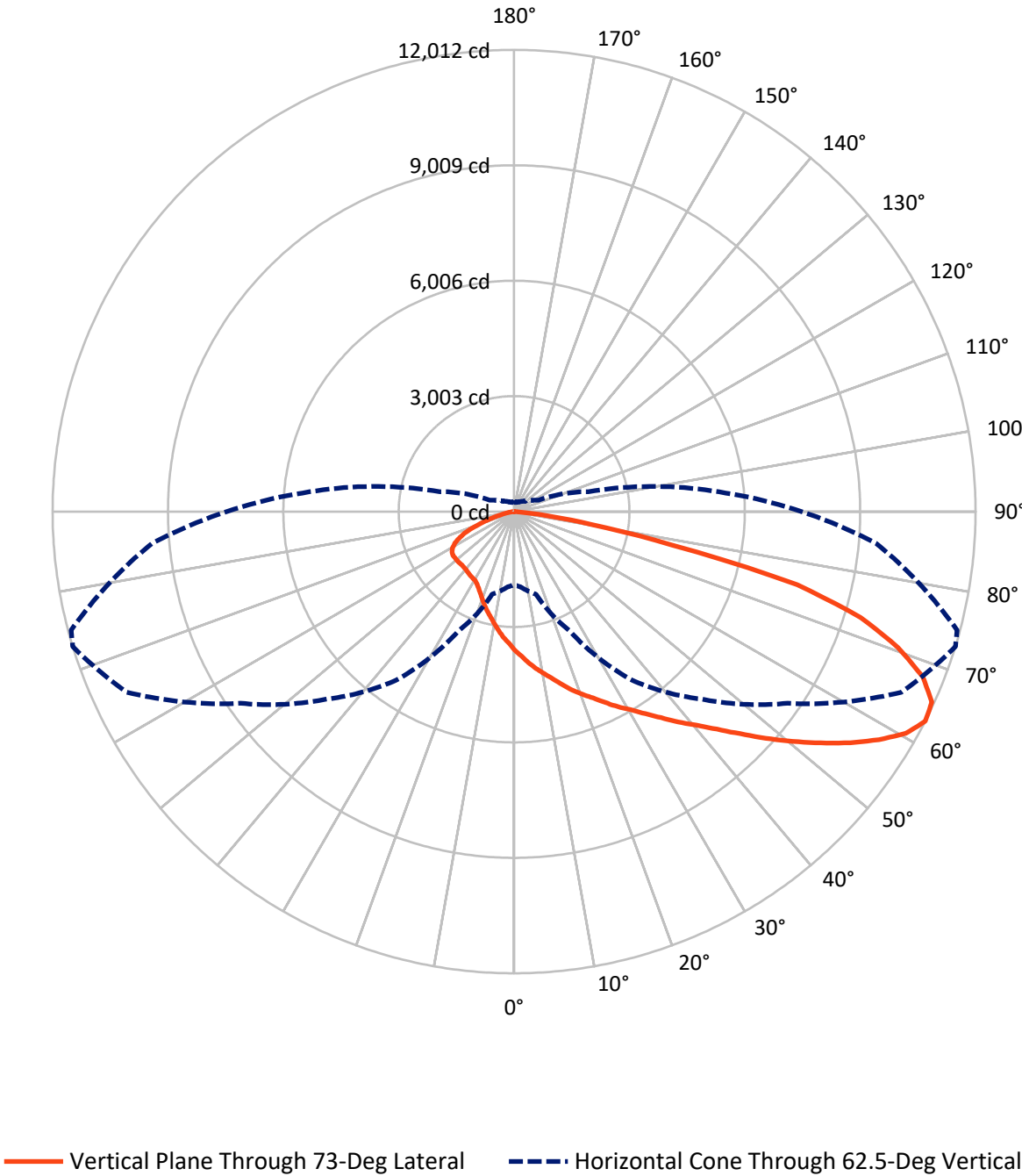
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.1 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2961.1	0.0	2961.1
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	16140.9	0.0	16140.9
	% Fixture	84.5	0.0	84.5
Total	Lumens	19102.0	0.0	19102.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	349.4	1.8
10°-20°	1054.4	5.5
20°-30°	1755.1	9.2
30°-40°	2648.1	13.9
40°-50°	3701.4	19.4
50°-60°	4088.5	21.4
60°-70°	3561.6	18.6
70°-80°	1799.1	9.4
80°-90°	144.4	0.8
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°	19102.0	100.0
0°-180°	19102.0	100.0

Coefficient of Utilization



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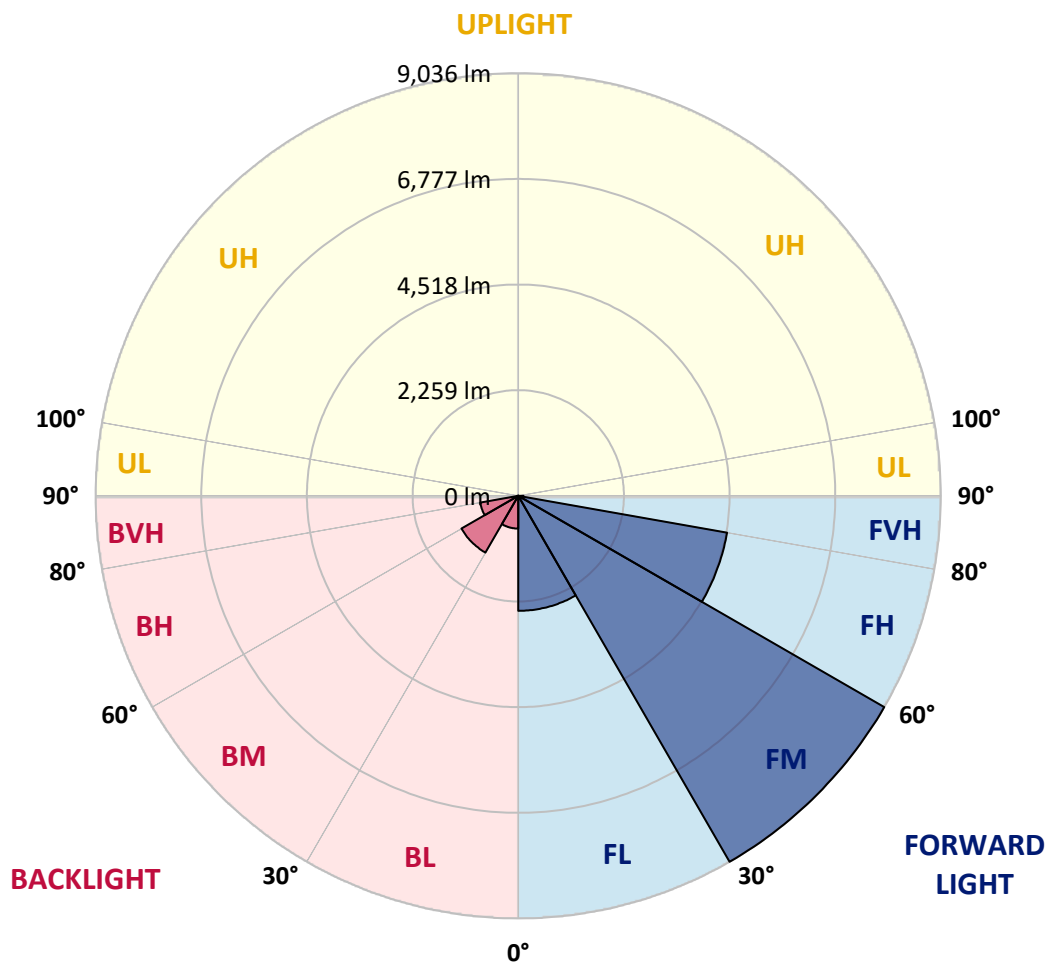
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2459.0	12.9			
FM	(30°-60°)	9036.0	47.3			
FH	(60°-80°)	4534.2	23.7			G2/5000
FVH	(80°-90°)	111.8	0.6			G2/225
BL	(0°-30°)	699.9	3.7	B2/1000		
BM	(30°-60°)	1402.1	7.3	B2/2500		
BH	(60°-80°)	826.5	4.3	B2/1000		G2/1000
BVH	(80°-90°)	32.6	0.2			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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	3617.0	3617.0	3617.0	3617.0	3617.0	3617.0	3617.0	3617.0	3617.0	3617.0	3617.0
2.5°	4116.5	4162.3	4137.3	4153.9	4070.7	4016.6	3954.1	3833.4	3766.8	3758.5	3679.4
5°	4720.0	4770.0	4728.3	4715.8	4570.2	4445.3	4303.8	4091.5	3950.0	3925.0	3750.2
7.5°	5323.5	5369.3	5319.4	5281.9	5086.3	4865.7	4657.6	4345.4	4124.8	4083.2	3808.5
10°	5748.1	5789.7	5752.2	5714.8	5510.8	5286.1	4990.6	4582.6	4283.0	4216.4	3845.9
12.5°	6068.6	6093.5	6076.9	6043.6	5852.1	5610.7	5327.7	4849.0	4461.9	4378.7	3904.2
15°	6330.8	6372.4	6351.6	6326.6	6143.5	5902.1	5631.5	5127.9	4670.1	4566.0	3991.6
17.5°	6505.6	6534.7	6538.9	6538.9	6376.6	6139.3	5877.1	5381.8	4878.2	4745.0	4074.9
20°	6584.7	6618.0	6638.8	6672.1	6538.9	6335.0	6068.6	5598.2	5073.8	4924.0	4153.9
22.5°	6622.2	6651.3	6705.4	6780.3	6672.1	6501.5	6255.9	5798.0	5269.4	5111.3	4245.5
25°	6651.3	6688.8	6767.8	6909.4	6834.4	6688.8	6476.5	6027.0	5502.5	5340.2	4378.7
27.5°	6730.4	6776.2	6851.1	7021.7	6930.2	6859.4	6709.6	6272.5	5748.1	5581.6	4541.0
30°	7005.1	7042.5	7038.4	7146.6	7034.2	7013.4	6909.4	6509.8	5985.3	5818.8	4732.5
32.5°	7504.6	7542.0	7450.4	7408.8	7163.2	7167.4	7125.8	6763.7	6268.4	6097.7	4953.1
35°	8041.5	8083.1	7962.4	7891.6	7479.6	7358.9	7379.7	7080.0	6584.7	6414.0	5227.8
37.5°	8520.1	8570.1	8466.0	8362.0	7945.8	7666.9	7662.7	7433.8	6946.8	6772.0	5531.6
40°	8782.4	8840.6	8903.1	8844.8	8407.8	8099.8	7966.6	7795.9	7304.8	7125.8	5860.5
42.5°	8907.2	9069.6	9181.9	9144.5	8786.5	8474.4	8316.2	8174.7	7741.8	7567.0	6251.7
45°	8557.6	8561.8	8799.0	9003.0	8936.4	8728.3	8699.1	8599.2	8241.3	8074.8	6692.9
47.5°	8120.6	8087.3	8253.8	8615.9	8803.2	8857.3	9027.9	9069.6	8811.5	8645.0	7142.4
50°	7071.7	7092.5	7633.6	8153.9	8520.1	8869.8	9261.0	9552.4	9398.4	9240.2	7616.9
52.5°	5752.2	5802.2	6422.4	7567.0	8145.5	8744.9	9398.4	10035.2	9997.7	9847.9	8091.4
55°	4611.8	4690.9	5348.5	6588.9	7666.9	8466.0	9456.7	10476.4	10617.9	10480.6	8557.6
57.5°	3525.4	3608.7	4162.3	5435.9	7055.0	8012.4	9415.0	10863.5	11196.5	11109.1	8986.3
60°	2655.5	2738.8	3092.6	4407.8	6289.2	7504.6	9206.9	11117.4	11716.8	11625.2	9298.5
62.5°	1902.2	1968.7	2231.0	3429.7	5356.8	6901.0	8695.0	11121.6	12012.3	11937.4	9448.3
65°	1369.4	1369.4	1581.7	2447.4	4482.8	6176.8	7920.8	10609.6	11949.8	11929.0	9344.3
67.5°	986.5	994.8	1165.4	1710.7	3575.4	5298.6	6917.7	9698.1	11467.0	11571.1	8969.7
70°	699.3	720.1	799.2	1194.6	2701.3	4183.1	5843.8	8503.5	10597.1	10780.3	8245.4
72.5°	541.1	553.6	607.7	832.5	1972.9	3109.2	4657.6	7171.6	9435.8	9644.0	7259.0
75°	416.2	428.7	470.3	611.9	1415.2	2181.0	3309.0	5564.9	7608.6	7979.1	5831.3
77.5°	303.8	320.5	349.6	445.4	824.1	1386.0	2006.2	3130.0	4199.7	4374.5	3055.1
80°	141.5	162.3	204.0	287.2	445.4	653.5	711.7	1207.1	2018.7	2110.3	1656.6
82.5°	79.1	99.9	116.5	174.8	224.8	233.1	241.4	303.8	761.7	840.8	695.1
85°	37.5	49.9	54.1	74.9	74.9	66.6	79.1	58.3	124.9	149.8	145.7
87.5°	0.0	4.2	8.3	20.8	16.6	12.5	12.5	12.5	12.5	16.6	12.5
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°	3617.0	3617.0	3617.0	3617.0	3617.0	3617.0	3617.0	3617.0	3617.0	3617.0	3617.0
2.5°	3642.0	3587.9	3463.0	3354.8	3284.0	3221.6	3138.3	3100.9	3034.3	3046.8	3009.3
5°	3662.8	3562.9	3342.3	3138.3	2988.5	2855.3	2709.6	2626.4	2534.8	2526.5	2497.4
7.5°	3675.3	3521.3	3204.9	2917.7	2688.8	2484.9	2289.2	2181.0	2068.6	2043.7	2018.7
10°	3662.8	3458.8	3063.4	2688.8	2385.0	2131.1	1910.5	1773.1	1656.6	1627.4	1602.5
12.5°	3675.3	3425.5	2930.2	2476.5	2114.4	1827.2	1577.5	1436.0	1327.8	1298.6	1282.0
15°	3704.4	3404.7	2817.9	2285.1	1873.0	1552.5	1306.9	1186.2	1098.8	1069.7	1061.4
17.5°	3729.4	3383.9	2697.1	2097.8	1631.6	1311.1	1098.8	998.9	924.0	894.9	886.6
20°	3762.7	3354.8	2576.4	1918.8	1419.3	1119.6	932.3	844.9	786.7	765.9	761.7
22.5°	3791.8	3334.0	2464.1	1739.8	1223.7	965.6	807.5	736.7	695.1	674.3	674.3
25°	3866.7	3342.3	2368.3	1573.3	1078.0	844.9	711.7	657.6	624.3	611.9	611.9
27.5°	3954.1	3375.6	2293.4	1431.8	953.2	753.4	645.2	599.4	582.7	566.1	570.2
30°	4079.0	3442.2	2243.5	1315.3	861.6	682.6	591.0	557.7	541.1	536.9	536.9
32.5°	4237.2	3550.4	2239.3	1240.4	795.0	628.5	553.6	524.4	516.1	512.0	512.0
35°	4424.5	3646.1	2214.3	1207.1	753.4	591.0	524.4	503.6	499.5	499.5	499.5
37.5°	4649.2	3804.3	2197.7	1161.3	732.6	570.2	503.6	487.0	487.0	487.0	487.0
40°	4882.3	3933.3	2172.7	1119.6	724.2	557.7	491.1	470.3	470.3	470.3	470.3
42.5°	5161.2	4120.6	2164.4	1098.8	711.7	549.4	474.5	449.5	453.7	453.7	457.8
45°	5498.3	4332.9	2160.2	1078.0	707.6	541.1	457.8	428.7	432.9	428.7	428.7
47.5°	5839.7	4578.5	2172.7	1065.5	703.4	532.8	445.4	407.9	407.9	403.7	403.7
50°	6197.6	4803.2	2181.0	1053.1	695.1	516.1	424.6	391.3	382.9	374.6	378.8
52.5°	6534.7	5011.4	2185.2	1032.2	670.1	491.1	407.9	370.4	358.0	345.5	349.6
55°	6871.9	5211.1	2193.5	1007.3	636.8	466.2	387.1	349.6	333.0	316.3	316.3
57.5°	7175.7	5386.0	2172.7	944.8	599.4	441.2	366.3	324.7	299.7	283.0	283.0
60°	7383.8	5510.8	2110.3	853.3	549.4	412.1	345.5	299.7	270.5	258.1	258.1
62.5°	7483.7	5531.6	1997.9	703.4	487.0	382.9	320.5	274.7	249.7	241.4	241.4
65°	7388.0	5440.1	1823.1	528.6	420.4	349.6	295.5	253.9	228.9	208.1	208.1
67.5°	7055.0	5182.0	1581.7	399.6	358.0	316.3	270.5	233.1	204.0	187.3	187.3
70°	6384.9	4645.1	1223.7	320.5	303.8	274.7	245.6	208.1	183.1	162.3	162.3
72.5°	5506.7	3937.5	861.6	258.1	258.1	233.1	208.1	183.1	158.2	141.5	141.5
75°	4224.7	2913.6	578.6	208.1	212.3	195.6	170.7	149.8	133.2	120.7	120.7
77.5°	2305.9	1440.1	353.8	154.0	158.2	149.8	133.2	120.7	112.4	99.9	99.9
80°	1119.6	632.7	204.0	108.2	112.4	108.2	99.9	87.4	87.4	79.1	79.1
82.5°	470.3	237.2	108.2	74.9	74.9	66.6	62.4	62.4	62.4	58.3	58.3
85°	116.5	45.8	45.8	41.6	41.6	41.6	37.5	37.5	37.5	29.1	33.3
87.5°	16.6	16.6	16.6	16.6	16.6	16.6	12.5	4.2	0.0	0.0	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)