

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: P841228

Luminaire Tested: **ARCH4-150-727-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841228
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: ARCH4-150-727-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1230mA 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: 16654 lumens
Efficiency: N/A
Efficacy: 110.4 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

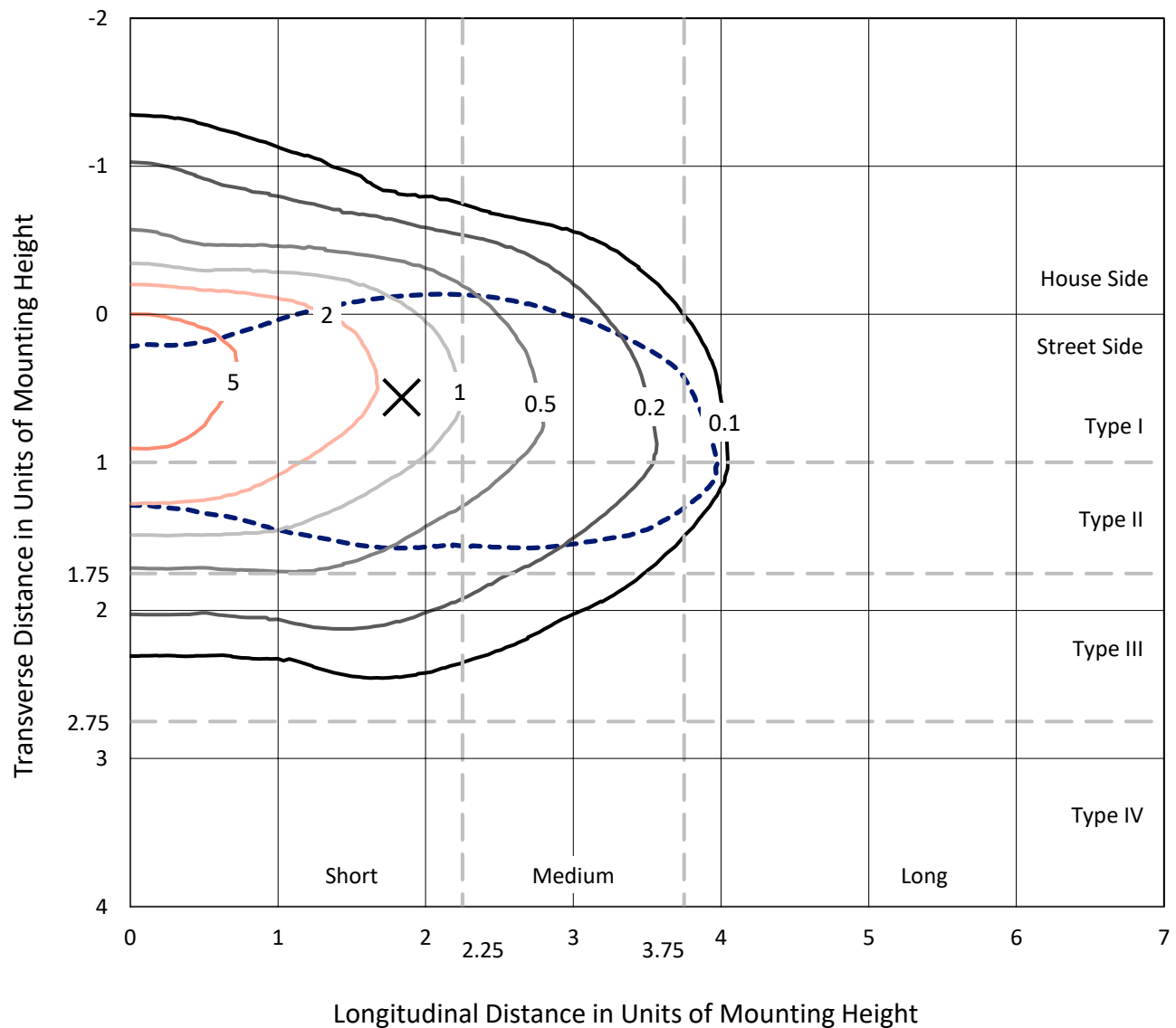
Input Watts (W): 150.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

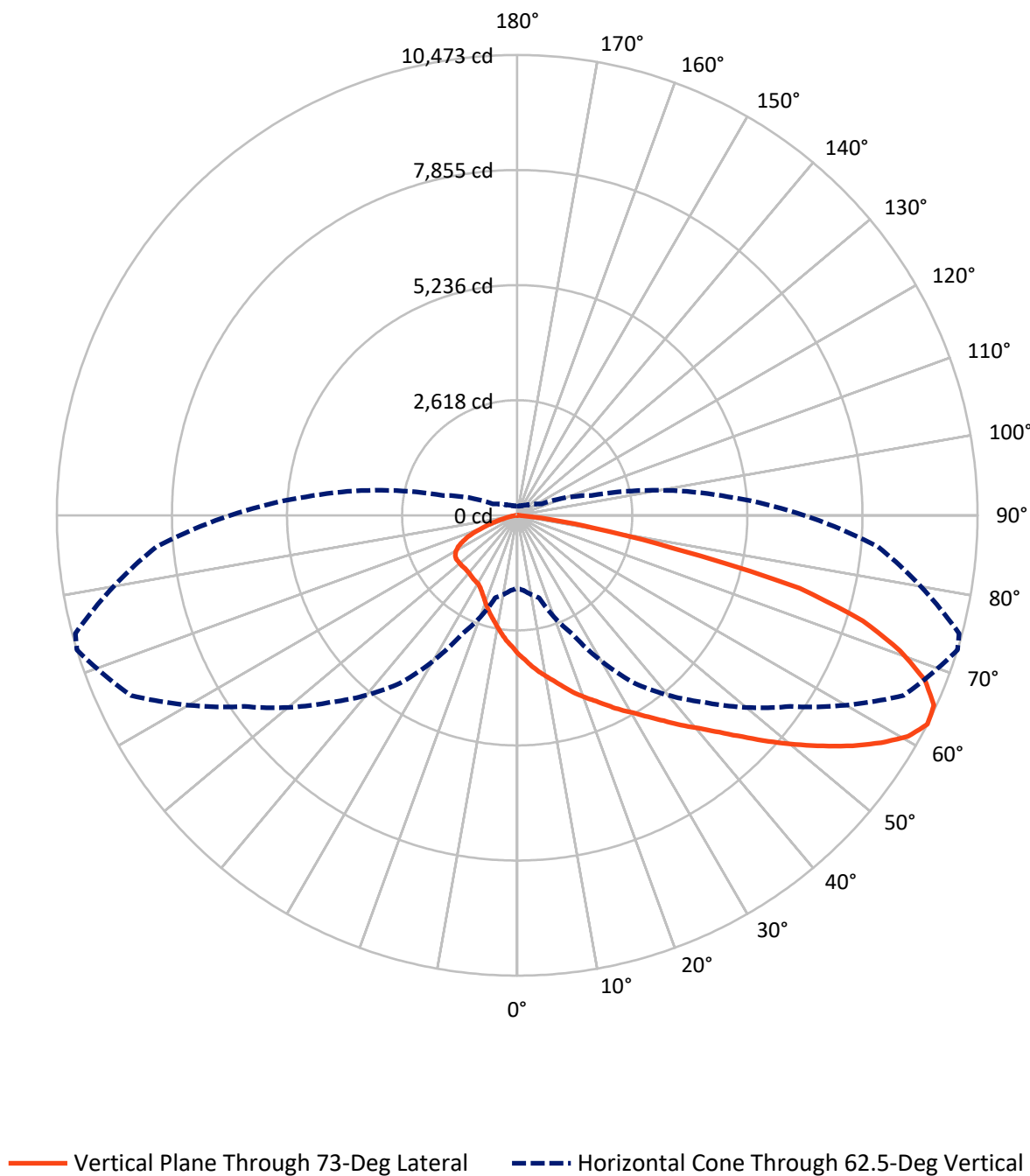
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 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	2581.6	0.0	2581.6
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	14072.4	0.0	14072.4
	% Fixture	84.5	0.0	84.5
Total	Lumens	16654.0	0.0	16654.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	304.6	1.8
10°-20°	919.3	5.5
20°-30°	1530.2	9.2
30°-40°	2308.8	13.9
40°-50°	3227.1	19.4
50°-60°	3564.5	21.4
60°-70°	3105.1	18.6
70°-80°	1568.5	9.4
80°-90°	125.9	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°	16654.0	100.0
0°-180°	16654.0	100.0

Coefficient of Utilization



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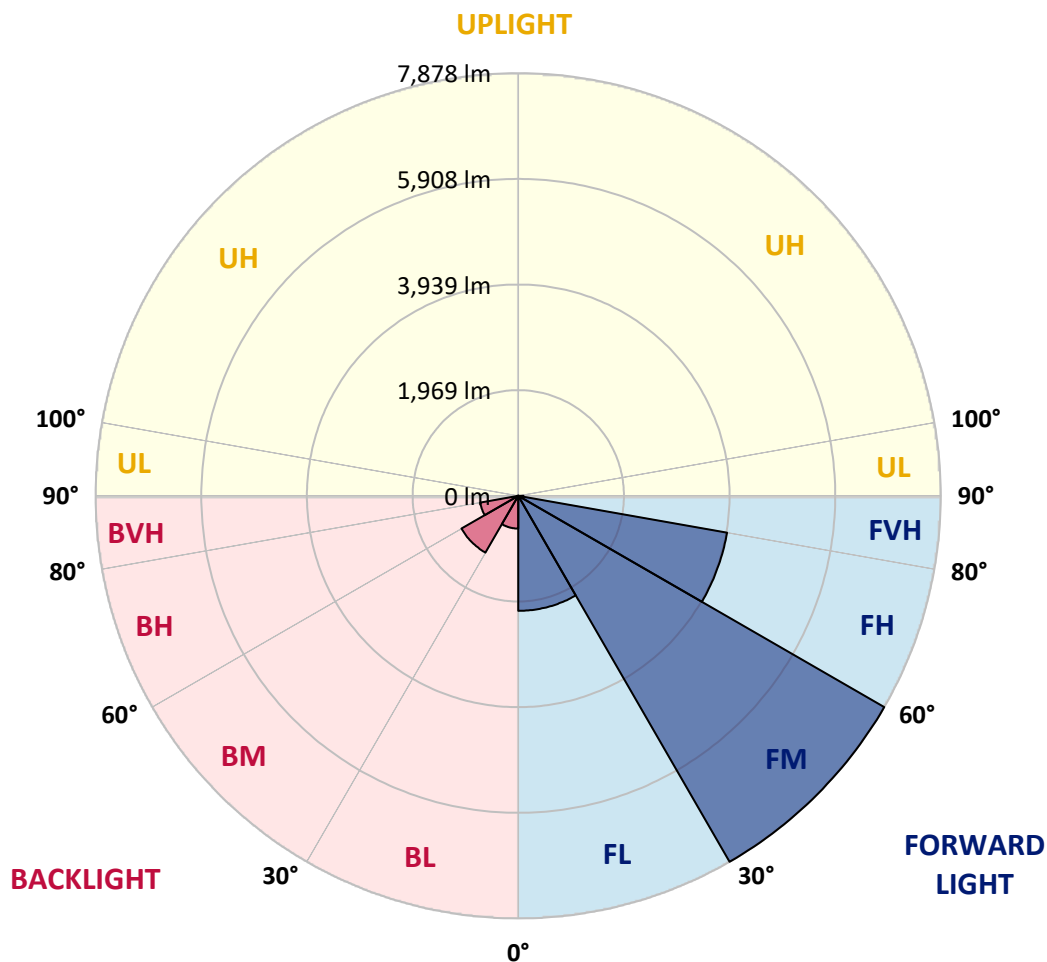
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2143.9	12.9			
FM	(30°-60°)	7878.0	47.3			
FH	(60°-80°)	3953.1	23.7			G2/5000
FVH	(80°-90°)	97.4	0.6			G1/100
BL	(0°-30°)	610.2	3.7	B2/1000		
BM	(30°-60°)	1222.4	7.3	B2/2500		
BH	(60°-80°)	720.6	4.3	B2/1000		G2/1000
BVH	(80°-90°)	28.5	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°	3153.5	3153.5	3153.5	3153.5	3153.5	3153.5	3153.5	3153.5	3153.5	3153.5	3153.5
2.5°	3588.9	3628.8	3607.1	3621.6	3549.0	3501.8	3447.4	3342.2	3284.1	3276.9	3207.9
5°	4115.1	4158.7	4122.4	4111.5	3984.5	3875.6	3752.2	3567.2	3443.8	3422.0	3269.6
7.5°	4641.3	4681.2	4637.7	4605.0	4434.5	4242.1	4060.7	3788.5	3596.2	3559.9	3320.4
10°	5011.4	5047.7	5015.1	4982.4	4804.6	4608.6	4351.0	3995.4	3734.1	3676.0	3353.1
12.5°	5290.9	5312.6	5298.1	5269.1	5102.2	4891.7	4644.9	4227.6	3890.1	3817.5	3403.9
15°	5519.5	5555.8	5537.6	5515.9	5356.2	5145.7	4909.8	4470.7	4071.6	3980.8	3480.1
17.5°	5671.9	5697.3	5700.9	5700.9	5559.4	5352.6	5123.9	4692.1	4253.0	4136.9	3552.6
20°	5740.8	5769.9	5788.0	5817.0	5700.9	5523.1	5290.9	4880.8	4423.6	4292.9	3621.6
22.5°	5773.5	5798.9	5846.1	5911.4	5817.0	5668.3	5454.2	5055.0	4594.1	4456.2	3701.4
25°	5798.9	5831.6	5900.5	6023.9	5958.6	5831.6	5646.5	5254.6	4797.3	4655.8	3817.5
27.5°	5867.8	5907.8	5973.1	6121.9	6042.0	5980.3	5849.7	5468.7	5011.4	4866.3	3959.1
30°	6107.4	6140.0	6136.4	6230.7	6132.8	6114.6	6023.9	5675.5	5218.3	5073.1	4126.0
32.5°	6542.8	6575.5	6495.6	6459.4	6245.2	6248.9	6212.6	5896.9	5465.0	5316.3	4318.3
35°	7010.9	7047.2	6942.0	6880.3	6521.0	6415.8	6434.0	6172.7	5740.8	5592.1	4557.8
37.5°	7428.3	7471.8	7381.1	7290.4	6927.5	6684.3	6680.7	6481.1	6056.5	5904.1	4822.7
40°	7656.9	7707.7	7762.1	7711.3	7330.3	7061.7	6945.6	6796.8	6368.6	6212.6	5109.4
42.5°	7765.7	7907.3	8005.2	7972.6	7660.5	7388.3	7250.4	7127.1	6749.7	6597.2	5450.5
45°	7460.9	7464.5	7671.4	7849.2	7791.1	7609.7	7584.3	7497.2	7185.1	7040.0	5835.2
47.5°	7079.9	7050.9	7196.0	7511.7	7675.0	7722.2	7871.0	7907.3	7682.3	7537.1	6227.1
50°	6165.4	6183.6	6655.3	7108.9	7428.3	7733.1	8074.2	8328.2	8193.9	8056.0	6640.8
52.5°	5015.1	5058.6	5599.3	6597.2	7101.7	7624.2	8193.9	8749.2	8716.5	8585.9	7054.5
55°	4020.8	4089.7	4663.1	5744.5	6684.3	7381.1	8244.7	9133.8	9257.2	9137.4	7460.9
57.5°	3073.6	3146.2	3628.8	4739.3	6150.9	6985.5	8208.5	9471.3	9761.6	9685.4	7834.7
60°	2315.2	2387.8	2696.2	3843.0	5483.2	6542.8	8027.0	9692.7	10215.2	10135.4	8106.8
62.5°	1658.4	1716.4	1945.1	2990.2	4670.3	6016.6	7580.7	9696.3	10472.9	10407.5	8237.5
65°	1193.9	1193.9	1379.0	2133.8	3908.3	5385.2	6905.7	9249.9	10418.4	10400.3	8146.8
67.5°	860.0	867.3	1016.1	1491.5	3117.2	4619.5	6031.1	8455.2	9997.5	10088.2	7820.2
70°	609.6	627.8	696.7	1041.5	2355.1	3647.0	5094.9	7413.7	9239.1	9398.7	7188.8
72.5°	471.8	482.6	529.8	725.8	1720.1	2710.8	4060.7	6252.5	8226.6	8408.0	6328.7
75°	362.9	373.8	410.1	533.4	1233.8	1901.5	2884.9	4851.8	6633.5	6956.5	5084.0
77.5°	264.9	279.4	304.8	388.3	718.5	1208.4	1749.1	2728.9	3661.5	3813.9	2663.6
80°	123.4	141.5	177.8	250.4	388.3	569.7	620.5	1052.4	1760.0	1839.8	1444.3
82.5°	68.9	87.1	101.6	152.4	196.0	203.2	210.5	264.9	664.1	733.0	606.0
85°	32.7	43.5	47.2	65.3	65.3	58.1	68.9	50.8	108.9	130.6	127.0
87.5°	0.0	3.6	7.3	18.1	14.5	10.9	10.9	10.9	10.9	14.5	10.9
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°	3153.5	3153.5	3153.5	3153.5	3153.5	3153.5	3153.5	3153.5	3153.5	3153.5	3153.5
2.5°	3175.2	3128.1	3019.2	2924.9	2863.2	2808.7	2736.2	2703.5	2645.4	2656.3	2623.7
5°	3193.4	3106.3	2914.0	2736.2	2605.5	2489.4	2362.4	2289.8	2210.0	2202.7	2177.3
7.5°	3204.3	3070.0	2794.2	2543.8	2344.2	2166.4	1995.9	1901.5	1803.5	1781.8	1760.0
10°	3193.4	3015.6	2670.8	2344.2	2079.3	1858.0	1665.6	1545.9	1444.3	1418.9	1397.1
12.5°	3204.3	2986.5	2554.7	2159.2	1843.5	1593.1	1375.3	1252.0	1157.6	1132.2	1117.7
15°	3229.7	2968.4	2456.7	1992.2	1633.0	1353.6	1139.5	1034.2	958.0	932.6	925.4
17.5°	3251.4	2950.3	2351.5	1828.9	1422.5	1143.1	958.0	870.9	805.6	780.2	772.9
20°	3280.5	2924.9	2246.3	1672.9	1237.4	976.2	812.9	736.7	685.9	667.7	664.1
22.5°	3305.9	2906.7	2148.3	1516.9	1066.9	841.9	704.0	642.3	606.0	587.9	587.9
25°	3371.2	2914.0	2064.8	1371.7	939.9	736.7	620.5	573.4	544.3	533.4	533.4
27.5°	3447.4	2943.0	1999.5	1248.3	831.0	656.8	562.5	522.6	508.0	493.5	497.2
30°	3556.3	3001.1	1955.9	1146.7	751.2	595.1	515.3	486.3	471.8	468.1	468.1
32.5°	3694.2	3095.4	1952.3	1081.4	693.1	548.0	482.6	457.2	450.0	446.3	446.3
35°	3857.5	3178.9	1930.5	1052.4	656.8	515.3	457.2	439.1	435.5	435.5	435.5
37.5°	4053.4	3316.8	1916.0	1012.4	638.7	497.2	439.1	424.6	424.6	424.6	424.6
40°	4256.6	3429.3	1894.3	976.2	631.4	486.3	428.2	410.1	410.1	410.1	410.1
42.5°	4499.8	3592.6	1887.0	958.0	620.5	479.0	413.7	391.9	395.5	395.5	399.2
45°	4793.7	3777.6	1883.4	939.9	616.9	471.8	399.2	373.8	377.4	373.8	373.8
47.5°	5091.3	3991.7	1894.3	929.0	613.3	464.5	388.3	355.6	355.6	352.0	352.0
50°	5403.4	4187.7	1901.5	918.1	606.0	450.0	370.1	341.1	333.9	326.6	330.2
52.5°	5697.3	4369.1	1905.1	900.0	584.2	428.2	355.6	323.0	312.1	301.2	304.8
55°	5991.2	4543.3	1912.4	878.2	555.2	406.4	337.5	304.8	290.3	275.8	275.8
57.5°	6256.1	4695.7	1894.3	823.7	522.6	384.7	319.3	283.1	261.3	246.8	246.8
60°	6437.6	4804.6	1839.8	743.9	479.0	359.3	301.2	261.3	235.9	225.0	225.0
62.5°	6524.7	4822.7	1741.8	613.3	424.6	333.9	279.4	239.5	217.7	210.5	210.5
65°	6441.2	4742.9	1589.4	460.9	366.5	304.8	257.6	221.4	199.6	181.4	181.4
67.5°	6150.9	4517.9	1379.0	348.4	312.1	275.8	235.9	203.2	177.8	163.3	163.3
70°	5566.7	4049.8	1066.9	279.4	264.9	239.5	214.1	181.4	159.7	141.5	141.5
72.5°	4801.0	3432.9	751.2	225.0	225.0	203.2	181.4	159.7	137.9	123.4	123.4
75°	3683.3	2540.2	504.4	181.4	185.1	170.6	148.8	130.6	116.1	105.2	105.2
77.5°	2010.4	1255.6	308.5	134.3	137.9	130.6	116.1	105.2	98.0	87.1	87.1
80°	976.2	551.6	177.8	94.4	98.0	94.4	87.1	76.2	76.2	68.9	68.9
82.5°	410.1	206.8	94.4	65.3	65.3	58.1	54.4	54.4	54.4	50.8	50.8
85°	101.6	39.9	39.9	36.3	36.3	36.3	32.7	32.7	32.7	25.4	29.0
87.5°	14.5	14.5	14.5	14.5	14.5	14.5	10.9	3.6	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)