

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: P841295

Luminaire Tested: **ARCH4-160-722-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841295
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-160-722-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2200K, 1305mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15736 lumens
Efficiency: N/A
Efficacy: 97.9 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - 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



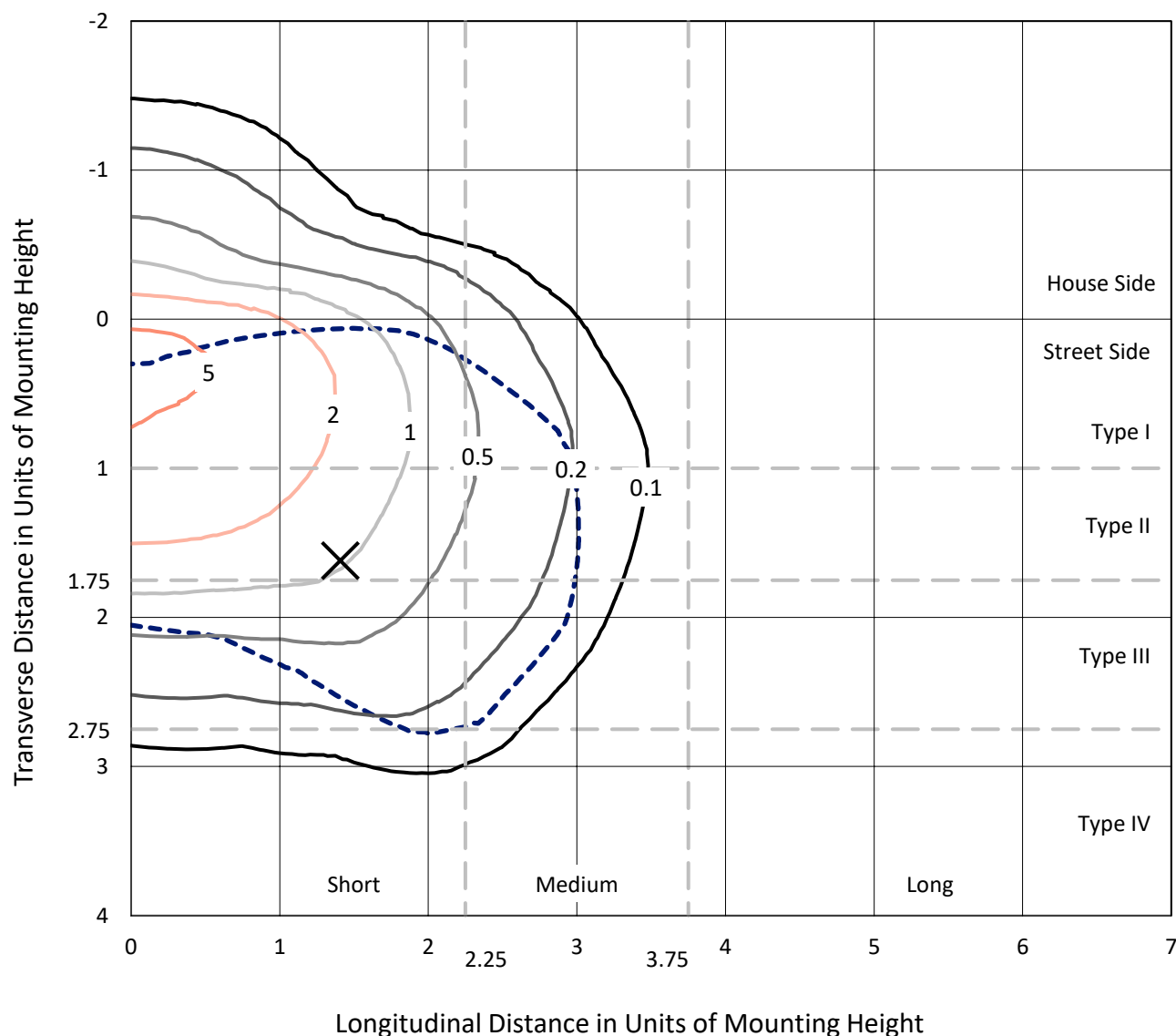
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

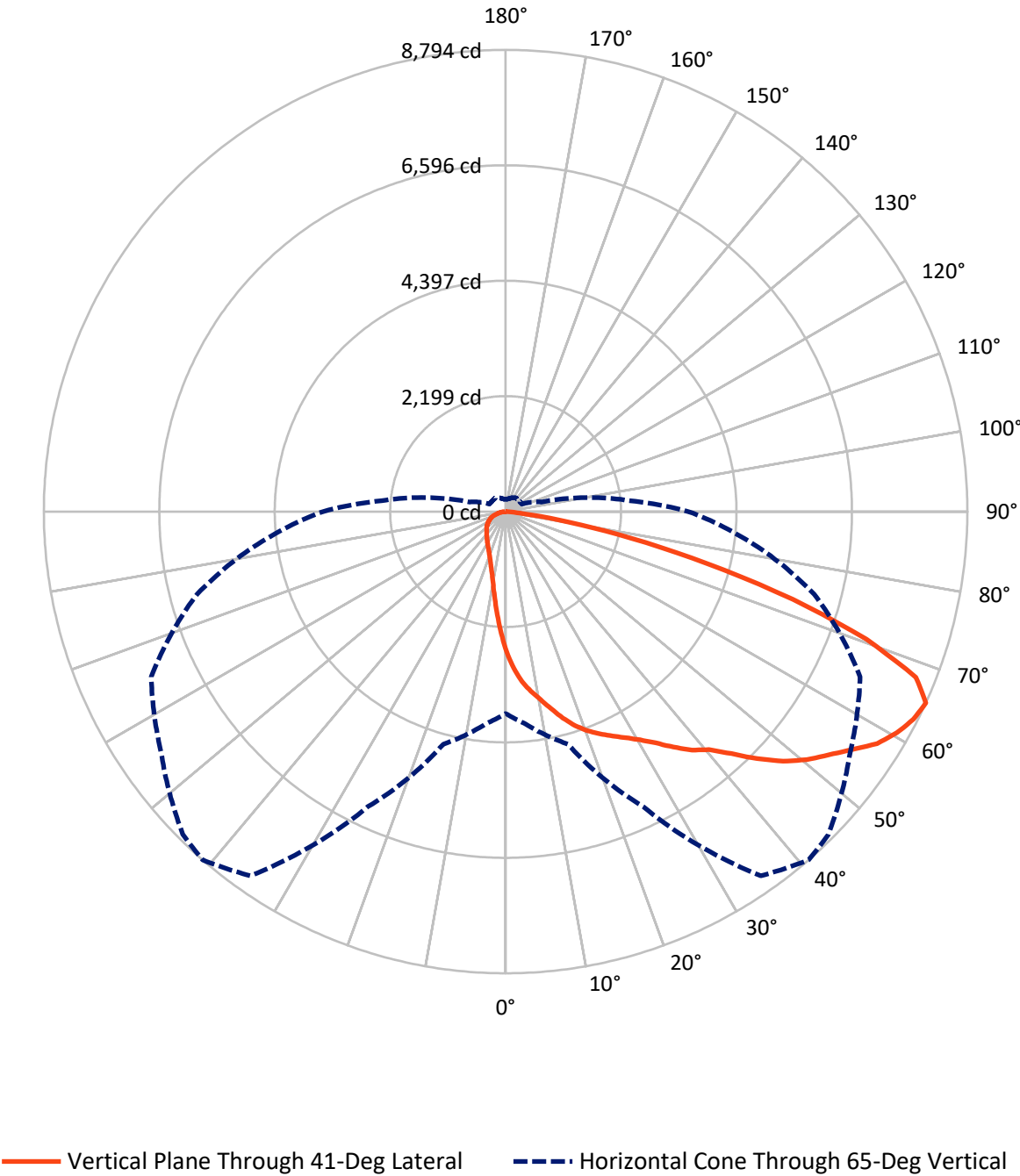


Based on 25 foot mounting height. Maximum calculated value = 6.2 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2020.3	0.0	2020.3
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	13715.8	0.0	13715.8
	% Fixture	87.2	0.0	87.2
Total	Lumens	15736.0	0.0	15736.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.8	1.6
10°-20°	749.1	4.8
20°-30°	1288.8	8.2
30°-40°	1954.6	12.4
40°-50°	2863.6	18.2
50°-60°	3616.1	23.0
60°-70°	3390.7	21.5
70°-80°	1511.3	9.6
80°-90°	112.0	0.7
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°	15736.0	100.0
0°-180°	15736.0	100.0

Coefficient of Utilization



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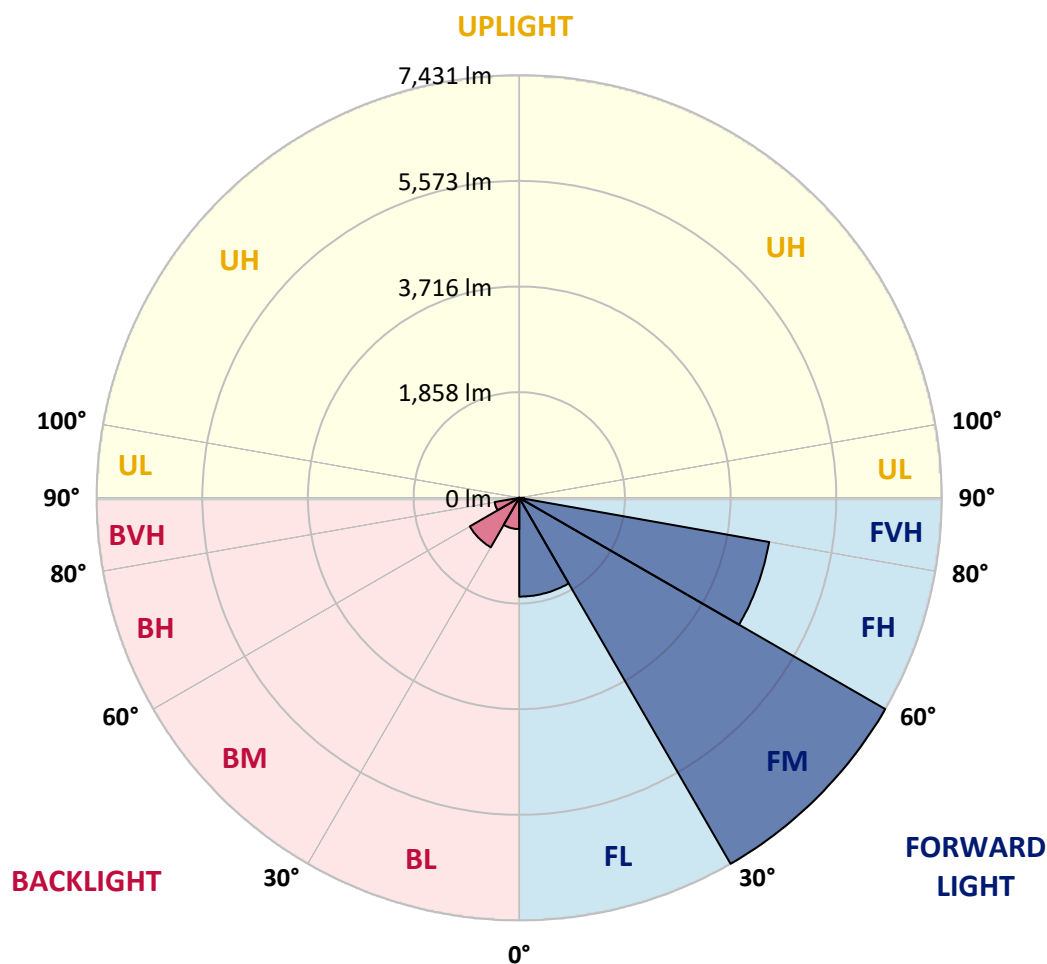
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1737.8	11.0			
FM	(30°-60°)	7431.2	47.2			
FH	(60°-80°)	4463.1	28.4			G2/5000
FVH	(80°-90°)	83.6	0.5			G1/100
BL	(0°-30°)	549.9	3.5	B2/1000		
BM	(30°-60°)	1003.2	6.4	B2/2500		
BH	(60°-80°)	438.9	2.8	B1/500		G1/500
BVH	(80°-90°)	28.3	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	2681.3	2681.3	2681.3	2681.3	2681.3	2681.3	2681.3	2681.3	2681.3	2681.3	2681.3
2.5°	3092.8	3082.9	3076.2	3039.7	3039.7	2990.0	2993.3	2946.8	2890.4	2800.8	2704.6
5°	3384.8	3371.6	3355.0	3318.5	3305.2	3255.4	3248.8	3182.4	3086.2	2930.2	2757.7
7.5°	3640.4	3627.1	3603.9	3550.8	3514.3	3454.5	3437.9	3351.7	3245.5	3053.0	2810.8
10°	3872.7	3862.7	3832.8	3766.5	3716.7	3643.7	3613.8	3497.7	3364.9	3152.6	2853.9
12.5°	4108.3	4095.0	4055.2	3998.8	3939.0	3852.8	3816.3	3666.9	3497.7	3262.1	2916.9
15°	4327.3	4307.4	4277.5	4217.8	4164.7	4081.7	4041.9	3866.0	3660.3	3384.8	2999.9
17.5°	4470.0	4453.4	4426.9	4393.7	4350.5	4287.5	4247.7	4075.1	3822.9	3504.3	3086.2
20°	4556.3	4549.6	4539.7	4519.8	4499.9	4456.7	4426.9	4264.2	3998.8	3620.5	3169.1
22.5°	4622.6	4616.0	4612.7	4612.7	4616.0	4599.4	4579.5	4440.1	4168.0	3743.2	3245.5
25°	4725.5	4722.2	4715.6	4708.9	4732.2	4735.5	4728.8	4632.6	4380.4	3905.9	3341.7
27.5°	4868.2	4858.3	4845.0	4838.3	4861.6	4878.2	4891.4	4825.1	4606.1	4071.8	3451.2
30°	5087.2	5057.4	5024.2	5000.9	5017.5	5044.1	5074.0	5034.1	4838.3	4277.5	3564.0
32.5°	5346.1	5309.6	5233.2	5190.1	5233.2	5253.2	5276.4	5256.5	5080.6	4499.9	3676.9
35°	5661.3	5618.2	5538.5	5475.5	5551.8	5508.7	5498.7	5478.8	5309.6	4718.9	3803.0
37.5°	6185.6	6122.6	5996.5	5857.1	5857.1	5764.2	5727.7	5668.0	5515.3	4914.7	3925.8
40°	6792.9	6710.0	6547.4	6341.6	6152.5	5960.0	5936.8	5893.6	5757.6	5140.3	4065.1
42.5°	7459.9	7300.7	7075.0	6826.1	6520.8	6301.8	6248.7	6125.9	5993.2	5369.3	4204.5
45°	8200.0	7868.1	7539.6	7413.5	6909.1	6710.0	6610.4	6388.1	6238.7	5608.2	4350.5
47.5°	8319.4	8060.6	7841.6	7821.7	7270.8	7104.9	6992.0	6673.5	6504.2	5863.8	4503.2
50°	8253.1	8097.1	8120.3	8040.7	7536.3	7426.8	7340.5	6978.8	6766.4	6109.3	4642.6
52.5°	7974.3	8060.6	8193.3	8047.3	7788.5	7698.9	7655.7	7307.3	7011.9	6335.0	4768.7
55°	7642.5	7702.2	7987.6	8166.8	8080.5	8000.9	7961.0	7688.9	7254.2	6524.1	4884.8
57.5°	7158.0	7131.4	7446.7	8146.9	8385.8	8339.3	8296.2	8063.9	7479.9	6660.2	4957.8
60°	6431.2	6374.8	6773.0	7748.7	8485.4	8558.4	8538.4	8312.8	7652.4	6656.9	4927.9
62.5°	5173.5	5312.9	5863.8	7098.2	8528.5	8714.3	8677.8	8332.7	7708.8	6464.4	4738.8
65°	3846.1	4045.2	4586.1	6202.2	8468.8	8794.0	8694.4	8007.5	7446.7	6082.8	4324.0
67.5°	2770.9	2946.8	3341.7	5103.8	7894.7	8428.9	8312.8	7476.5	6842.7	5541.9	3749.9
70°	1894.9	2021.0	2289.8	3716.7	6739.8	7287.4	7214.4	6683.4	5890.3	4898.1	3046.4
72.5°	1337.3	1390.4	1563.0	2452.4	5120.4	5717.7	5631.5	5498.7	4732.2	4071.8	2369.4
75°	1002.2	1035.4	1128.3	1586.2	3454.5	3962.3	3882.6	3958.9	3534.2	3082.9	1725.6
77.5°	378.3	411.5	640.5	1012.1	2044.2	2432.4	2352.8	2399.3	1964.5	1556.4	859.5
80°	102.9	109.5	212.4	481.2	929.2	1211.2	1101.7	945.8	730.1	716.8	454.6
82.5°	43.1	49.8	96.2	258.8	331.8	331.8	278.8	345.1	278.8	335.2	219.0
85°	16.6	19.9	23.2	66.4	43.1	46.5	49.8	66.4	56.4	69.7	49.8
87.5°	0.0	0.0	0.0	3.3	3.3	6.6	3.3	6.6	10.0	10.0	10.0
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°	2681.3	2681.3	2681.3	2681.3	2681.3	2681.3	2681.3	2681.3	2681.3	2681.3	2681.3
2.5°	2664.7	2628.2	2575.1	2488.9	2399.3	2349.5	2286.4	2276.5	2210.1	2203.5	2176.9
5°	2681.3	2605.0	2468.9	2303.0	2140.4	2014.3	1921.4	1871.6	1775.4	1775.4	1748.8
7.5°	2694.6	2575.1	2356.1	2110.6	1888.2	1719.0	1592.9	1539.8	1453.5	1446.9	1426.9
10°	2697.9	2538.6	2233.3	1914.8	1642.6	1470.1	1347.3	1287.6	1211.2	1204.6	1191.3
12.5°	2724.5	2518.7	2123.8	1745.5	1466.8	1280.9	1161.5	1111.7	1052.0	1045.3	1032.0
15°	2767.6	2518.7	2030.9	1602.8	1310.8	1138.2	1035.4	988.9	945.8	939.1	932.5
17.5°	2810.8	2512.1	1938.0	1470.1	1181.4	1025.4	935.8	899.3	866.1	862.8	856.2
20°	2850.6	2508.8	1845.1	1357.3	1081.8	932.5	862.8	829.6	803.1	803.1	799.8
22.5°	2890.4	2502.1	1755.5	1251.1	995.5	862.8	803.1	766.6	746.7	746.7	743.3
25°	2950.1	2502.1	1672.5	1161.5	925.9	809.7	750.0	723.4	706.8	703.5	703.5
27.5°	3019.8	2522.0	1599.5	1081.8	866.1	756.6	710.2	683.6	663.7	657.1	660.4
30°	3096.1	2538.6	1533.1	1012.1	809.7	716.8	667.0	640.5	620.6	613.9	617.2
32.5°	3172.5	2558.5	1473.4	949.1	753.3	680.3	630.5	600.6	580.7	577.4	577.4
35°	3255.4	2578.5	1413.7	896.0	706.8	643.8	597.3	564.1	550.9	544.2	547.5
37.5°	3338.4	2611.6	1357.3	846.2	673.7	610.6	567.5	534.3	524.3	521.0	521.0
40°	3437.9	2661.4	1334.0	813.0	643.8	580.7	544.2	511.0	501.1	501.1	501.1
42.5°	3520.9	2701.2	1314.1	776.5	620.6	554.2	521.0	494.5	487.8	484.5	487.8
45°	3603.9	2737.7	1287.6	743.3	590.7	527.6	501.1	474.5	467.9	467.9	467.9
47.5°	3686.8	2757.7	1251.1	710.2	564.1	504.4	481.2	458.0	451.3	451.3	451.3
50°	3753.2	2774.2	1198.0	673.7	534.3	484.5	461.3	438.0	431.4	431.4	431.4
52.5°	3819.6	2777.6	1141.6	630.5	504.4	461.3	441.4	418.1	411.5	408.2	408.2
55°	3879.3	2774.2	1075.2	580.7	471.2	434.7	418.1	398.2	384.9	371.7	378.3
57.5°	3922.4	2770.9	998.9	531.0	438.0	408.2	401.5	375.0	348.4	315.3	321.9
60°	3905.9	2734.4	915.9	467.9	401.5	381.6	381.6	345.1	298.7	282.1	285.4
62.5°	3799.7	2631.6	829.6	401.5	365.0	355.1	351.8	311.9	275.4	258.8	262.2
65°	3481.1	2372.7	703.5	341.8	328.5	325.2	325.2	288.7	255.5	235.6	238.9
67.5°	2996.6	1991.1	574.1	288.7	292.0	298.7	298.7	265.5	232.3	212.4	215.7
70°	2402.6	1556.4	458.0	248.9	252.2	262.2	268.8	238.9	209.1	189.2	189.2
72.5°	1808.6	1181.4	368.4	209.1	225.7	225.7	235.6	212.4	182.5	162.6	165.9
75°	1310.8	846.2	292.0	175.9	195.8	192.5	192.5	179.2	156.0	142.7	142.7
77.5°	620.6	444.7	232.3	126.1	152.7	149.3	152.7	142.7	132.7	119.5	122.8
80°	305.3	219.0	149.3	89.6	106.2	109.5	119.5	112.8	109.5	99.6	99.6
82.5°	146.0	86.3	69.7	63.1	73.0	76.3	83.0	83.0	86.3	79.6	79.6
85°	39.8	23.2	29.9	39.8	46.5	49.8	56.4	59.7	59.7	56.4	59.7
87.5°	10.0	10.0	13.3	19.9	23.2	26.5	29.9	29.9	13.3	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)