

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: P842740

Luminaire Tested: **ARCH4-90-727-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842740
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: ARCH4-90-727-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 765mA 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: 10807 lumens
Efficiency: N/A
Efficacy: 116.1 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 93.1
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

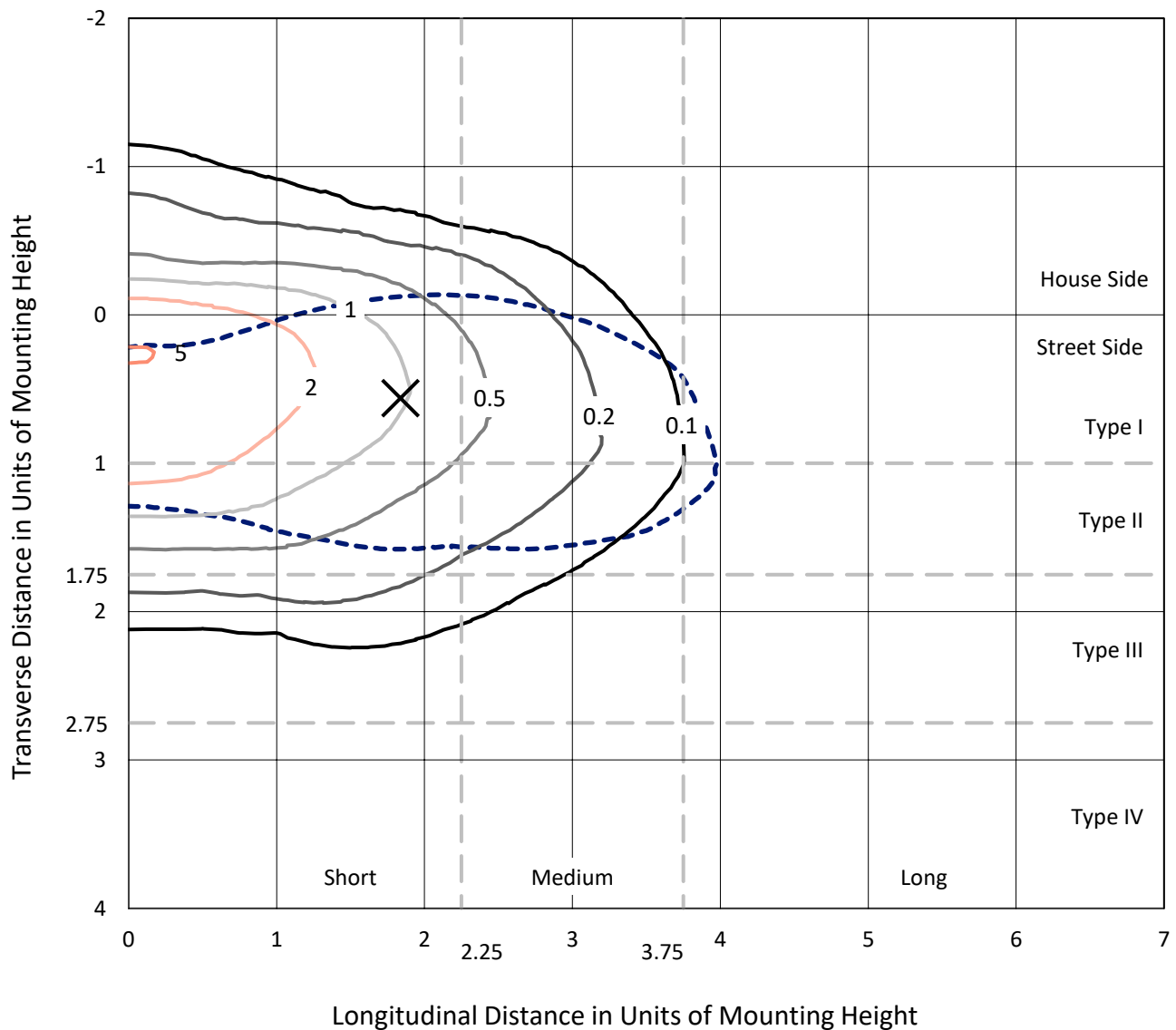


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Iso-Footcandle Lines of Horizontal Illumination

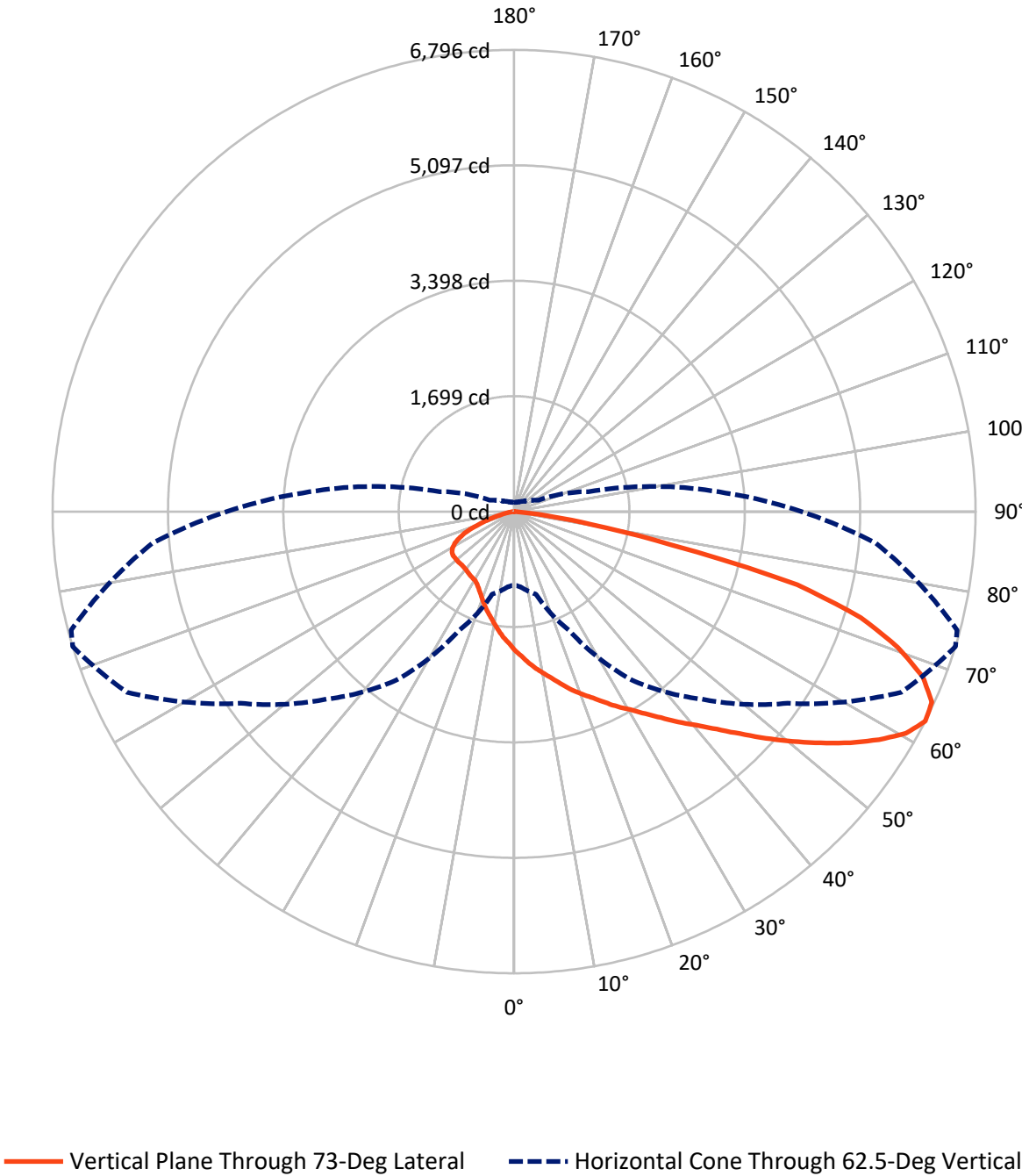
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 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	1675.2	0.0	1675.2
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	9131.8	0.0	9131.8
	% Fixture	84.5	0.0	84.5
Total	Lumens	10807.0	0.0	10807.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.7	1.8
10°-20°	596.5	5.5
20°-30°	992.9	9.2
30°-40°	1498.2	13.9
40°-50°	2094.1	19.4
50°-60°	2313.1	21.4
60°-70°	2015.0	18.6
70°-80°	1017.8	9.4
80°-90°	81.7	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°	10807.0	100.0
0°-180°	10807.0	100.0

Coefficient of Utilization



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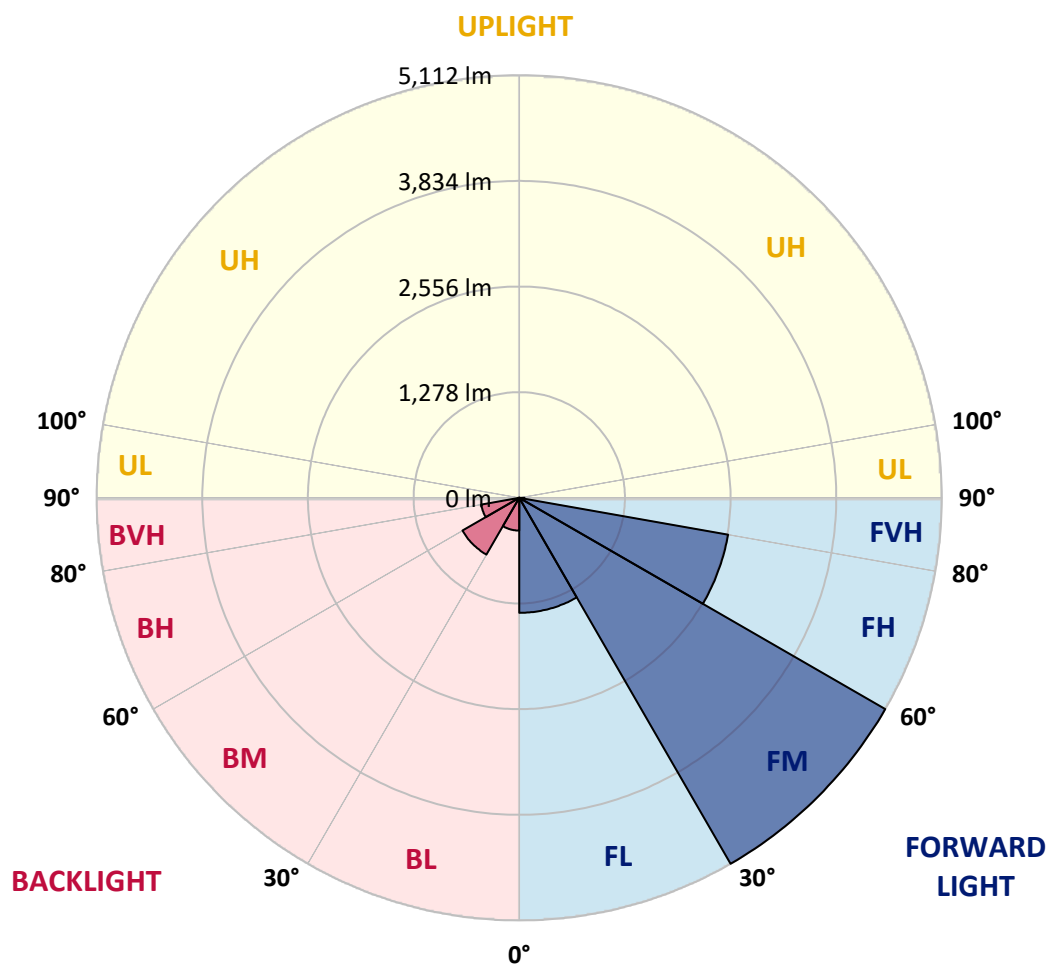
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1391.2	12.9			
FM	(30°-60°)	5112.1	47.3			
FH	(60°-80°)	2565.2	23.7			G2/5000
FVH	(80°-90°)	63.2	0.6			G1/100
BL	(0°-30°)	396.0	3.7	B1/500		
BM	(30°-60°)	793.2	7.3	B1/1000		
BH	(60°-80°)	467.6	4.3	B1/500		G1/500
BVH	(80°-90°)	18.5	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	2046.3	2046.3	2046.3	2046.3	2046.3	2046.3	2046.3	2046.3	2046.3	2046.3	2046.3
2.5°	2328.9	2354.8	2340.7	2350.1	2303.0	2272.4	2237.1	2168.8	2131.1	2126.4	2081.7
5°	2670.4	2698.6	2675.1	2668.0	2585.6	2514.9	2434.9	2314.8	2234.7	2220.6	2121.7
7.5°	3011.8	3037.7	3009.4	2988.3	2877.6	2752.8	2635.0	2458.4	2333.6	2310.1	2154.6
10°	3252.0	3275.5	3254.3	3233.2	3117.8	2990.6	2823.4	2592.6	2423.1	2385.4	2175.8
12.5°	3433.3	3447.4	3438.0	3419.2	3310.9	3174.3	3014.2	2743.4	2524.4	2477.3	2208.8
15°	3581.7	3605.2	3593.4	3579.3	3475.7	3339.1	3186.1	2901.1	2642.1	2583.2	2258.3
17.5°	3680.6	3697.0	3699.4	3699.4	3607.6	3473.3	3325.0	3044.8	2759.8	2684.5	2305.4
20°	3725.3	3744.1	3755.9	3774.8	3699.4	3584.0	3433.3	3167.2	2870.5	2785.7	2350.1
22.5°	3746.5	3763.0	3793.6	3836.0	3774.8	3678.2	3539.3	3280.2	2981.2	2891.7	2401.9
25°	3763.0	3784.2	3828.9	3909.0	3866.6	3784.2	3664.1	3409.8	3113.1	3021.2	2477.3
27.5°	3807.7	3833.6	3876.0	3972.6	3920.8	3880.7	3796.0	3548.7	3252.0	3157.8	2569.1
30°	3963.1	3984.3	3982.0	4043.2	3979.6	3967.9	3909.0	3682.9	3386.2	3292.0	2677.4
32.5°	4245.7	4266.9	4215.1	4191.6	4052.6	4055.0	4031.4	3826.6	3546.3	3449.8	2802.2
35°	4549.5	4573.0	4504.7	4464.7	4231.6	4163.3	4175.1	4005.5	3725.3	3628.8	2957.6
37.5°	4820.3	4848.6	4789.7	4730.8	4495.3	4337.6	4335.2	4205.7	3930.2	3831.3	3129.5
40°	4968.6	5001.6	5036.9	5004.0	4756.7	4582.5	4507.1	4410.6	4132.7	4031.4	3315.6
42.5°	5039.3	5131.1	5194.7	5173.5	4971.0	4794.4	4704.9	4624.8	4379.9	4281.0	3536.9
45°	4841.5	4843.8	4978.1	5093.5	5055.8	4938.0	4921.5	4865.0	4662.5	4568.3	3786.5
47.5°	4594.2	4575.4	4669.6	4874.5	4980.4	5011.0	5107.6	5131.1	4985.1	4890.9	4040.9
50°	4000.8	4012.6	4318.7	4613.1	4820.3	5018.1	5239.4	5404.3	5317.2	5227.7	4309.3
52.5°	3254.3	3282.6	3633.5	4281.0	4608.4	4947.5	5317.2	5677.4	5656.2	5571.5	4577.7
55°	2609.1	2653.9	3025.9	3727.7	4337.6	4789.7	5350.1	5927.1	6007.1	5929.4	4841.5
57.5°	1994.5	2041.6	2354.8	3075.4	3991.4	4533.0	5326.6	6146.0	6334.4	6285.0	5084.0
60°	1502.4	1549.5	1749.6	2493.7	3558.1	4245.7	5208.8	6289.7	6628.8	6577.0	5260.6
62.5°	1076.1	1113.8	1262.2	1940.4	3030.6	3904.3	4919.2	6292.0	6796.0	6753.6	5345.4
65°	774.7	774.7	894.8	1384.6	2536.1	3494.5	4481.2	6002.4	6760.7	6748.9	5286.5
67.5°	558.1	562.8	659.3	967.8	2022.8	2997.7	3913.7	5486.7	6487.5	6546.4	5074.6
70°	395.6	407.4	452.1	675.8	1528.3	2366.6	3306.2	4810.9	5995.3	6099.0	4664.9
72.5°	306.1	313.2	343.8	471.0	1116.2	1759.0	2635.0	4057.3	5338.4	5456.1	4106.8
75°	235.5	242.5	266.1	346.2	800.6	1233.9	1872.1	3148.4	4304.6	4514.2	3299.1
77.5°	171.9	181.3	197.8	252.0	466.3	784.2	1135.0	1770.8	2376.0	2474.9	1728.4
80°	80.1	91.8	115.4	162.5	252.0	369.7	402.7	682.9	1142.1	1193.9	937.2
82.5°	44.7	56.5	65.9	98.9	127.2	131.9	136.6	171.9	430.9	475.7	393.3
85°	21.2	28.3	30.6	42.4	42.4	37.7	44.7	33.0	70.6	84.8	82.4
87.5°	0.0	2.4	4.7	11.8	9.4	7.1	7.1	7.1	7.1	9.4	7.1
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°	2046.3	2046.3	2046.3	2046.3	2046.3	2046.3	2046.3	2046.3	2046.3	2046.3	2046.3
2.5°	2060.5	2029.8	1959.2	1898.0	1857.9	1822.6	1775.5	1754.3	1716.7	1723.7	1702.5
5°	2072.2	2015.7	1890.9	1775.5	1690.8	1615.4	1533.0	1485.9	1434.1	1429.4	1412.9
7.5°	2079.3	1992.2	1813.2	1650.7	1521.2	1405.8	1295.1	1233.9	1170.3	1156.2	1142.1
10°	2072.2	1956.8	1733.1	1521.2	1349.3	1205.7	1080.9	1003.1	937.2	920.7	906.6
12.5°	2079.3	1938.0	1657.8	1401.1	1196.2	1033.8	892.5	812.4	751.2	734.7	725.3
15°	2095.8	1926.2	1594.2	1292.8	1059.7	878.3	739.4	671.1	621.7	605.2	600.5
17.5°	2109.9	1914.5	1525.9	1186.8	923.1	741.8	621.7	565.2	522.8	506.3	501.6
20°	2128.7	1898.0	1457.6	1085.6	803.0	633.4	527.5	478.0	445.1	433.3	430.9
22.5°	2145.2	1886.2	1394.0	984.3	692.3	546.3	456.8	416.8	393.3	381.5	381.5
25°	2187.6	1890.9	1339.9	890.1	609.9	478.0	402.7	372.1	353.2	346.2	346.2
27.5°	2237.1	1909.7	1297.5	810.1	539.3	426.2	365.0	339.1	329.7	320.3	322.6
30°	2307.7	1947.4	1269.2	744.1	487.4	386.2	334.4	315.5	306.1	303.8	303.8
32.5°	2397.2	2008.7	1266.9	701.7	449.8	355.6	313.2	296.7	292.0	289.6	289.6
35°	2503.2	2062.8	1252.8	682.9	426.2	334.4	296.7	284.9	282.6	282.6	282.6
37.5°	2630.3	2152.3	1243.3	657.0	414.4	322.6	284.9	275.5	275.5	275.5	275.5
40°	2762.2	2225.3	1229.2	633.4	409.7	315.5	277.9	266.1	266.1	266.1	266.1
42.5°	2920.0	2331.3	1224.5	621.7	402.7	310.8	268.4	254.3	256.7	256.7	259.0
45°	3110.7	2451.4	1222.1	609.9	400.3	306.1	259.0	242.5	244.9	242.5	242.5
47.5°	3303.8	2590.3	1229.2	602.8	398.0	301.4	252.0	230.8	230.8	228.4	228.4
50°	3506.3	2717.4	1233.9	595.8	393.3	292.0	240.2	221.4	216.6	211.9	214.3
52.5°	3697.0	2835.2	1236.3	584.0	379.1	277.9	230.8	209.6	202.5	195.4	197.8
55°	3887.8	2948.2	1241.0	569.9	360.3	263.7	219.0	197.8	188.4	179.0	179.0
57.5°	4059.7	3047.1	1229.2	534.5	339.1	249.6	207.2	183.7	169.5	160.1	160.1
60°	4177.4	3117.8	1193.9	482.7	310.8	233.1	195.4	169.5	153.1	146.0	146.0
62.5°	4233.9	3129.5	1130.3	398.0	275.5	216.6	181.3	155.4	141.3	136.6	136.6
65°	4179.8	3077.7	1031.4	299.1	237.8	197.8	167.2	143.6	129.5	117.7	117.7
67.5°	3991.4	2931.7	894.8	226.1	202.5	179.0	153.1	131.9	115.4	106.0	106.0
70°	3612.3	2628.0	692.3	181.3	171.9	155.4	138.9	117.7	103.6	91.8	91.8
72.5°	3115.4	2227.6	487.4	146.0	146.0	131.9	117.7	103.6	89.5	80.1	80.1
75°	2390.1	1648.4	327.3	117.7	120.1	110.7	96.5	84.8	75.4	68.3	68.3
77.5°	1304.6	814.8	200.2	87.1	89.5	84.8	75.4	68.3	63.6	56.5	56.5
80°	633.4	357.9	115.4	61.2	63.6	61.2	56.5	49.5	49.5	44.7	44.7
82.5°	266.1	134.2	61.2	42.4	42.4	37.7	35.3	35.3	35.3	33.0	33.0
85°	65.9	25.9	25.9	23.5	23.5	23.5	21.2	21.2	21.2	16.5	18.8
87.5°	9.4	9.4	9.4	9.4	9.4	9.4	7.1	2.4	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)