

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: P842096

Luminaire Tested: **ARCH4-270-727-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842096
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: ARCH4-270-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1045mA 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: 25643 lumens
Efficiency: N/A
Efficacy: 95.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

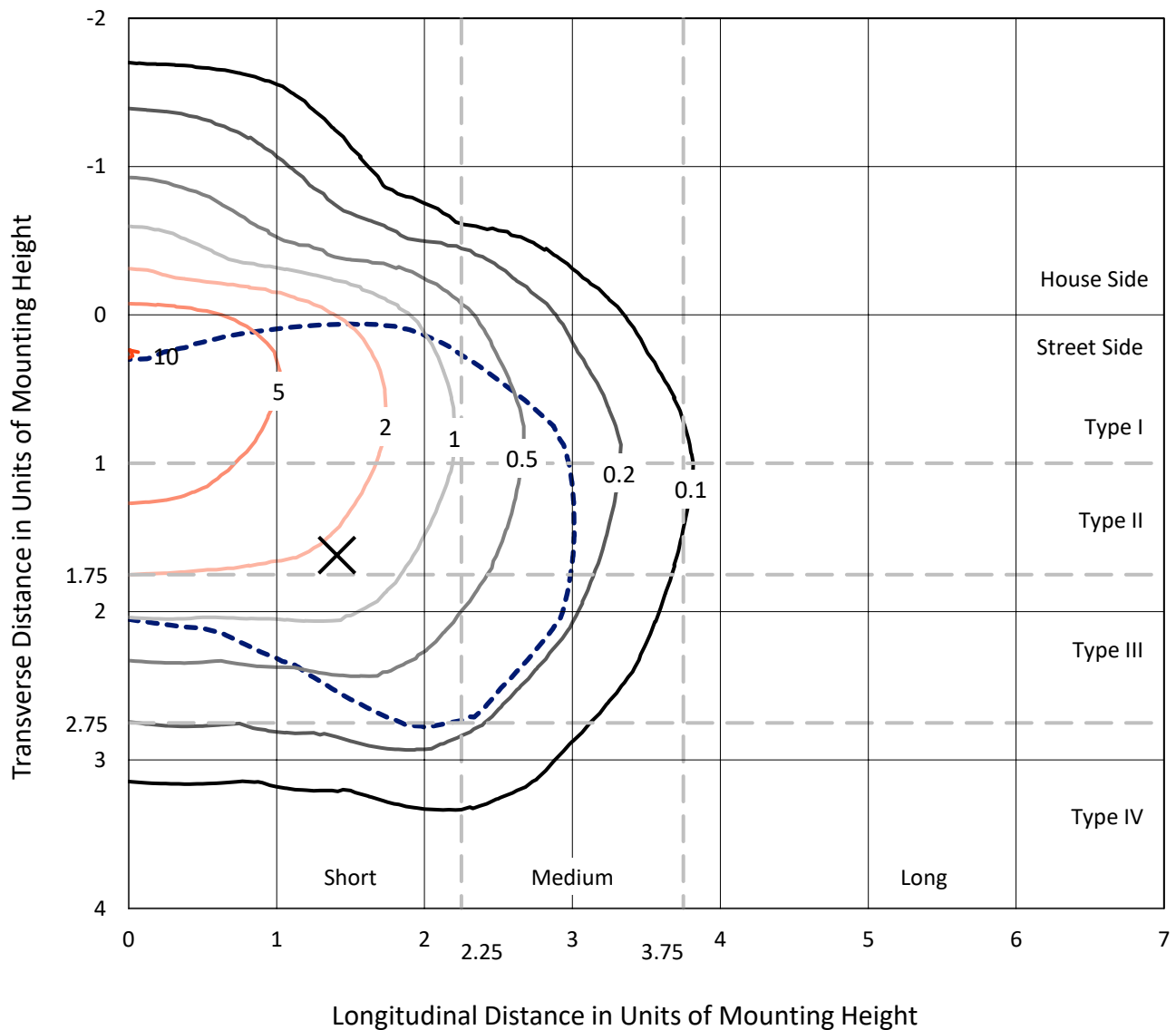
Input Watts (W): 269
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

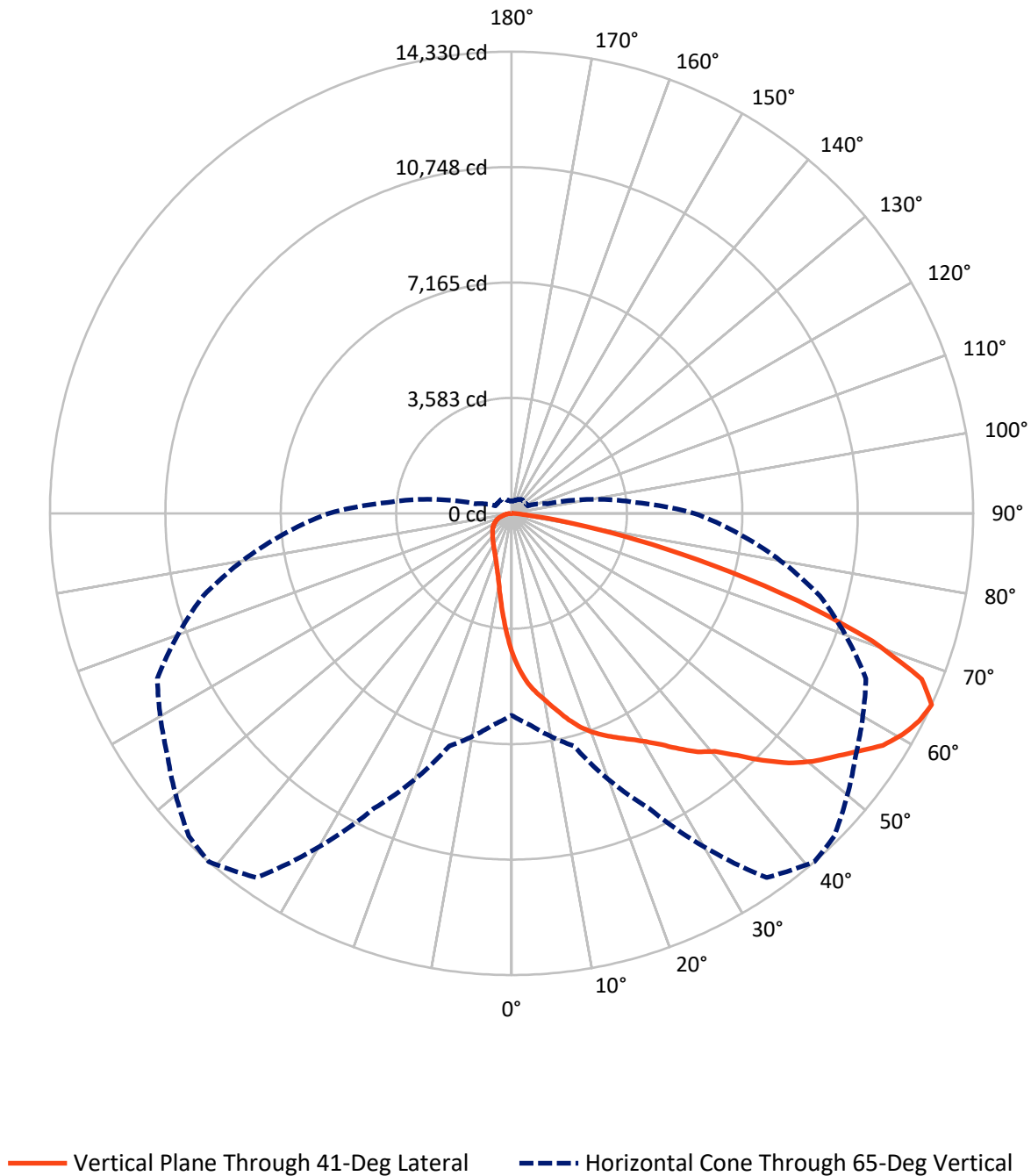
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.1 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	3292.2	0.0	3292.2
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	22350.8	0.0	22350.8
	% Fixture	87.2	0.0	87.2
Total	Lumens	25643.0	0.0	25643.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	407.1	1.6
10°-20°	1220.8	4.8
20°-30°	2100.2	8.2
30°-40°	3185.2	12.4
40°-50°	4666.4	18.2
50°-60°	5892.7	23.0
60°-70°	5525.5	21.5
70°-80°	2462.7	9.6
80°-90°	182.4	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°	25643.0	100.0
0°-180°	25643.0	100.0

Coefficient of Utilization



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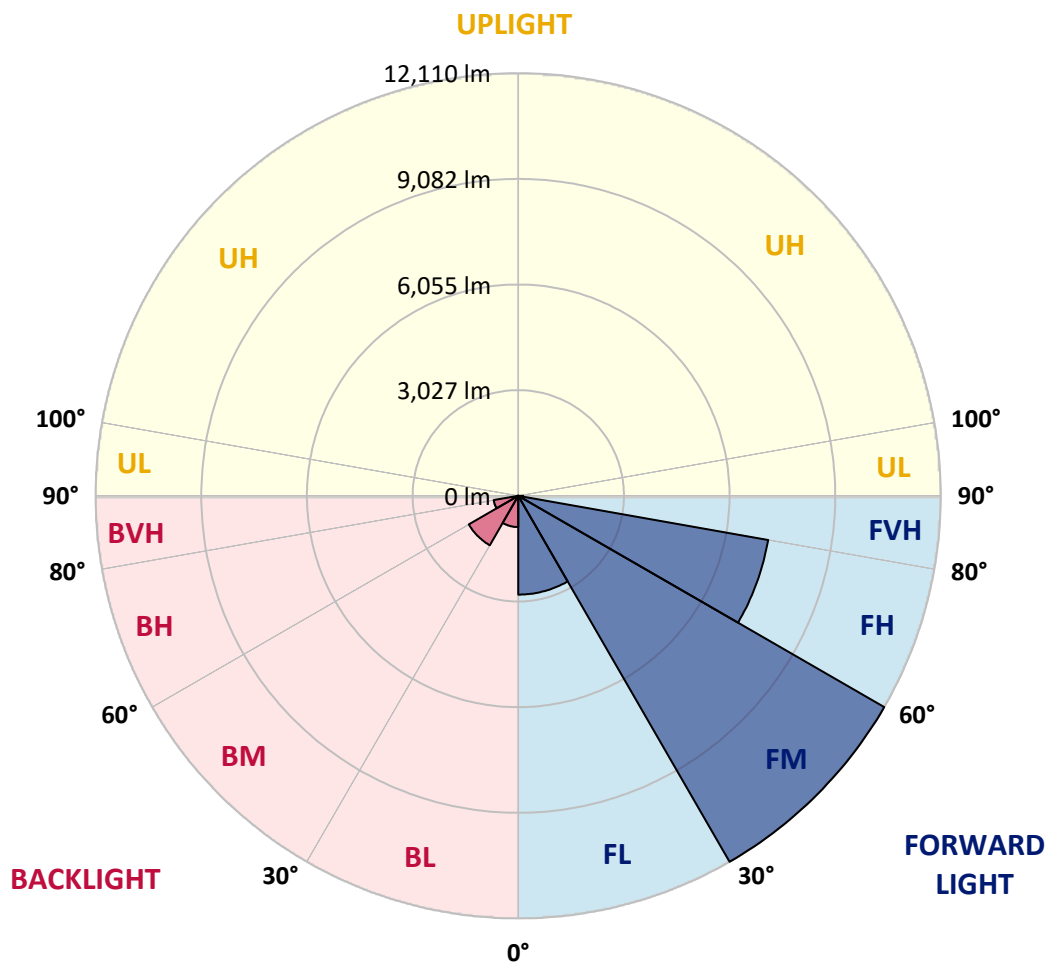
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2831.9	11.0			
FM	(30°-60°)	12109.6	47.2			
FH	(60°-80°)	7273.0	28.4			G3/7500
FVH	(80°-90°)	136.2	0.5			G2/225
BL	(0°-30°)	896.1	3.5	B2/1000		
BM	(30°-60°)	1634.7	6.4	B2/2500		
BH	(60°-80°)	715.2	2.8	B2/1000		G2/1000
BVH	(80°-90°)	46.2	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-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	4369.4	4369.4	4369.4	4369.4	4369.4	4369.4	4369.4	4369.4	4369.4	4369.4	4369.4
2.5°	5040.0	5023.8	5013.0	4953.5	4953.5	4872.4	4877.8	4802.1	4710.1	4564.1	4407.3
5°	5515.9	5494.2	5467.2	5407.7	5386.1	5305.0	5294.2	5186.0	5029.2	4775.0	4493.8
7.5°	5932.3	5910.6	5872.8	5786.3	5726.8	5629.4	5602.4	5461.8	5288.7	4975.1	4580.3
10°	6310.8	6294.6	6245.9	6137.8	6056.6	5937.7	5889.0	5699.7	5483.4	5137.3	4650.6
12.5°	6694.8	6673.1	6608.2	6516.3	6419.0	6278.4	6218.9	5975.5	5699.7	5315.8	4753.4
15°	7051.7	7019.2	6970.5	6873.2	6786.7	6651.5	6586.6	6300.0	5964.7	5515.9	4888.6
17.5°	7284.2	7257.2	7213.9	7159.8	7089.5	6986.8	6921.9	6640.7	6229.7	5710.5	5029.2
20°	7424.8	7414.0	7397.8	7365.3	7332.9	7262.6	7213.9	6948.9	6516.3	5899.8	5164.4
22.5°	7532.9	7522.1	7516.7	7516.7	7522.1	7495.1	7462.6	7235.5	6792.1	6099.9	5288.7
25°	7700.6	7695.2	7684.4	7673.5	7711.4	7716.8	7706.0	7549.2	7138.2	6364.9	5445.6
27.5°	7933.1	7916.9	7895.3	7884.4	7922.3	7949.3	7971.0	7862.8	7505.9	6635.3	5624.0
30°	8290.0	8241.4	8187.3	8149.4	8176.5	8219.7	8268.4	8203.5	7884.4	6970.5	5807.9
32.5°	8711.8	8652.3	8528.0	8457.7	8528.0	8560.4	8598.3	8565.8	8279.2	7332.9	5991.7
35°	9225.6	9155.3	9025.5	8922.7	9047.1	8976.8	8960.6	8928.1	8652.3	7689.8	6197.2
37.5°	10080.0	9977.2	9771.7	9544.6	9544.6	9393.2	9333.7	9236.4	8987.6	8008.8	6397.3
40°	11069.6	10934.4	10669.4	10334.1	10025.9	9712.3	9674.4	9604.1	9382.4	8376.5	6624.4
42.5°	12156.5	11897.0	11529.2	11123.7	10626.2	10269.2	10182.7	9982.6	9766.3	8749.7	6851.6
45°	13362.5	12821.7	12286.3	12080.8	11258.9	10934.4	10772.2	10409.8	10166.5	9139.0	7089.5
47.5°	13557.1	13135.3	12778.4	12746.0	11848.3	11577.9	11394.1	10874.9	10599.1	9555.4	7338.3
50°	13449.0	13194.8	13232.7	13102.9	12280.9	12102.5	11961.9	11372.4	11026.3	9955.6	7565.4
52.5°	12994.7	13135.3	13351.6	13113.7	12691.9	12545.9	12475.6	11907.8	11426.5	10323.3	7770.9
55°	12454.0	12551.3	13016.4	13308.4	13167.8	13038.0	12973.1	12529.7	11821.3	10631.6	7960.2
57.5°	11664.4	11621.2	12134.9	13275.9	13665.3	13589.6	13519.3	13140.7	12189.0	10853.3	8079.1
60°	10480.2	10388.2	11037.1	12627.0	13827.5	13946.5	13914.0	13546.3	12470.2	10847.9	8030.5
62.5°	8430.6	8657.8	9555.4	11567.1	13897.8	14200.7	14141.2	13578.8	12562.1	10534.2	7722.2
65°	6267.5	6592.0	7473.5	10107.0	13800.5	14330.4	14168.2	13048.8	12134.9	9912.3	7046.3
67.5°	4515.4	4802.1	5445.6	8317.1	12865.0	13735.6	13546.3	12183.6	11150.7	9030.9	6110.7
70°	3087.8	3293.3	3731.3	6056.6	10983.1	11875.3	11756.4	10891.1	9598.7	7981.8	4964.3
72.5°	2179.3	2265.8	2547.0	3996.3	8344.1	9317.5	9176.9	8960.6	7711.4	6635.3	3861.1
75°	1633.1	1687.2	1838.6	2584.9	5629.4	6456.8	6327.0	6451.4	5759.2	5023.8	2812.0
77.5°	616.5	670.6	1043.7	1649.4	3331.2	3963.9	3834.1	3909.8	3201.4	2536.2	1400.6
80°	167.6	178.5	346.1	784.1	1514.2	1973.8	1795.4	1541.2	1189.7	1168.1	740.9
82.5°	70.3	81.1	156.8	421.8	540.8	540.8	454.2	562.4	454.2	546.2	356.9
85°	27.0	32.4	37.9	108.2	70.3	75.7	81.1	108.2	91.9	113.6	81.1
87.5°	0.0	0.0	0.0	5.4	5.4	10.8	5.4	10.8	16.2	16.2	16.2
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°	4369.4	4369.4	4369.4	4369.4	4369.4	4369.4	4369.4	4369.4	4369.4	4369.4	4369.4
2.5°	4342.4	4282.9	4196.4	4055.8	3909.8	3828.7	3725.9	3709.7	3601.5	3590.7	3547.5
5°	4369.4	4245.1	4023.3	3753.0	3488.0	3282.5	3131.1	3050.0	2893.1	2893.1	2849.9
7.5°	4391.1	4196.4	3839.5	3439.3	3077.0	2801.2	2595.7	2509.2	2368.6	2357.8	2325.3
10°	4396.5	4136.9	3639.4	3120.3	2676.8	2395.6	2195.5	2098.2	1973.8	1963.0	1941.4
12.5°	4439.7	4104.5	3460.9	2844.5	2390.2	2087.4	1892.7	1811.6	1714.2	1703.4	1681.8
15°	4510.0	4104.5	3309.5	2611.9	2136.0	1854.8	1687.2	1611.5	1541.2	1530.4	1519.6
17.5°	4580.3	4093.6	3158.1	2395.6	1925.1	1671.0	1525.0	1465.5	1411.4	1406.0	1395.2
20°	4645.2	4088.2	3006.7	2211.8	1762.9	1519.6	1406.0	1351.9	1308.7	1308.7	1303.3
22.5°	4710.1	4077.4	2860.7	2038.7	1622.3	1406.0	1308.7	1249.2	1216.7	1216.7	1211.3
25°	4807.5	4077.4	2725.5	1892.7	1508.8	1319.5	1222.1	1178.9	1151.8	1146.4	1146.4
27.5°	4921.0	4109.9	2606.5	1762.9	1411.4	1233.0	1157.3	1114.0	1081.5	1070.7	1076.1
30°	5045.4	4136.9	2498.4	1649.4	1319.5	1168.1	1087.0	1043.7	1011.2	1000.4	1005.8
32.5°	5169.8	4169.3	2401.0	1546.6	1227.6	1108.6	1027.5	978.8	946.3	940.9	940.9
35°	5305.0	4201.8	2303.7	1460.1	1151.8	1049.1	973.4	919.3	897.7	886.9	892.3
37.5°	5440.2	4255.9	2211.8	1379.0	1097.8	995.0	924.7	870.6	854.4	849.0	849.0
40°	5602.4	4337.0	2173.9	1324.9	1049.1	946.3	886.9	832.8	816.6	816.6	816.6
42.5°	5737.6	4401.9	2141.5	1265.4	1011.2	903.1	849.0	805.7	794.9	789.5	794.9
45°	5872.8	4461.4	2098.2	1211.3	962.6	859.8	816.6	773.3	762.5	762.5	762.5
47.5°	6008.0	4493.8	2038.7	1157.3	919.3	822.0	784.1	746.3	735.4	735.4	735.4
50°	6116.1	4520.8	1952.2	1097.8	870.6	789.5	751.7	713.8	703.0	703.0	703.0
52.5°	6224.3	4526.3	1860.3	1027.5	822.0	751.7	719.2	681.4	670.6	665.1	665.1
55°	6321.6	4520.8	1752.1	946.3	767.9	708.4	681.4	648.9	627.3	605.7	616.5
57.5°	6391.9	4515.4	1627.7	865.2	713.8	665.1	654.3	611.1	567.8	513.7	524.5
60°	6364.9	4456.0	1492.5	762.5	654.3	621.9	621.9	562.4	486.7	459.7	465.1
62.5°	6191.8	4288.3	1351.9	654.3	594.8	578.6	573.2	508.3	448.8	421.8	427.2
65°	5672.7	3866.5	1146.4	557.0	535.4	530.0	530.0	470.5	416.4	383.9	389.4
67.5°	4883.2	3244.6	935.5	470.5	475.9	486.7	486.7	432.6	378.5	346.1	351.5
70°	3915.2	2536.2	746.3	405.6	411.0	427.2	438.0	389.4	340.7	308.2	308.2
72.5°	2947.2	1925.1	600.3	340.7	367.7	367.7	383.9	346.1	297.4	265.0	270.4
75°	2136.0	1379.0	475.9	286.6	319.1	313.6	313.6	292.0	254.2	232.5	232.5
77.5°	1011.2	724.6	378.5	205.5	248.8	243.3	248.8	232.5	216.3	194.7	200.1
80°	497.5	356.9	243.3	146.0	173.0	178.5	194.7	183.9	178.5	162.2	162.2
82.5°	237.9	140.6	113.6	102.7	119.0	124.4	135.2	135.2	140.6	129.8	129.8
85°	64.9	37.9	48.7	64.9	75.7	81.1	91.9	97.3	97.3	91.9	97.3
87.5°	16.2	16.2	21.6	32.4	37.9	43.3	48.7	48.7	21.6	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)