

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: P842105

Luminaire Tested: **ARCH4-270-730-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842105
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: ARCH4-270-730-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 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: 26573 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G4

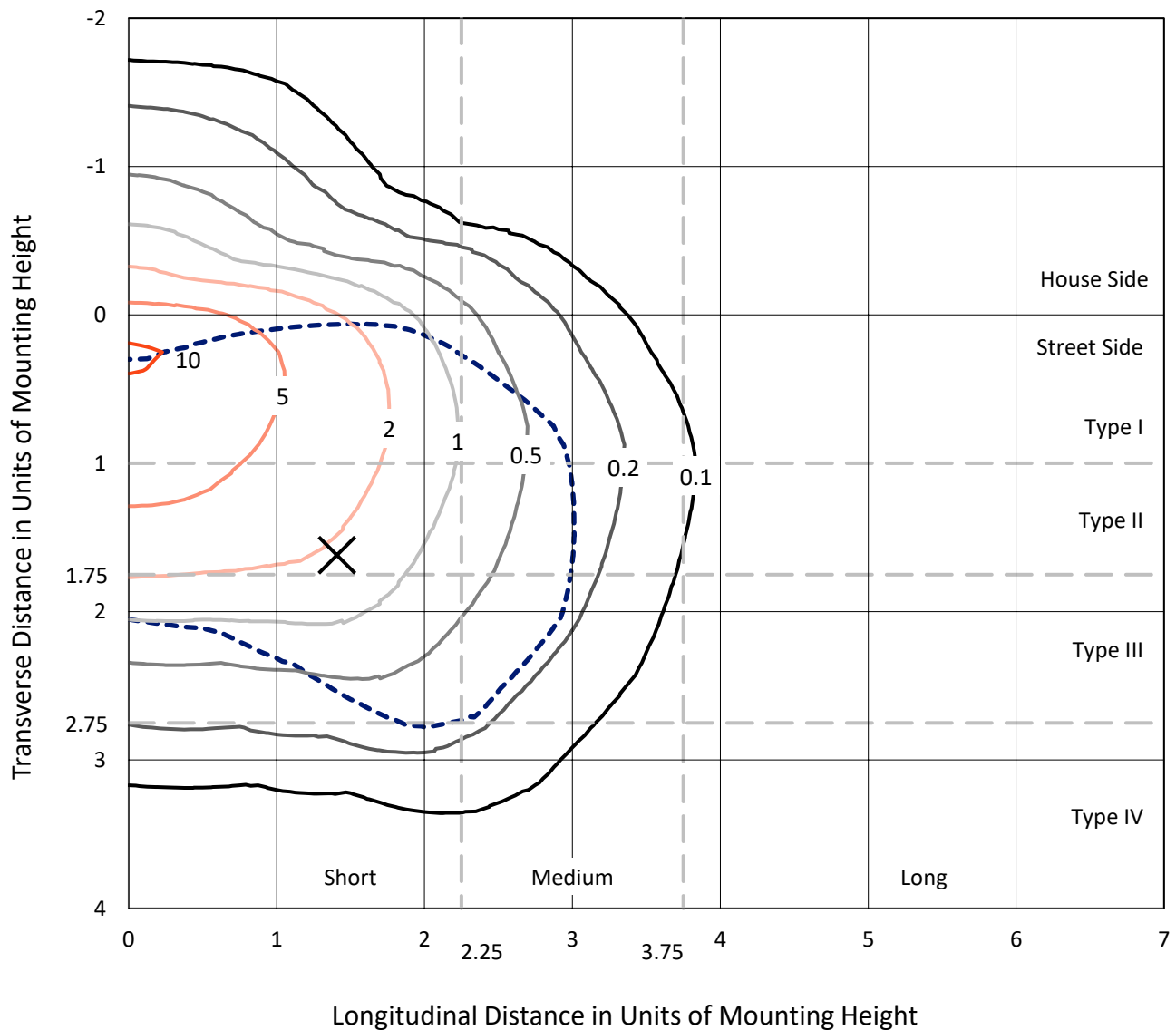
Input Watts (W): 269
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

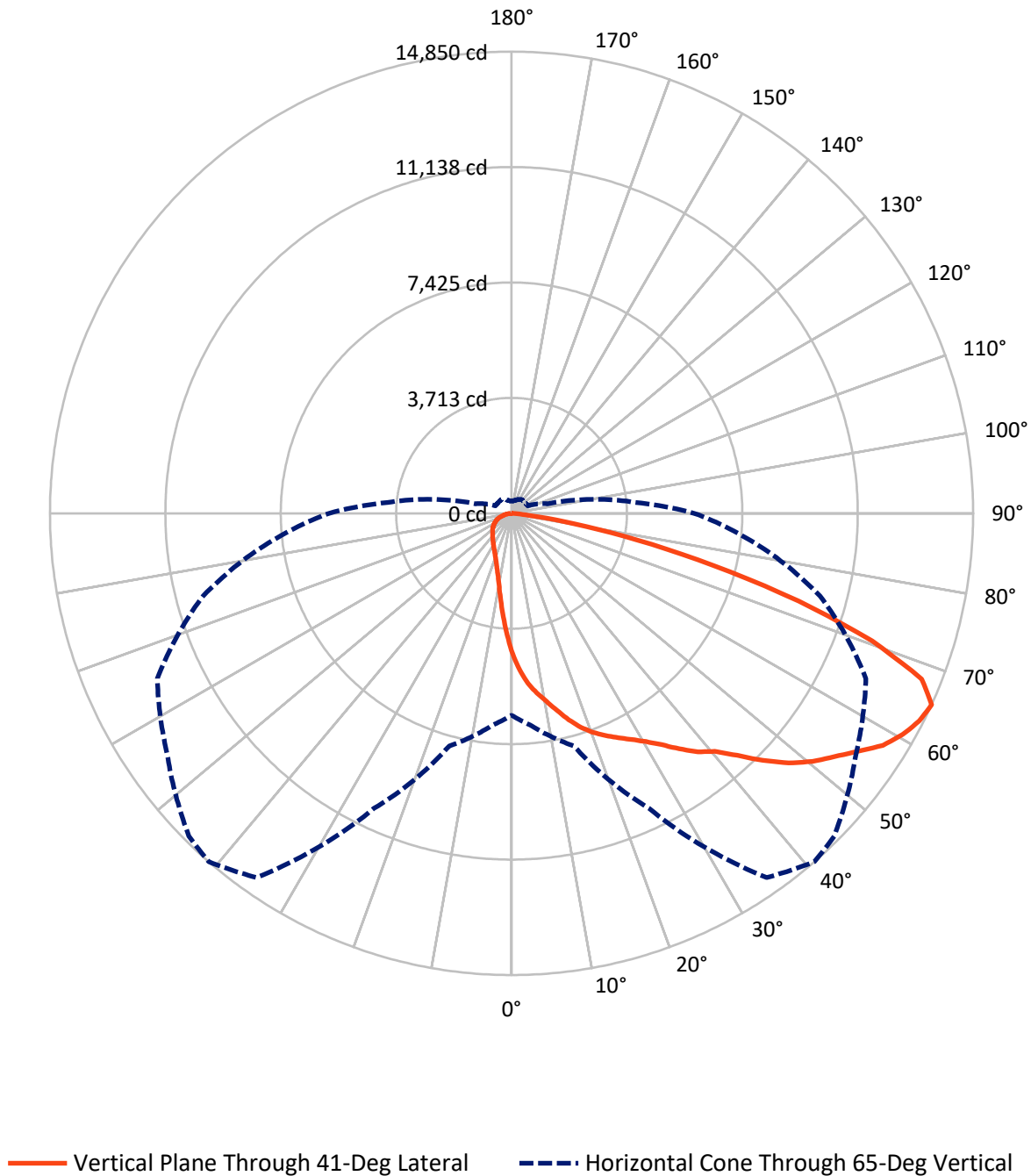
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.5 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	3411.6	0.0	3411.6
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	23161.4	0.0	23161.4
	% Fixture	87.2	0.0	87.2
Total	Lumens	26573.0	0.0	26573.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	421.9	1.6
10°-20°	1265.0	4.8
20°-30°	2176.3	8.2
30°-40°	3300.7	12.4
40°-50°	4835.7	18.2
50°-60°	6106.4	23.0
60°-70°	5725.9	21.5
70°-80°	2552.0	9.6
80°-90°	189.1	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°	26573.0	100.0
0°-180°	26573.0	100.0

Coefficient of Utilization



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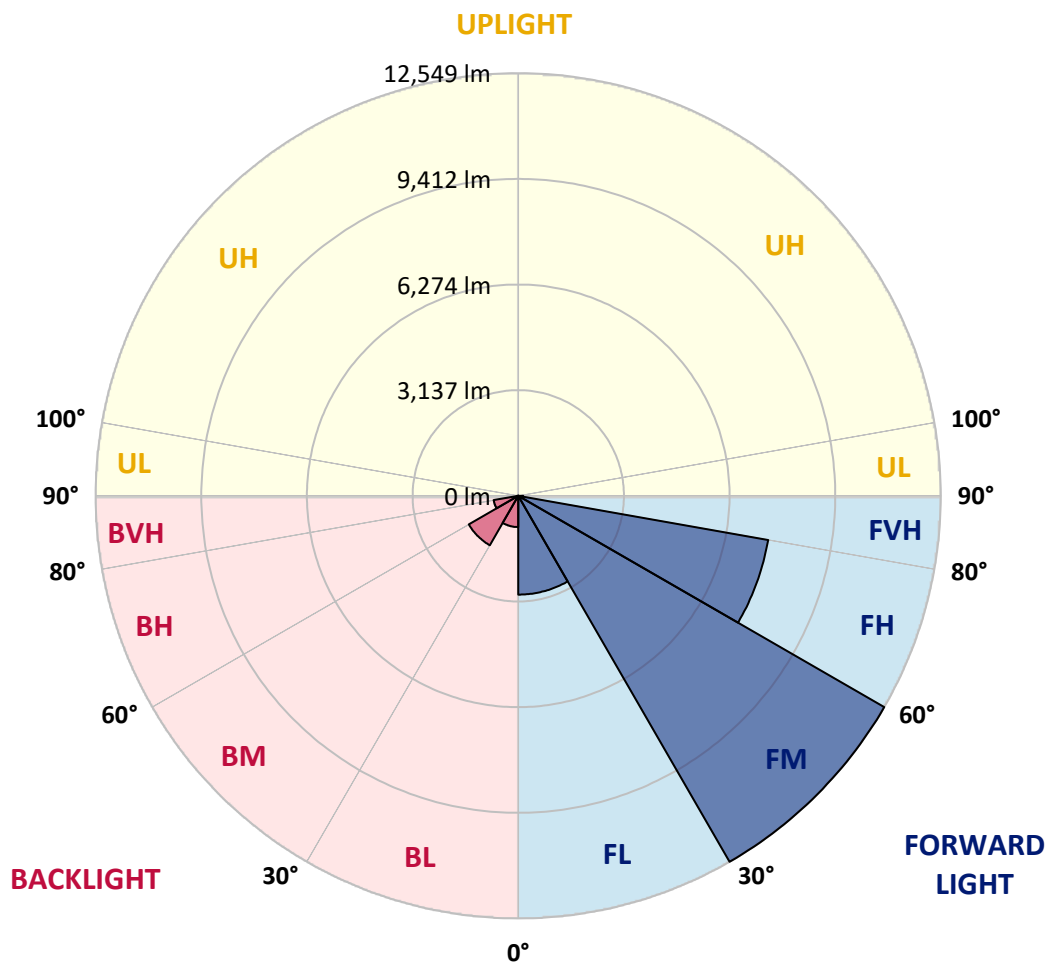
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2934.7	11.0			
FM	(30°-60°)	12548.8	47.2			
FH	(60°-80°)	7536.8	28.4			G4/12000
FVH	(80°-90°)	141.2	0.5			G2/225
BL	(0°-30°)	928.6	3.5	B2/1000		
BM	(30°-60°)	1694.0	6.4	B2/2500		
BH	(60°-80°)	741.1	2.8	B2/1000		G2/1000
BVH	(80°-90°)	47.9	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-G4

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	4527.9	4527.9	4527.9	4527.9	4527.9	4527.9	4527.9	4527.9	4527.9	4527.9	4527.9
2.5°	5222.8	5206.0	5194.8	5133.1	5133.1	5049.1	5054.7	4976.2	4880.9	4729.6	4567.1
5°	5715.9	5693.5	5665.5	5603.8	5581.4	5497.4	5486.2	5374.1	5211.6	4948.2	4656.8
7.5°	6147.4	6125.0	6085.8	5996.1	5934.5	5833.6	5805.6	5659.9	5480.6	5155.5	4746.4
10°	6539.7	6522.9	6472.4	6360.4	6276.3	6153.0	6102.6	5906.4	5682.3	5323.6	4819.3
12.5°	6937.6	6915.1	6847.9	6752.6	6651.8	6506.1	6444.4	6192.2	5906.4	5508.6	4925.8
15°	7307.4	7273.8	7223.3	7122.5	7032.8	6892.7	6825.5	6528.5	6181.0	5715.9	5065.9
17.5°	7548.4	7520.3	7475.5	7419.5	7346.6	7240.2	7172.9	6881.5	6455.6	5917.7	5211.6
20°	7694.1	7682.9	7666.0	7632.4	7598.8	7526.0	7475.5	7200.9	6752.6	6113.8	5351.7
22.5°	7806.1	7794.9	7789.3	7789.3	7794.9	7766.9	7733.3	7497.9	7038.4	6321.1	5480.6
25°	7979.9	7974.3	7963.1	7951.8	7991.1	7996.7	7985.5	7823.0	7397.1	6595.7	5643.1
27.5°	8220.8	8204.0	8181.6	8170.4	8209.6	8237.6	8260.1	8148.0	7778.1	6875.9	5828.0
30°	8590.7	8540.2	8484.2	8445.0	8473.0	8517.8	8568.3	8501.0	8170.4	7223.3	6018.5
32.5°	9027.8	8966.1	8837.3	8764.4	8837.3	8870.9	8910.1	8876.5	8579.5	7598.8	6209.1
35°	9560.1	9487.3	9352.8	9246.3	9375.2	9302.4	9285.6	9251.9	8966.1	7968.7	6422.0
37.5°	10445.6	10339.1	10126.1	9890.8	9890.8	9733.9	9672.2	9571.4	9313.6	8299.3	6629.3
40°	11471.1	11331.0	11056.4	10708.9	10389.5	10064.5	10025.3	9952.4	9722.7	8680.3	6864.7
42.5°	12597.4	12328.4	11947.4	11527.1	11011.5	10641.7	10552.0	10344.7	10120.5	9067.0	7100.1
45°	13847.1	13286.7	12731.9	12519.0	11667.2	11331.0	11162.8	10787.4	10535.2	9470.5	7346.6
47.5°	14048.8	13611.7	13241.9	13208.2	12278.0	11997.8	11807.3	11269.3	10983.5	9902.0	7604.4
50°	13936.7	13673.4	13712.6	13578.1	12726.3	12541.4	12395.7	11784.9	11426.2	10316.7	7839.8
52.5°	13466.0	13611.7	13835.9	13589.3	13152.2	13000.9	12928.1	12339.6	11840.9	10697.7	8052.7
55°	12905.6	13006.5	13488.4	13791.0	13645.3	13510.9	13443.6	12984.1	12250.0	11017.1	8248.8
57.5°	12087.5	12042.6	12575.0	13757.4	14160.9	14082.4	14009.6	13617.3	12631.0	11246.9	8372.1
60°	10860.2	10765.0	11437.4	13085.0	14329.0	14452.3	14418.7	14037.6	12922.4	11241.3	8321.7
62.5°	8736.4	8971.7	9902.0	11986.6	14401.9	14715.7	14654.0	14071.2	13017.7	10916.3	8002.3
65°	6494.8	6831.1	7744.5	10473.6	14301.0	14850.2	14682.1	13522.1	12575.0	10271.8	7301.8
67.5°	4679.2	4976.2	5643.1	8618.7	13331.5	14233.7	14037.6	12625.4	11555.1	9358.4	6332.3
70°	3199.8	3412.7	3866.6	6276.3	11381.4	12306.0	12182.7	11286.1	9946.8	8271.3	5144.3
72.5°	2258.3	2348.0	2639.4	4141.2	8646.7	9655.4	9509.7	9285.6	7991.1	6875.9	4001.1
75°	1692.4	1748.4	1905.3	2678.6	5833.6	6691.0	6556.5	6685.4	5968.1	5206.0	2914.0
77.5°	638.8	694.9	1081.5	1709.2	3452.0	4107.6	3973.1	4051.6	3317.5	2628.2	1451.4
80°	173.7	184.9	358.6	812.6	1569.1	2045.4	1860.5	1597.1	1232.8	1210.4	767.7
82.5°	72.8	84.1	162.5	437.1	560.4	560.4	470.7	582.8	470.7	566.0	369.9
85°	28.0	33.6	39.2	112.1	72.8	78.5	84.1	112.1	95.3	117.7	84.1
87.5°	0.0	0.0	0.0	5.6	5.6	11.2	5.6	11.2	16.8	16.8	16.8
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°	4527.9	4527.9	4527.9	4527.9	4527.9	4527.9	4527.9	4527.9	4527.9	4527.9	4527.9
2.5°	4499.9	4438.2	4348.6	4202.9	4051.6	3967.5	3861.0	3844.2	3732.2	3720.9	3676.1
5°	4527.9	4399.0	4169.3	3889.1	3614.5	3401.5	3244.6	3160.6	2998.1	2998.1	2953.2
7.5°	4550.3	4348.6	3978.7	3564.0	3188.6	2902.8	2689.8	2600.2	2454.5	2443.3	2409.6
10°	4555.9	4286.9	3771.4	3233.4	2773.9	2482.5	2275.2	2174.3	2045.4	2034.2	2011.8
12.5°	4600.8	4253.3	3586.5	2947.6	2476.9	2163.1	1961.3	1877.3	1776.4	1765.2	1742.8
15°	4673.6	4253.3	3429.5	2706.7	2213.5	1922.1	1748.4	1669.9	1597.1	1585.9	1574.7
17.5°	4746.4	4242.1	3272.6	2482.5	1995.0	1731.6	1580.3	1518.6	1462.6	1457.0	1445.8
20°	4813.7	4236.5	3115.7	2292.0	1826.9	1574.7	1457.0	1401.0	1356.1	1356.1	1350.5
22.5°	4880.9	4225.3	2964.4	2112.6	1681.2	1457.0	1356.1	1294.5	1260.9	1260.9	1255.3
25°	4981.8	4225.3	2824.3	1961.3	1563.5	1367.3	1266.5	1221.6	1193.6	1188.0	1188.0
27.5°	5099.5	4258.9	2701.0	1826.9	1462.6	1277.7	1199.2	1154.4	1120.8	1109.6	1115.2
30°	5228.4	4286.9	2589.0	1709.2	1367.3	1210.4	1126.4	1081.5	1047.9	1036.7	1042.3
32.5°	5357.3	4320.6	2488.1	1602.7	1272.1	1148.8	1064.7	1014.3	980.7	975.1	975.1
35°	5497.4	4354.2	2387.2	1513.0	1193.6	1087.1	1008.7	952.7	930.2	919.0	924.6
37.5°	5637.5	4410.2	2292.0	1429.0	1137.6	1031.1	958.3	902.2	885.4	879.8	879.8
40°	5805.6	4494.3	2252.7	1372.9	1087.1	980.7	919.0	863.0	846.2	846.2	846.2
42.5°	5945.7	4561.5	2219.1	1311.3	1047.9	935.8	879.8	835.0	823.8	818.2	823.8
45°	6085.8	4623.2	2174.3	1255.3	997.5	891.0	846.2	801.3	790.1	790.1	790.1
47.5°	6225.9	4656.8	2112.6	1199.2	952.7	851.8	812.6	773.3	762.1	762.1	762.1
50°	6337.9	4684.8	2023.0	1137.6	902.2	818.2	778.9	739.7	728.5	728.5	728.5
52.5°	6450.0	4690.4	1927.7	1064.7	851.8	778.9	745.3	706.1	694.9	689.3	689.3
55°	6550.9	4684.8	1815.6	980.7	795.7	734.1	706.1	672.5	650.0	627.6	638.8
57.5°	6623.7	4679.2	1686.8	896.6	739.7	689.3	678.1	633.2	588.4	532.4	543.6
60°	6595.7	4617.6	1546.7	790.1	678.1	644.4	644.4	582.8	504.3	476.3	481.9
62.5°	6416.4	4443.8	1401.0	678.1	616.4	599.6	594.0	526.8	465.1	437.1	442.7
65°	5878.4	4006.7	1188.0	577.2	554.8	549.2	549.2	487.5	431.5	397.9	403.5
67.5°	5060.3	3362.3	969.5	487.5	493.1	504.3	504.3	448.3	392.3	358.6	364.2
70°	4057.2	2628.2	773.3	420.3	425.9	442.7	453.9	403.5	353.0	319.4	319.4
72.5°	3054.1	1995.0	622.0	353.0	381.1	381.1	397.9	358.6	308.2	274.6	280.2
75°	2213.5	1429.0	493.1	297.0	330.6	325.0	325.0	302.6	263.4	241.0	241.0
77.5°	1047.9	750.9	392.3	212.9	257.8	252.2	257.8	241.0	224.2	201.7	207.3
80°	515.6	369.9	252.2	151.3	179.3	184.9	201.7	190.5	184.9	168.1	168.1
82.5°	246.6	145.7	117.7	106.5	123.3	128.9	140.1	140.1	145.7	134.5	134.5
85°	67.2	39.2	50.4	67.2	78.5	84.1	95.3	100.9	100.9	95.3	100.9
87.5°	16.8	16.8	22.4	33.6	39.2	44.8	50.4	50.4	22.4	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)