

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: P841983

Luminaire Tested: **ARCH4-250-750-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841983
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-250-750-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 975mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38730 lumens
Efficiency: N/A
Efficacy: 155.2 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G4

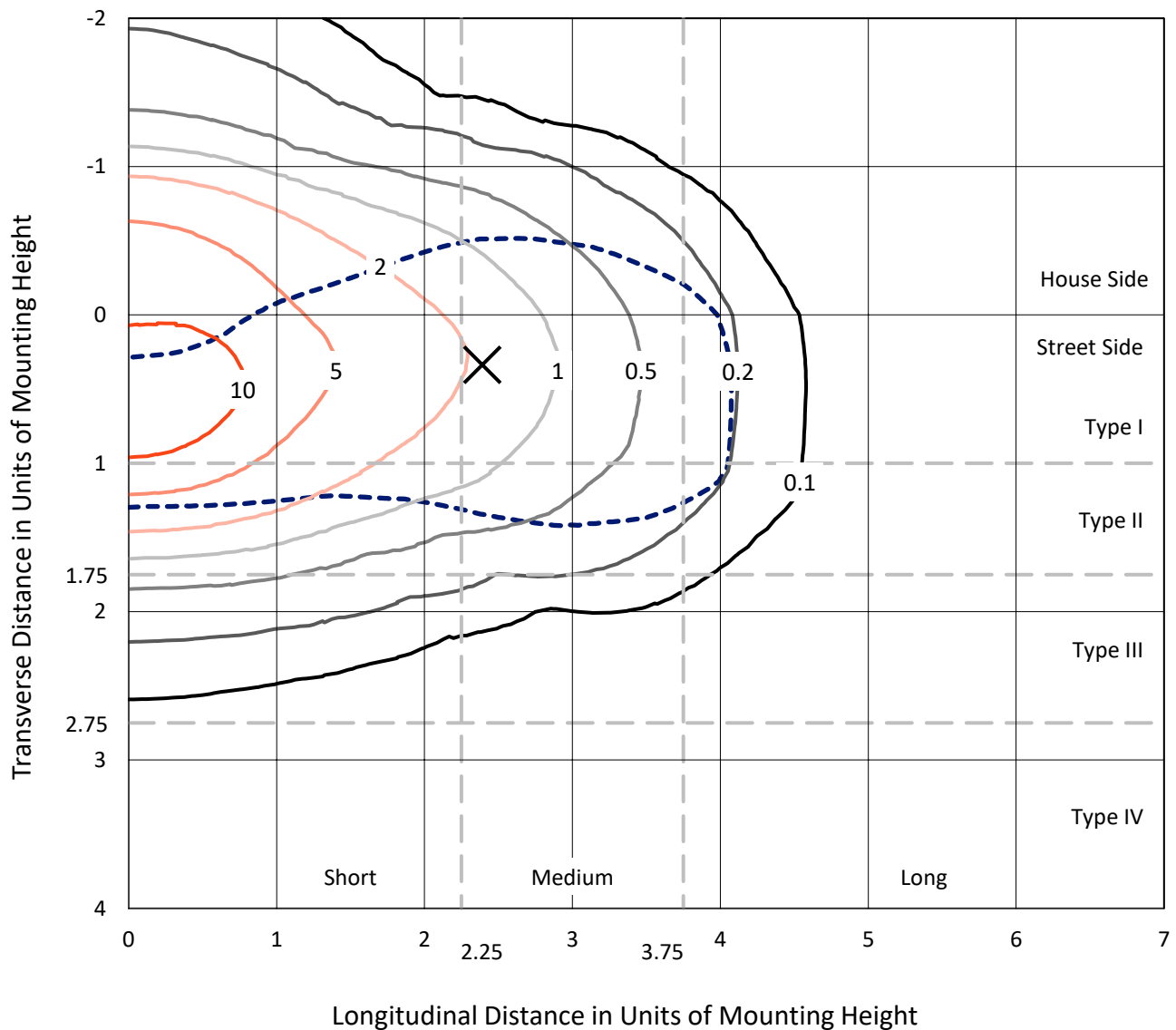
Input Watts (W): 249.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

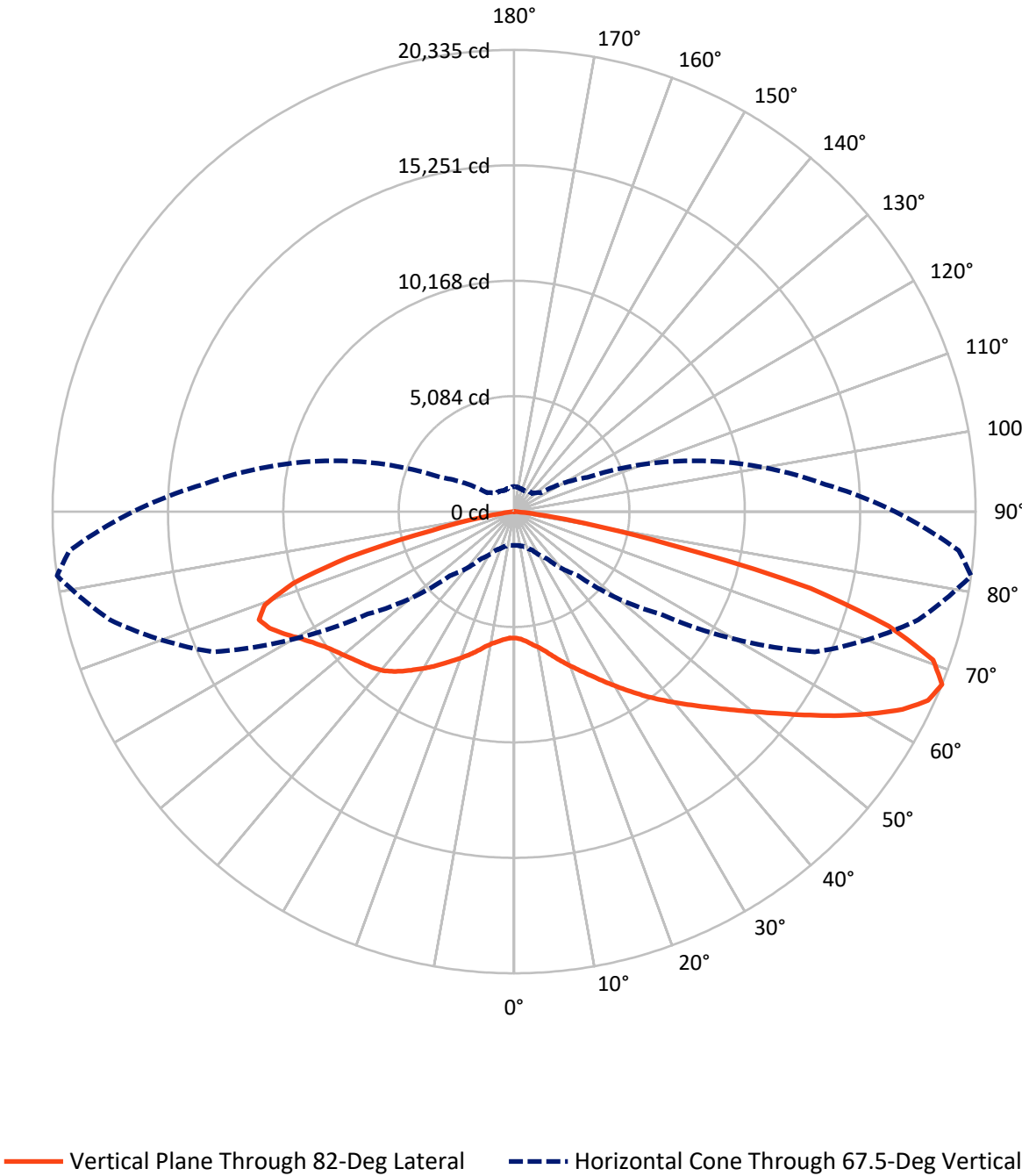
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 17.1 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11794.8	0.0	11794.8
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	26935.1	0.0	26935.1
	% Fixture	69.5	0.0	69.5
Total	Lumens	38730.0	0.0	38730.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	575.4	1.5
10°-20°	2072.5	5.4
20°-30°	4165.2	10.8
30°-40°	6543.0	16.9
40°-50°	7970.7	20.6
50°-60°	7531.3	19.4
60°-70°	6219.1	16.1
70°-80°	3386.6	8.7
80°-90°	266.3	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°	38730.0	100.0
0°-180°	38730.0	100.0

Coefficient of Utilization



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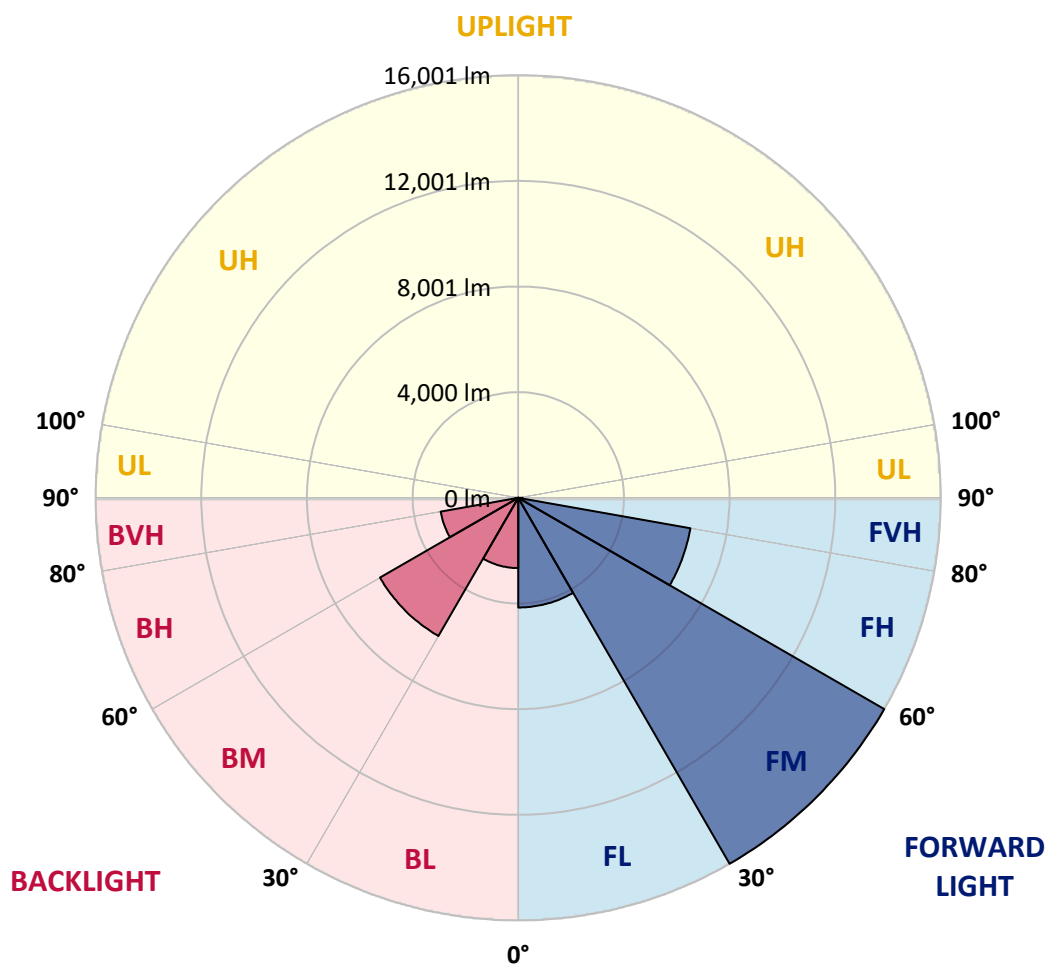
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4153.3	10.7			
FM	(30°-60°)	16001.0	41.3			
FH	(60°-80°)	6620.4	17.1			G3/7500
FVH	(80°-90°)	160.5	0.4			G2/225
BL	(0°-30°)	2659.8	6.9	B4/5000		
BM	(30°-60°)	6043.9	15.6	B4/8500		
BH	(60°-80°)	2985.3	7.7	B4/5000		G4/5000
BVH	(80°-90°)	105.8	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	5567.4	5567.4	5567.4	5567.4	5567.4	5567.4	5567.4	5567.4	5567.4	5567.4	5567.4
2.5°	5820.5	5820.5	5865.5	5865.5	5826.1	5764.2	5747.4	5679.9	5618.0	5618.0	5623.7
5°	6377.2	6371.6	6405.3	6360.4	6264.8	6141.0	6056.7	5910.5	5786.7	5747.4	5741.8
7.5°	7057.7	7052.1	7068.9	6995.8	6815.9	6613.4	6444.7	6208.5	6006.1	5921.7	5899.2
10°	7816.9	7811.3	7794.4	7670.7	7428.8	7113.9	6860.9	6534.7	6231.0	6096.0	6067.9
12.5°	8688.5	8677.3	8637.9	8458.0	8126.2	7721.3	7355.7	6934.0	6529.1	6343.5	6281.6
15°	9661.4	9644.6	9571.5	9352.1	8907.9	8396.1	7923.7	7383.9	6889.0	6647.2	6562.8
17.5°	10684.9	10684.9	10572.5	10246.3	9751.4	9115.9	8531.1	7845.0	7265.8	6967.7	6866.5
20°	11725.3	11719.7	11579.1	11185.4	10600.6	9869.5	9127.2	8373.6	7653.8	7293.9	7170.2
22.5°	12821.9	12810.7	12636.4	12186.5	11489.1	10662.4	9796.4	8896.6	8081.2	7648.2	7490.7
25°	14081.6	14064.8	13851.1	13299.9	12473.3	11539.7	10550.0	9509.6	8570.4	8041.8	7856.2
27.5°	15420.1	15397.6	15144.5	14503.4	13598.0	12473.3	11382.3	10218.2	9110.3	8480.5	8272.4
30°	16612.3	16595.4	16319.8	15661.9	14621.5	13401.2	12175.2	10926.8	9678.3	8947.2	8688.5
32.5°	17512.1	17512.1	17264.6	16617.9	15538.2	14289.7	12973.8	11596.0	10268.8	9447.7	9144.1
35°	18057.6	18074.4	17860.7	17343.3	16325.5	15127.6	13800.4	12383.3	10898.6	9982.0	9655.8
37.5°	18136.3	18192.5	18068.8	17720.1	16871.0	15825.0	14610.3	13142.5	11551.0	10521.9	10156.3
40°	17770.7	17810.1	17815.7	17680.8	17095.9	16325.5	15324.5	13946.7	12242.7	11089.8	10668.1
42.5°	17039.7	17067.8	17118.4	17157.8	16932.8	16544.8	15870.0	14694.6	12979.4	11669.1	11174.2
45°	16094.9	16089.3	16173.6	16342.3	16331.1	16421.1	16173.6	15375.1	13744.2	12327.0	11736.6
47.5°	14683.4	14655.2	14953.3	15335.7	15526.9	15948.7	16179.3	15909.3	14576.5	13052.5	12377.7
50°	12473.3	12445.1	13097.5	13997.3	14559.6	15200.7	15870.0	16229.9	15448.2	13867.9	13075.0
52.5°	9785.2	9757.0	10583.7	12158.3	13384.3	14317.8	15245.7	16303.0	16274.9	14779.0	13862.3
55°	7277.0	7254.5	8058.7	9762.7	11747.8	13294.3	14480.9	16111.8	17050.9	15825.0	14818.3
57.5°	5128.8	5117.5	5814.9	7226.4	9644.6	12045.9	13744.2	15740.6	17765.1	16960.9	15898.1
60°	3599.1	3582.3	4088.4	5179.4	7293.9	10161.9	13013.1	15245.7	18299.4	18080.0	17045.3
62.5°	2423.8	2412.5	2772.5	3683.5	5179.4	7822.5	11905.3	14913.9	18603.0	19204.8	18203.8
65°	1838.9	1833.3	1996.4	2496.9	3666.6	5618.0	10145.1	14874.6	18642.4	20048.3	19187.9
67.5°	1484.6	1490.3	1580.2	1867.1	2536.3	3992.8	7867.5	14627.1	18434.3	20335.1	19665.9
70°	1214.7	1214.7	1254.1	1445.3	1872.7	2693.7	5494.3	13502.4	17855.1	19587.2	19097.9
72.5°	927.9	933.5	1057.2	1169.7	1411.5	1889.5	3520.4	11174.2	16488.6	17270.2	16899.1
75°	736.7	731.1	804.2	961.6	1096.6	1349.7	2159.5	8013.7	14031.0	13496.8	13260.6
77.5°	528.6	523.0	579.2	714.2	832.3	956.0	1287.8	4043.4	7631.3	7012.7	6838.4
80°	359.9	348.7	399.3	494.9	551.1	562.4	629.8	1552.1	3329.2	3138.0	3098.6
82.5°	185.6	185.6	213.7	281.2	286.8	292.4	281.2	500.5	1102.2	1029.1	984.1
85°	73.1	73.1	78.7	95.6	95.6	101.2	101.2	129.3	118.1	112.5	106.8
87.5°	5.6	5.6	11.2	11.2	16.9	16.9	16.9	22.5	28.1	28.1	28.1
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°	5567.4	5567.4	5567.4	5567.4	5567.4	5567.4	5567.4	5567.4	5567.4	5567.4	5567.4
2.5°	5612.4	5589.9	5516.8	5499.9	5488.7	5471.8	5477.4	5438.1	5421.2	5426.8	5404.3
5°	5713.6	5674.3	5584.3	5544.9	5533.7	5516.8	5533.7	5505.6	5477.4	5488.7	5477.4
7.5°	5854.2	5798.0	5685.5	5646.1	5640.5	5623.7	5646.1	5623.7	5601.2	5612.4	5589.9
10°	6000.4	5927.3	5803.6	5764.2	5764.2	5758.6	5781.1	5747.4	5724.9	5730.5	5719.3
12.5°	6214.1	6118.5	5983.6	5949.8	5933.0	5949.8	5955.4	5910.5	5871.1	5876.7	5859.8
15°	6472.8	6366.0	6219.8	6169.1	6157.9	6152.3	6129.8	6073.5	6022.9	6017.3	6000.4
17.5°	6754.0	6619.0	6444.7	6394.1	6343.5	6326.6	6270.4	6197.3	6118.5	6118.5	6096.0
20°	7023.9	6872.1	6664.0	6590.9	6517.8	6450.3	6354.7	6236.6	6135.4	6118.5	6096.0
22.5°	7316.4	7136.4	6894.6	6787.8	6658.4	6523.4	6360.4	6202.9	6073.5	6045.4	6028.6
25°	7642.5	7417.6	7130.8	6973.3	6765.3	6557.2	6315.4	6112.9	5961.1	5916.1	5904.8
27.5°	8002.5	7732.5	7383.9	7153.3	6849.6	6523.4	6214.1	5972.3	5786.7	5730.5	5713.6
30°	8368.0	8047.4	7614.4	7277.0	6849.6	6416.6	6028.6	5747.4	5533.7	5454.9	5443.7
32.5°	8733.5	8373.6	7822.5	7344.5	6782.1	6236.6	5786.7	5454.9	5213.1	5117.5	5140.0
35°	9172.2	8733.5	8013.7	7372.6	6669.7	6017.3	5511.2	5123.1	4875.7	4791.4	4808.2
37.5°	9627.7	9093.4	8165.5	7350.1	6512.2	5769.9	5201.9	4825.1	4515.8	4369.6	4386.5
40°	10021.4	9419.6	8272.4	7271.4	6309.7	5488.7	4898.2	4403.3	3975.9	3835.3	3818.5
42.5°	10392.5	9661.4	8328.6	7153.3	6079.2	5162.5	4465.2	3829.7	3402.3	3228.0	3233.6
45°	10780.5	9897.6	8306.1	6995.8	5792.4	4780.1	3908.4	3267.3	2890.6	2733.1	2738.7
47.5°	11224.8	10150.7	8283.6	6827.1	5443.7	4285.2	3374.2	2772.5	2446.3	2333.8	2322.6
50°	11697.2	10431.9	8255.5	6619.0	5055.7	3734.1	2845.6	2311.3	2035.8	1962.7	1945.8
52.5°	12231.4	10735.6	8238.7	6371.6	4588.9	3149.2	2373.2	1906.4	1720.8	1670.2	1664.6
55°	12872.5	11089.8	8261.1	6073.5	4026.5	2598.1	1973.9	1642.1	1518.4	1490.3	1484.6
57.5°	13654.2	11545.4	8328.6	5724.9	3436.1	2120.1	1681.5	1479.0	1400.3	1377.8	1377.8
60°	14503.4	12062.7	8452.4	5331.2	2845.6	1749.0	1490.3	1349.7	1315.9	1344.1	1344.1
62.5°	15420.1	12670.1	8671.7	4853.2	2294.5	1479.0	1338.4	1242.8	1220.3	1276.6	1282.2
65°	16269.2	13260.6	8812.3	4279.6	1822.1	1282.2	1220.3	1136.0	1147.2	1203.5	1197.8
67.5°	16792.2	13749.8	8615.4	3559.8	1445.3	1136.0	1096.6	1023.5	1051.6	1096.6	1102.2
70°	16471.7	13474.3	7642.5	2688.1	1130.4	989.8	961.6	916.7	939.2	995.4	1017.9
72.5°	14902.7	12068.4	5944.2	1816.4	911.0	832.3	843.5	821.1	849.2	899.8	950.4
75°	12096.5	9121.6	3987.2	1164.1	719.8	708.6	725.5	708.6	719.8	770.4	798.6
77.5°	6315.4	4448.3	1985.1	725.5	534.2	551.1	579.2	584.9	618.6	629.8	641.1
80°	2946.8	2002.0	826.7	404.9	354.3	388.0	444.3	449.9	461.1	478.0	483.6
82.5°	961.6	601.7	382.4	219.3	202.5	219.3	286.8	343.0	348.7	382.4	382.4
85°	101.2	61.9	84.4	90.0	78.7	95.6	129.3	123.7	56.2	33.7	33.7
87.5°	28.1	22.5	28.1	28.1	22.5	22.5	16.9	5.6	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)