

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: P841771

Luminaire Tested: **ARCH4-220-750-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841771
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-220-750-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 870mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35295 lumens
Efficiency: N/A
Efficacy: 159.1 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 221.8
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

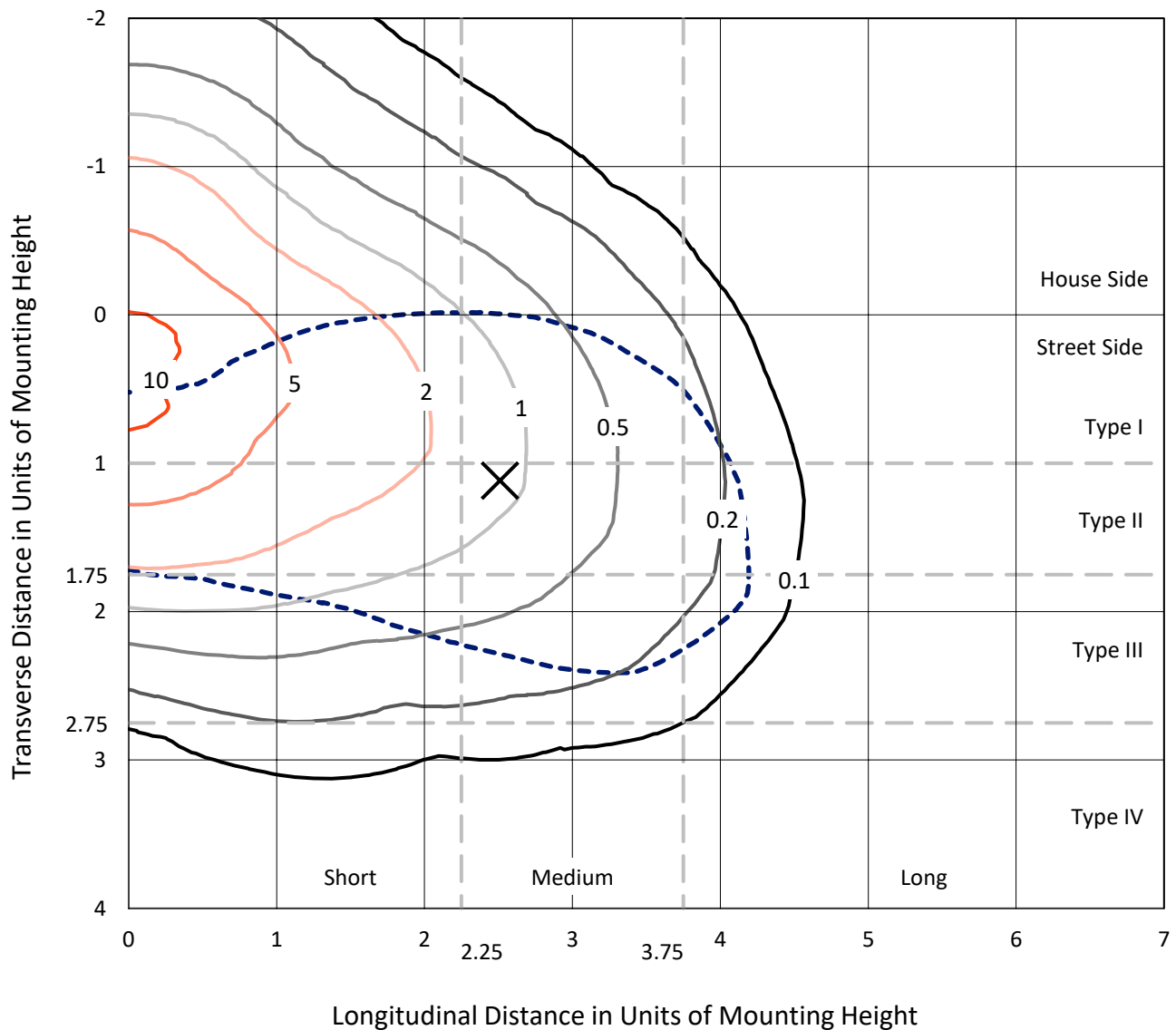


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Iso-Footcandle Lines of Horizontal Illumination

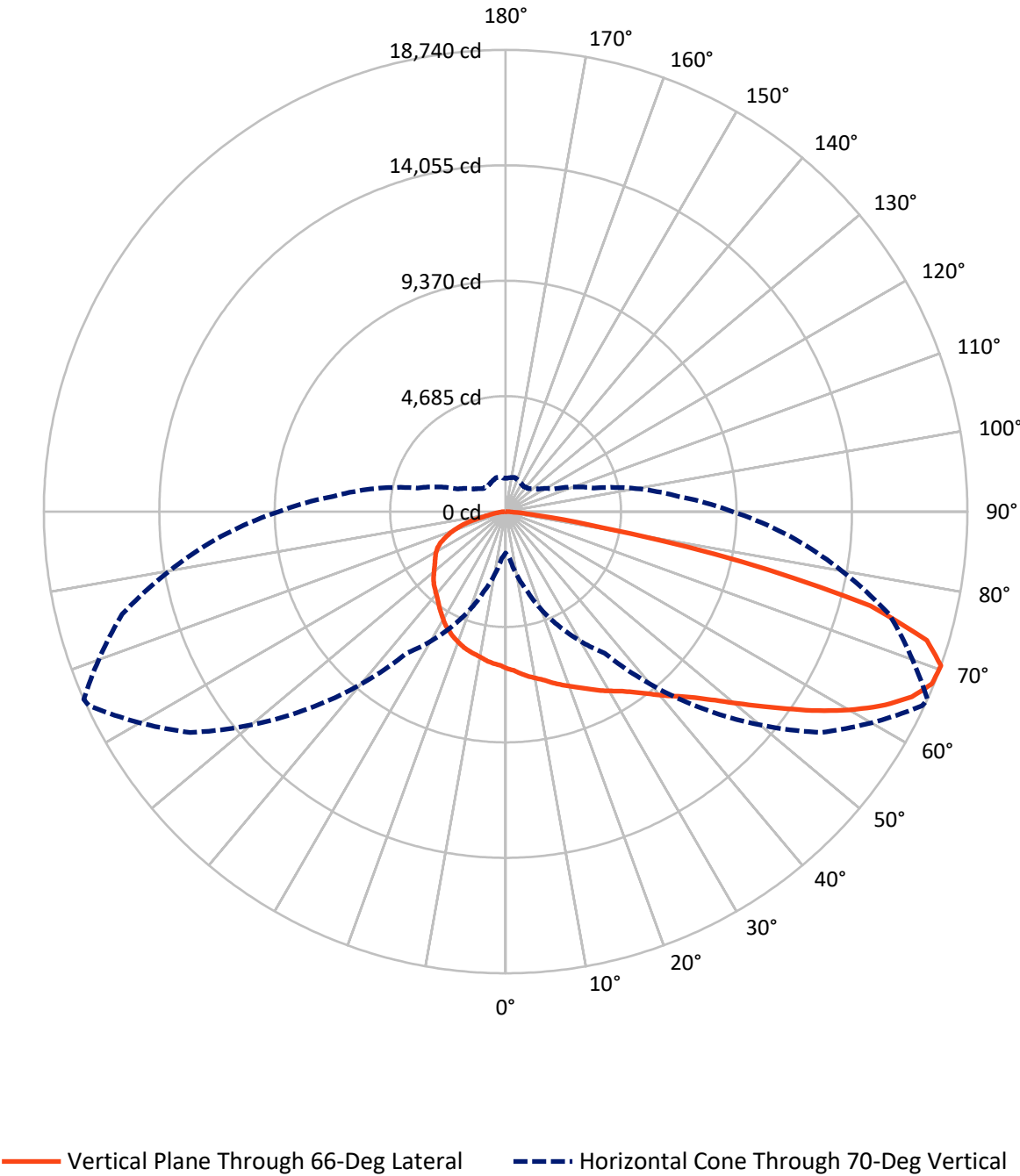
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.1 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9352.4	0.0	9352.4
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	25942.6	0.0	25942.6
	% Fixture	73.5	0.0	73.5
Total	Lumens	35295.0	0.0	35295.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	612.1	1.7
10°-20°	1836.0	5.2
20°-30°	3077.8	8.7
30°-40°	4608.5	13.1
40°-50°	6161.5	17.5
50°-60°	7193.8	20.4
60°-70°	7153.1	20.3
70°-80°	4234.7	12.0
80°-90°	417.4	1.2
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°	35295.0	100.0
0°-180°	35295.0	100.0

Coefficient of Utilization



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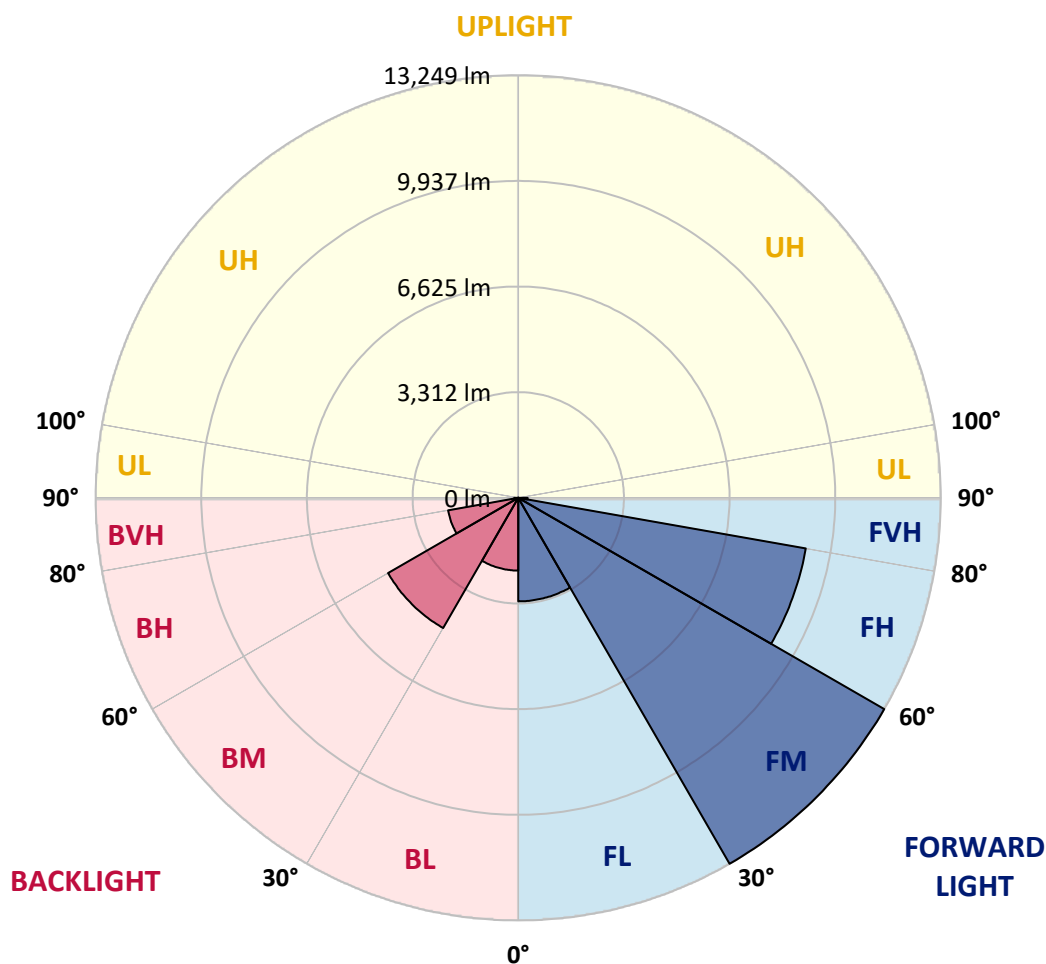
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3246.2	9.2			
FM	(30°-60°)	13249.3	37.5			
FH	(60°-80°)	9153.8	25.9			G4/12000
FVH	(80°-90°)	293.3	0.8			G3/500
BL	(0°-30°)	2279.7	6.5	B3/2500		
BM	(30°-60°)	4714.6	13.4	B3/5000		
BH	(60°-80°)	2234.0	6.3	B3/2500		G3/2500
BVH	(80°-90°)	124.1	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	6369.9	6369.9	6369.9	6369.9	6369.9	6369.9	6369.9	6369.9	6369.9	6369.9	6369.9
2.5°	6604.1	6593.7	6588.5	6567.7	6520.9	6541.7	6494.8	6463.6	6458.4	6385.6	6343.9
5°	6874.8	6869.5	6859.1	6827.9	6755.1	6765.5	6687.4	6630.2	6614.5	6500.0	6411.6
7.5°	7103.7	7093.3	7088.1	7046.5	6968.4	6963.2	6869.5	6786.3	6760.3	6604.1	6468.8
10°	7280.7	7265.1	7275.5	7233.8	7150.6	7135.0	7015.3	6906.0	6880.0	6682.2	6494.8
12.5°	7431.6	7421.2	7436.8	7400.4	7332.7	7317.1	7197.4	7056.9	7025.7	6796.7	6552.1
15°	7598.1	7561.7	7592.9	7577.3	7530.5	7525.3	7416.0	7259.9	7218.2	6942.4	6640.6
17.5°	7686.6	7665.8	7702.2	7707.4	7686.6	7723.0	7619.0	7431.6	7395.2	7077.7	6718.6
20°	7749.1	7717.8	7759.5	7790.7	7806.3	7879.2	7795.9	7613.7	7572.1	7207.8	6791.5
22.5°	7962.4	7894.8	7900.0	7920.8	7931.2	8035.3	7983.2	7806.3	7764.7	7369.2	6880.0
25°	8498.5	8363.2	8274.7	8212.2	8139.4	8227.8	8196.6	8024.9	7988.5	7561.7	6989.2
27.5°	9331.1	9159.4	8982.5	8800.3	8514.1	8477.6	8425.6	8269.5	8227.8	7754.3	7098.5
30°	10278.3	10106.6	9898.4	9607.0	9070.9	8789.9	8670.2	8498.5	8451.6	7926.0	7202.6
32.5°	11220.3	11069.3	10861.2	10507.3	9742.3	9169.8	8914.8	8737.9	8691.0	8113.4	7327.5
35°	11954.1	11860.4	11725.1	11282.7	10408.4	9617.4	9268.7	9055.3	9003.3	8410.0	7556.5
37.5°	12547.3	12479.7	12365.2	11902.0	10892.4	10064.9	9674.6	9430.0	9372.8	8732.7	7801.1
40°	13421.6	13244.7	13151.0	12479.7	11313.9	10470.9	10132.6	9877.6	9815.1	9076.1	7998.9
42.5°	14165.8	14035.7	13921.2	12994.9	11714.7	10819.5	10564.5	10330.3	10247.1	9414.4	8212.2
45°	14290.7	14342.8	14285.5	13249.9	12349.6	11163.0	11001.7	10850.8	10772.7	9872.4	8534.9
47.5°	14295.9	14295.9	13957.7	13395.6	13135.4	11548.1	11470.1	11522.1	11438.8	10455.2	8920.0
50°	13921.2	13988.9	13812.0	13432.0	13343.6	11933.2	12042.5	12323.6	12240.3	11074.5	9336.3
52.5°	13145.8	13369.6	13364.4	13374.8	13041.7	12261.1	12646.2	13286.3	13145.8	11771.9	9778.7
55°	11777.1	12224.7	12625.4	12968.9	12781.5	12458.9	13385.2	14311.6	14165.8	12552.5	10226.3
57.5°	10606.2	10892.4	11392.0	12365.2	12474.5	12630.6	14077.4	15383.6	15253.5	13416.4	10694.6
60°	9268.7	9664.2	10163.8	11548.1	12099.8	12854.4	14837.2	16429.7	16304.8	14290.7	11147.4
62.5°	7213.0	7723.0	8722.2	10293.9	11553.3	12994.9	15435.7	17350.8	17293.6	15118.2	11553.3
65°	5027.3	5480.0	6880.0	8753.5	10684.2	12932.4	15914.5	18173.1	18121.0	15794.8	11839.6
67.5°	2935.2	3460.8	5042.9	7046.5	9149.0	12500.5	16070.6	18657.1	18657.1	16205.9	11917.6
70°	1675.8	1920.4	3325.5	5136.5	7015.3	11308.7	15633.4	18651.9	18740.3	16112.2	11595.0
72.5°	1170.9	1280.2	2237.8	3455.6	4756.6	9149.0	14488.5	17751.5	17871.2	15227.5	10491.7
75°	910.7	988.8	1576.9	2357.5	2997.6	6213.8	11985.3	14967.3	15284.7	12979.3	8482.8
77.5°	692.2	749.4	921.1	1472.8	1920.4	3570.1	7910.4	9815.1	9835.9	7946.8	4548.5
80°	504.8	562.1	614.1	900.3	1020.0	1670.5	2987.2	4100.9	3986.4	3845.9	2461.6
82.5°	301.8	359.1	374.7	489.2	499.6	713.0	1046.0	1321.9	1269.8	1691.4	1155.3
85°	130.1	182.1	192.6	223.8	213.4	291.4	416.3	348.7	312.3	359.1	249.8
87.5°	31.2	52.0	52.0	57.2	46.8	72.9	78.1	57.2	52.0	62.5	62.5
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°	6369.9	6369.9	6369.9	6369.9	6369.9	6369.9	6369.9	6369.9	6369.9	6369.9	6369.9
2.5°	6333.5	6317.9	6323.1	6234.6	6208.6	6182.6	6167.0	6156.6	6146.2	6161.8	6177.4
5°	6380.4	6343.9	6302.3	6172.2	6120.1	6062.9	6021.3	5984.8	5969.2	5969.2	5984.8
7.5°	6416.8	6354.3	6265.9	6094.1	6000.4	5922.4	5854.7	5807.9	5781.9	5781.9	5797.5
10°	6422.0	6333.5	6193.0	5984.8	5859.9	5745.4	5667.4	5615.3	5578.9	5578.9	5589.3
12.5°	6453.2	6333.5	6151.4	5901.6	5745.4	5604.9	5511.3	5433.2	5417.6	5417.6	5428.0
15°	6505.3	6359.5	6125.3	5828.7	5641.4	5480.0	5375.9	5292.7	5261.4	5282.3	5287.5
17.5°	6552.1	6375.1	6078.5	5735.0	5511.3	5334.3	5219.8	5147.0	5105.3	5152.2	5152.2
20°	6583.3	6375.1	6010.9	5615.3	5370.7	5173.0	5063.7	4975.2	4944.0	5001.2	5006.4
22.5°	6630.2	6369.9	5938.0	5495.6	5219.8	5011.6	4902.4	4834.7	4819.1	4881.5	4902.4
25°	6682.2	6380.4	5859.9	5360.3	5053.3	4850.3	4767.0	4735.8	4746.2	4824.3	4850.3
27.5°	6739.4	6401.2	5781.9	5209.4	4871.1	4689.0	4642.1	4657.8	4699.4	4798.3	4829.5
30°	6791.5	6406.4	5672.6	5032.5	4663.0	4491.2	4512.0	4579.7	4642.1	4741.0	4777.5
32.5°	6859.1	6411.6	5558.1	4839.9	4439.2	4314.3	4408.0	4517.2	4579.7	4673.4	4715.0
35°	7025.7	6500.0	5469.6	4652.6	4231.0	4163.4	4319.5	4460.0	4496.4	4579.7	4616.1
37.5°	7218.2	6645.8	5422.8	4460.0	4028.1	4012.4	4210.2	4350.7	4361.1	4413.2	4449.6
40°	7337.9	6708.2	5370.7	4298.7	3845.9	3856.3	4059.3	4168.6	4147.7	4184.2	4210.2
42.5°	7457.6	6729.0	5261.4	4163.4	3674.2	3684.6	3840.7	3918.8	3929.2	4007.2	4043.7
45°	7660.6	6786.3	5141.8	4038.5	3518.0	3481.6	3575.3	3679.4	3814.7	3965.6	4007.2
47.5°	7931.2	6906.0	5016.9	3887.5	3367.1	3247.4	3283.9	3466.0	3606.5	3747.0	3773.0
50°	8207.0	7025.7	4902.4	3705.4	3216.2	2997.6	3013.2	3179.8	3294.3	3403.5	3419.2
52.5°	8477.6	7129.8	4803.5	3533.7	3044.5	2701.0	2763.4	2935.2	3013.2	3065.3	3080.9
55°	8748.3	7218.2	4715.0	3387.9	2846.7	2466.8	2524.0	2685.4	2763.4	2789.5	2799.9
57.5°	9029.3	7322.3	4647.4	3263.0	2622.9	2258.6	2295.1	2409.5	2482.4	2513.6	2503.2
60°	9263.5	7410.8	4610.9	3132.9	2399.1	2066.1	2055.7	2159.7	2263.8	2295.1	2284.6
62.5°	9445.6	7468.0	4553.7	2966.4	2201.4	1873.5	1821.5	1956.8	2066.1	2086.9	2102.5
65°	9544.5	7473.2	4413.2	2753.0	1998.4	1665.3	1628.9	1764.2	1831.9	1852.7	1852.7
67.5°	9528.9	7390.0	4137.3	2466.8	1811.1	1478.0	1446.8	1530.0	1628.9	1644.5	1628.9
70°	9206.2	7046.5	3695.0	2164.9	1587.3	1311.5	1254.2	1337.5	1431.2	1373.9	1347.9
72.5°	8290.3	6156.6	3044.5	1831.9	1337.5	1103.3	1077.3	1160.5	1165.7	1176.1	1150.1
75°	6541.7	4584.9	2279.4	1426.0	1082.5	926.3	921.1	905.5	926.3	968.0	936.8
77.5°	3434.8	2289.8	1233.4	874.3	785.8	744.2	707.8	702.6	765.0	791.0	759.8
80°	1863.1	1285.4	707.8	525.6	478.8	484.0	530.8	520.4	588.1	603.7	577.7
82.5°	811.9	608.9	348.7	317.5	317.5	312.3	327.9	364.3	437.2	437.2	348.7
85°	176.9	150.9	135.3	156.1	176.9	176.9	176.9	176.9	124.9	67.7	46.8
87.5°	57.2	57.2	57.2	62.5	67.7	67.7	57.2	41.6	26.0	5.2	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)