

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: P842201

Luminaire Tested: **ARCH4-280-750-U-T2U**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842201
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-280-750-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1085mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42087 lumens
Efficiency: N/A
Efficacy: 150.5 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

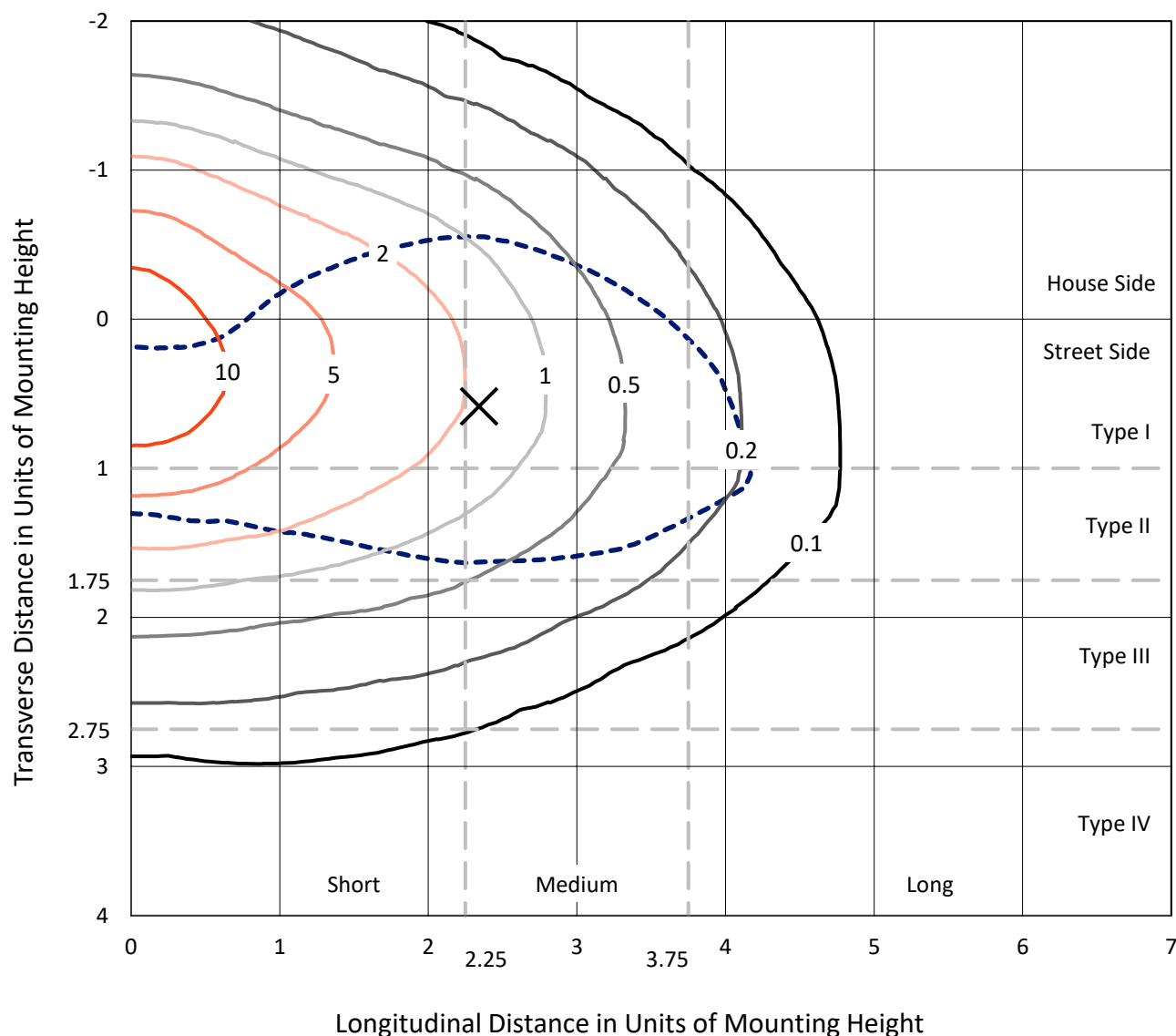
Input Watts (W): 279.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

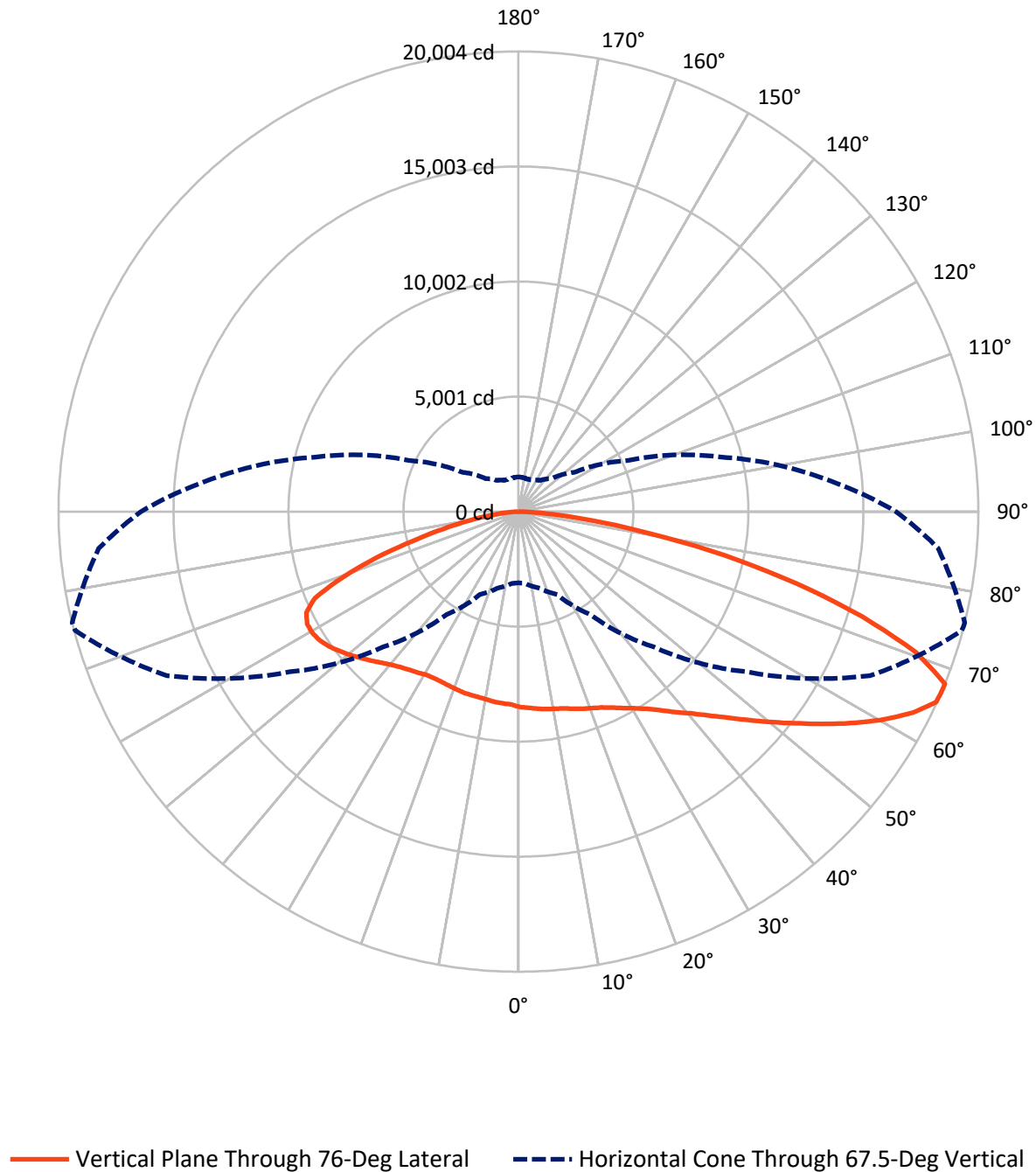
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.4 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	14221.4	0.0	14221.4
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	27865.6	0.0	27865.6
	% Fixture	66.2	0.0	66.2
Total	Lumens	42087.0	0.0	42087.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	819.8	1.9
10°-20°	2506.2	6.0
20°-30°	4258.1	10.1
30°-40°	6058.8	14.4
40°-50°	7652.0	18.2
50°-60°	8284.7	19.7
60°-70°	7705.7	18.3
70°-80°	4138.6	9.8
80°-90°	663.2	1.6
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°	42087.0	100.0
0°-180°	42087.0	100.0

Coefficient of Utilization



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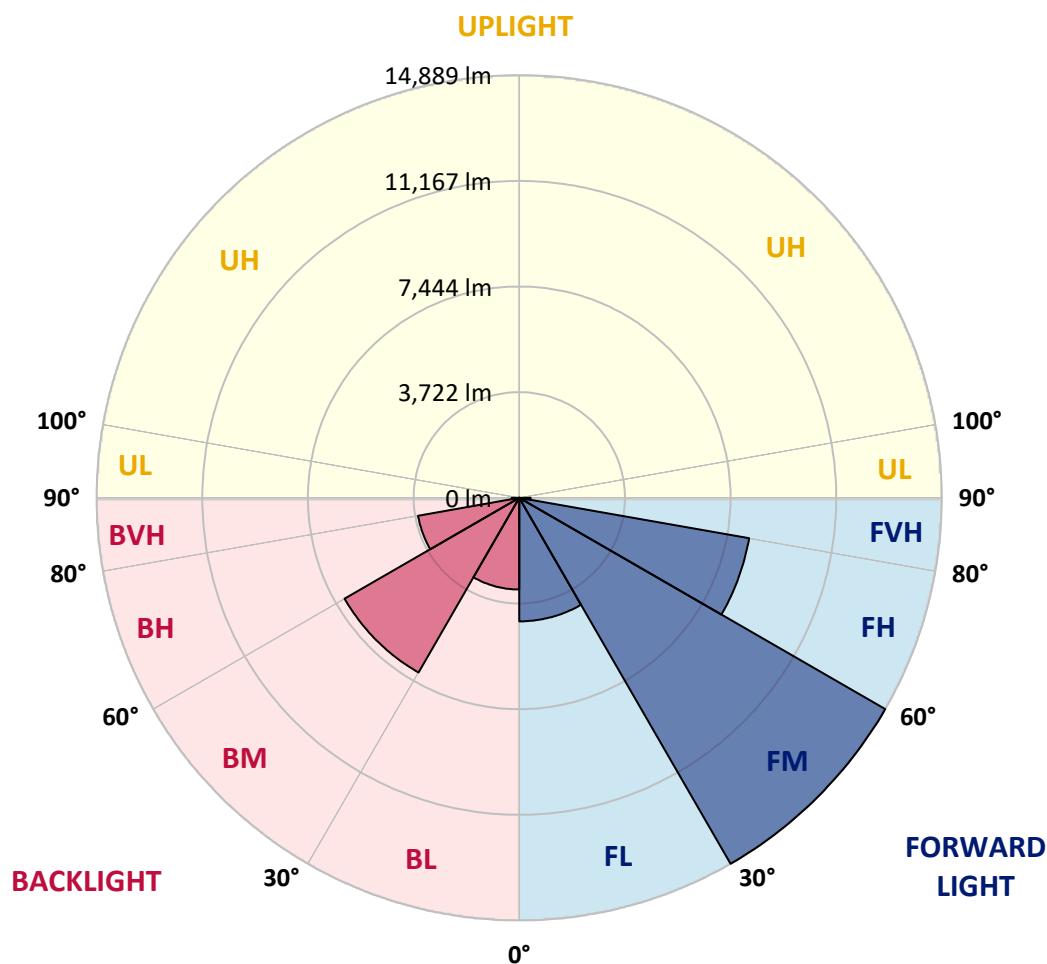
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4352.2	10.3			
FM	(30°-60°)	14888.8	35.4			
FH	(60°-80°)	8223.4	19.5			G4/12000
FVH	(80°-90°)	401.2	1.0			G3/500
BL	(0°-30°)	3231.9	7.7	B4/5000		
BM	(30°-60°)	7106.6	16.9	B4/8500		
BH	(60°-80°)	3620.9	8.6	B4/5000		G4/5000
BVH	(80°-90°)	262.0	0.6			G3/500
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°	76°	85°
0°	8501.5	8501.5	8501.5	8501.5	8501.5	8501.5	8501.5	8501.5	8501.5	8501.5	8501.5
2.5°	8759.3	8743.7	8681.2	8689.0	8689.0	8681.2	8587.4	8548.4	8548.4	8540.6	8454.6
5°	9071.9	9048.5	8978.1	8962.5	8931.2	8892.2	8743.7	8657.8	8618.7	8610.9	8493.7
7.5°	9439.1	9407.9	9321.9	9275.1	9196.9	9095.3	8907.8	8775.0	8681.2	8673.4	8509.3
10°	9806.4	9775.1	9673.6	9587.6	9478.2	9314.1	9071.9	8876.5	8728.1	8712.5	8517.1
12.5°	10244.0	10212.7	10087.7	9978.3	9814.2	9595.4	9275.1	9009.4	8806.2	8782.8	8540.6
15°	10705.0	10658.1	10533.1	10408.1	10204.9	9923.6	9540.7	9189.1	8931.2	8892.2	8610.9
17.5°	11087.9	11025.4	10923.8	10798.8	10572.2	10244.0	9806.4	9368.8	9048.5	9017.2	8681.2
20°	11416.1	11369.2	11259.8	11142.6	10900.3	10540.9	10056.4	9548.5	9157.8	9118.8	8735.9
22.5°	11728.6	11666.1	11603.6	11517.6	11252.0	10853.5	10345.6	9767.3	9298.5	9251.6	8806.2
25°	12088.0	12017.7	11994.3	11947.4	11634.8	11228.5	10697.2	10040.8	9493.8	9439.1	8931.2
27.5°	12533.4	12455.3	12408.4	12408.4	12033.3	11611.4	11072.2	10361.2	9720.4	9673.6	9087.5
30°	13002.3	12908.5	12838.2	12838.2	12416.2	11994.3	11439.5	10681.5	9978.3	9923.6	9290.7
32.5°	13416.4	13322.6	13244.5	13236.7	12799.1	12377.2	11822.4	11033.2	10290.9	10220.5	9540.7
35°	13736.8	13650.8	13580.5	13596.1	13182.0	12767.8	12252.1	11502.0	10681.5	10603.4	9868.9
37.5°	13932.1	13900.9	13861.8	13916.5	13533.6	13142.9	12697.5	11955.2	11126.9	11056.6	10275.2
40°	14033.7	14010.3	14166.5	14236.9	13830.5	13478.9	13142.9	12424.0	11611.4	11533.3	10744.1
42.5°	14182.2	14377.5	14440.0	14424.4	14049.3	13736.8	13549.2	12931.9	12181.8	12111.5	11306.7
45°	13650.8	13603.9	13947.7	14135.3	14065.0	13900.9	13932.1	13541.4	12846.0	12775.7	11955.2
47.5°	12939.8	12877.2	13072.6	13533.6	13807.1	13963.4	14275.9	14174.3	13611.7	13549.2	12713.2
50°	11439.5	11525.4	12252.1	12869.4	13408.6	13947.7	14565.0	14854.2	14455.6	14393.1	13525.8
52.5°	9775.1	9861.1	10619.0	12041.2	12924.1	13830.5	14776.0	15534.0	15369.9	15299.5	14393.1
55°	8564.0	8751.5	9611.0	10642.5	12236.5	13463.3	14901.0	16229.4	16354.4	16291.9	15338.6
57.5°	7360.7	7501.3	8149.9	9064.1	11298.8	12822.5	14893.2	16877.9	17385.8	17323.3	16299.7
60°	5946.3	6126.1	6641.8	7626.3	10048.6	12056.8	14674.4	17385.8	18378.2	18331.3	17229.6
62.5°	4977.4	5032.1	5399.4	6251.1	8439.0	11087.9	14182.2	17659.3	19276.8	19245.5	18065.6
65°	4008.5	4016.3	4352.3	5063.4	6884.0	9884.5	13346.1	17557.7	19956.6	19972.2	18667.3
67.5°	3094.3	3133.4	3438.1	3977.3	5469.7	8321.8	12150.6	16870.1	19964.4	20003.5	18323.5
70°	2141.0	2172.3	2633.3	3156.8	4227.3	6634.0	10533.1	15049.5	18323.5	18354.8	16424.7
72.5°	1508.1	1523.7	2016.0	2523.9	3305.3	5000.9	7946.7	12447.5	15619.9	15643.4	13814.9
75°	1125.2	1140.8	1422.1	1914.4	2531.7	3461.5	5430.6	9532.9	12478.7	12478.7	10908.2
77.5°	797.0	804.8	922.0	1320.5	1687.8	2336.3	3266.2	6243.3	9157.8	9173.5	7946.7
80°	539.2	547.0	601.7	890.8	1054.9	1265.8	1773.7	3274.0	5774.4	5797.9	5047.8
82.5°	281.3	296.9	336.0	453.2	531.3	703.2	914.2	1664.4	3195.9	3258.4	3031.8
85°	109.4	109.4	125.0	148.5	195.3	273.5	421.9	632.9	1445.6	1492.4	1336.2
87.5°	39.1	39.1	46.9	46.9	54.7	62.5	70.3	93.8	164.1	164.1	156.3
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°	8501.5	8501.5	8501.5	8501.5	8501.5	8501.5	8501.5	8501.5	8501.5	8501.5	8501.5
2.5°	8423.3	8423.3	8384.3	8399.9	8392.1	8376.5	8360.8	8384.3	8360.8	8306.1	8298.3
5°	8439.0	8423.3	8360.8	8353.0	8329.6	8298.3	8259.3	8274.9	8235.8	8188.9	8181.1
7.5°	8446.8	8415.5	8329.6	8298.3	8251.4	8188.9	8126.4	8126.4	8071.7	8024.8	8017.0
10°	8431.2	8392.1	8274.9	8212.4	8126.4	8032.6	7946.7	7923.3	7860.7	7806.0	7806.0
12.5°	8439.0	8384.3	8235.8	8134.2	8017.0	7899.8	7790.4	7759.2	7704.5	7649.8	7642.0
15°	8485.9	8407.7	8220.2	8087.3	7915.4	7782.6	7665.4	7642.0	7595.1	7556.0	7556.0
17.5°	8532.7	8431.2	8196.7	8009.2	7798.2	7649.8	7540.4	7540.4	7509.1	7485.7	7485.7
20°	8556.2	8439.0	8149.9	7899.8	7657.6	7501.3	7399.7	7415.4	7407.5	7399.7	7399.7
22.5°	8610.9	8454.6	8110.8	7798.2	7509.1	7345.0	7251.3	7274.7	7266.9	7266.9	7274.7
25°	8696.8	8493.7	8079.5	7704.5	7368.5	7188.8	7087.2	7102.8	7102.8	7102.8	7102.8
27.5°	8814.0	8571.8	8071.7	7618.5	7227.8	7024.7	6899.6	6899.6	6868.4	6876.2	6884.0
30°	8993.8	8720.3	8087.3	7540.4	7079.4	6821.5	6673.0	6649.6	6641.8	6657.4	6665.2
32.5°	9212.5	8923.4	8181.1	7485.7	6923.1	6594.9	6407.4	6399.6	6376.1	6376.1	6376.1
35°	9486.0	9118.8	8267.1	7477.9	6766.8	6352.7	6149.5	6126.1	6071.4	6047.9	6047.9
37.5°	9837.7	9423.5	8368.6	7423.2	6634.0	6118.3	5876.0	5797.9	5735.4	5727.6	5727.6
40°	10267.4	9767.3	8517.1	7360.7	6493.3	5876.0	5555.7	5422.8	5430.6	5461.9	5461.9
42.5°	10775.3	10189.3	8704.6	7329.4	6290.2	5626.0	5180.6	5024.3	5079.0	5110.3	5118.1
45°	11369.2	10689.4	8915.6	7290.3	6102.6	5344.7	4782.1	4586.7	4610.2	4618.0	4625.8
47.5°	12056.8	11244.1	9134.4	7259.1	5891.7	4993.1	4344.5	4086.6	4078.8	4032.0	4047.6
50°	12775.7	11830.2	9361.0	7204.4	5633.8	4578.9	3883.5	3578.7	3516.2	3445.9	3453.7
52.5°	13541.4	12431.9	9572.0	7118.4	5313.4	4157.0	3445.9	3117.7	2992.7	2914.6	2930.2
55°	14385.3	13049.1	9775.1	6985.6	4977.4	3735.0	3055.2	2719.2	2562.9	2500.4	2508.2
57.5°	15158.9	13643.0	9923.6	6821.5	4610.2	3352.1	2711.4	2383.2	2281.6	2273.8	2281.6
60°	15909.0	14143.1	9986.1	6594.9	4235.1	3000.5	2391.0	2141.0	2070.7	2109.7	2117.6
62.5°	16541.9	14463.5	9954.9	6290.2	3852.2	2664.5	2133.2	1953.5	1906.6	1984.7	1992.5
65°	16909.2	14565.0	9736.1	5852.6	3438.1	2336.3	1891.0	1695.6	1672.2	1719.0	1742.5
67.5°	16424.7	13932.1	9142.2	5250.9	2977.1	2031.6	1656.5	1500.3	1461.2	1500.3	1500.3
70°	14557.2	12072.4	7735.7	4297.6	2469.2	1734.7	1437.8	1328.4	1297.1	1328.4	1320.5
72.5°	12127.1	10040.8	6094.8	3352.1	1945.7	1461.2	1250.2	1148.6	1117.4	1086.1	1070.5
75°	9407.9	7626.3	4422.6	2461.4	1469.0	1172.1	1047.1	953.3	875.2	906.4	890.8
77.5°	6891.8	5352.5	3133.4	1703.4	1054.9	906.4	820.5	750.1	695.4	757.9	750.1
80°	4438.3	3461.5	2094.1	1140.8	726.7	632.9	601.7	562.6	617.3	804.8	820.5
82.5°	2711.4	2195.7	1250.2	742.3	476.6	421.9	390.7	390.7	632.9	695.4	703.2
85°	1211.1	1164.3	679.8	382.9	265.7	242.2	218.8	281.3	257.9	187.5	195.3
87.5°	195.3	203.2	148.5	132.8	101.6	101.6	78.1	54.7	39.1	23.4	23.4
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)