

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: P842165

Luminaire Tested: **ARCH4-280-727-U-T2U**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842165
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: ARCH4-280-727-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1085mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38680 lumens
Efficiency: N/A
Efficacy: 138.3 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

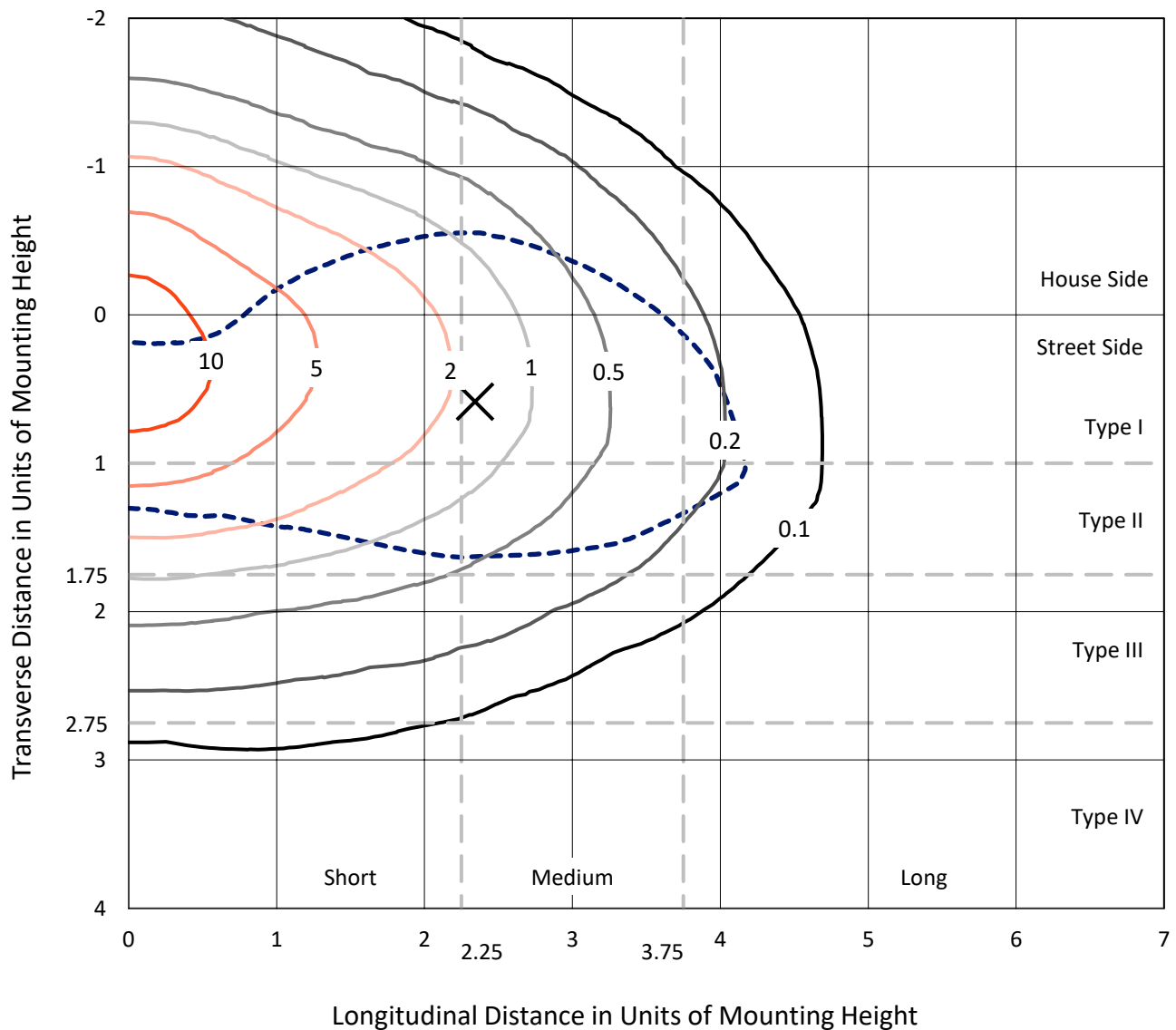
Input Watts (W): 279.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

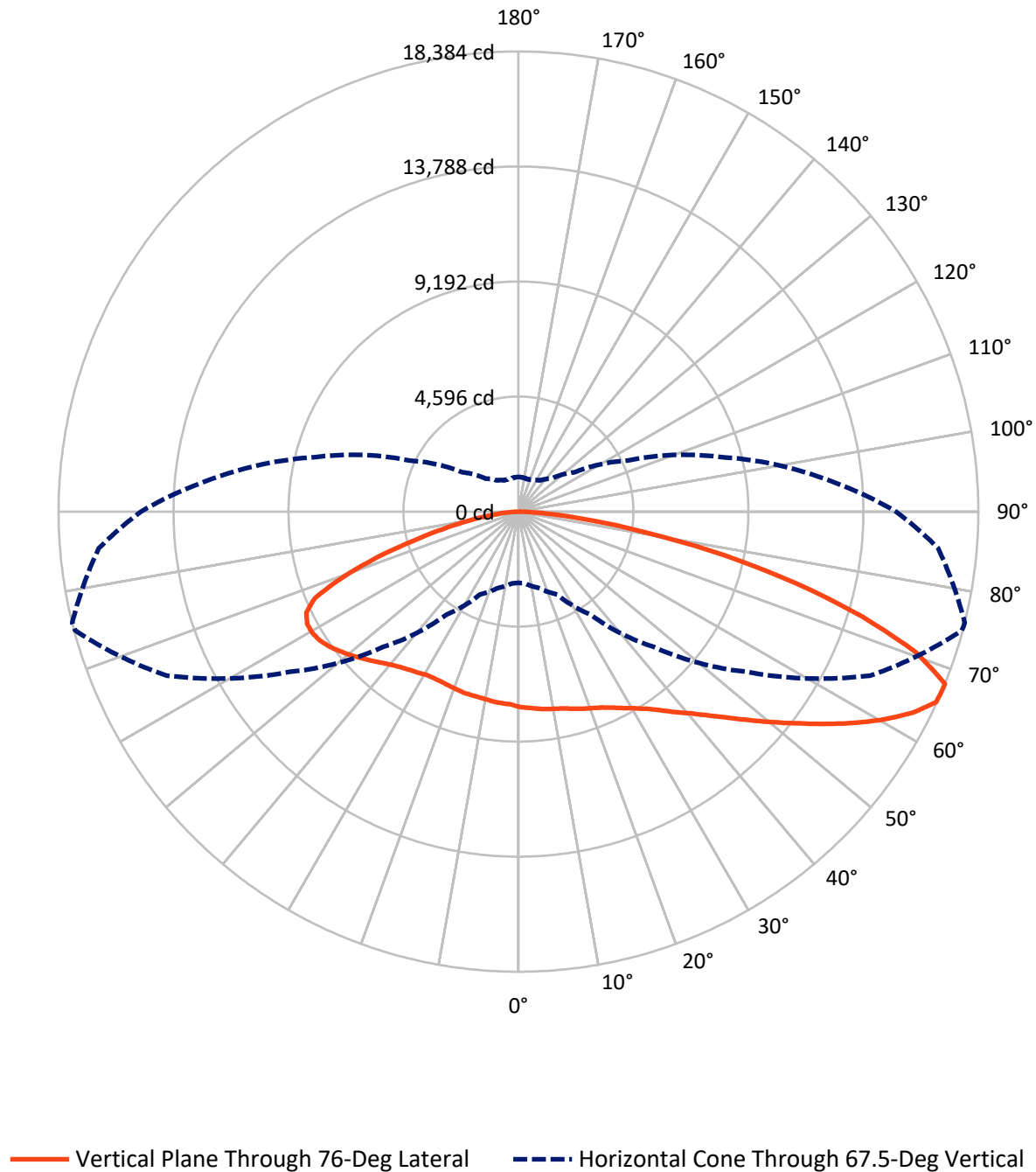
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.1 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	13070.2	0.0	13070.2
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	25609.8	0.0	25609.8
	% Fixture	66.2	0.0	66.2
Total	Lumens	38680.0	0.0	38680.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	753.4	1.9
10°-20°	2303.3	6.0
20°-30°	3913.4	10.1
30°-40°	5568.3	14.4
40°-50°	7032.5	18.2
50°-60°	7614.0	19.7
60°-70°	7081.9	18.3
70°-80°	3803.6	9.8
80°-90°	609.5	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°	38680.0	100.0
0°-180°	38680.0	100.0

Coefficient of Utilization



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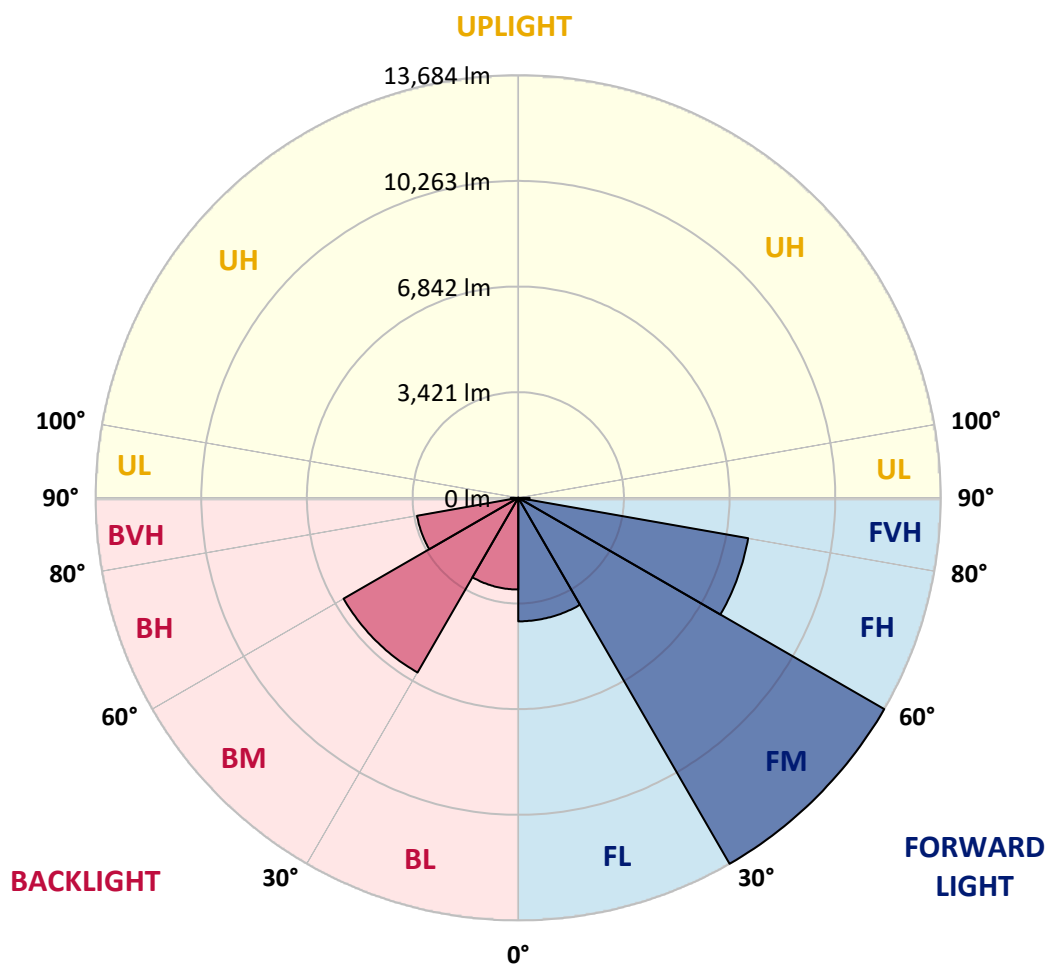
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3999.9	10.3			
FM	(30°-60°)	13683.5	35.4			
FH	(60°-80°)	7557.7	19.5			G4/12000
FVH	(80°-90°)	368.7	1.0			G3/500
BL	(0°-30°)	2970.2	7.7	B4/5000		
BM	(30°-60°)	6531.3	16.9	B4/8500		
BH	(60°-80°)	3327.8	8.6	B4/5000		G4/5000
BVH	(80°-90°)	240.8	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°	7813.3	7813.3	7813.3	7813.3	7813.3	7813.3	7813.3	7813.3	7813.3	7813.3	7813.3
2.5°	8050.3	8035.9	7978.4	7985.6	7985.6	7978.4	7892.3	7856.4	7856.4	7849.2	7770.2
5°	8337.5	8316.0	8251.3	8237.0	8208.2	8172.3	8035.9	7956.9	7921.0	7913.8	7806.1
7.5°	8675.0	8646.3	8567.3	8524.2	8452.4	8359.1	8186.7	8064.6	7978.4	7971.3	7820.5
10°	9012.6	8983.8	8890.5	8811.5	8710.9	8560.1	8337.5	8158.0	8021.5	8007.2	7827.6
12.5°	9414.7	9386.0	9271.1	9170.5	9019.7	8818.7	8524.2	8280.1	8093.3	8071.8	7849.2
15°	9838.4	9795.3	9680.4	9565.5	9378.8	9120.3	8768.4	8445.2	8208.2	8172.3	7913.8
17.5°	10190.3	10132.8	10039.5	9924.6	9716.3	9414.7	9012.6	8610.4	8316.0	8287.2	7978.4
20°	10491.9	10448.8	10348.3	10240.6	10017.9	9687.6	9242.4	8775.6	8416.5	8380.6	8028.7
22.5°	10779.2	10721.7	10664.3	10585.3	10341.1	9974.9	9508.1	8976.6	8545.8	8502.7	8093.3
25°	11109.5	11044.9	11023.3	10980.2	10693.0	10319.6	9831.2	9228.0	8725.3	8675.0	8208.2
27.5°	11518.8	11447.0	11403.9	11403.9	11059.2	10671.4	10175.9	9522.4	8933.6	8890.5	8351.9
30°	11949.7	11863.5	11798.9	11798.9	11411.1	11023.3	10513.5	9816.9	9170.5	9120.3	8538.6
32.5°	12330.3	12244.1	12172.3	12165.2	11763.0	11375.2	10865.3	10140.0	9457.8	9393.2	8768.4
35°	12624.8	12545.8	12481.1	12495.5	12114.9	11734.3	11260.3	10570.9	9816.9	9745.0	9070.0
37.5°	12804.3	12775.6	12739.7	12789.9	12438.0	12079.0	11669.6	10987.4	10226.2	10161.6	9443.4
40°	12897.6	12876.1	13019.7	13084.4	12710.9	12387.8	12079.0	11418.3	10671.4	10599.6	9874.3
42.5°	13034.1	13213.6	13271.1	13256.7	12912.0	12624.8	12452.4	11885.1	11195.7	11131.0	10391.4
45°	12545.8	12502.7	12818.7	12991.0	12926.4	12775.6	12804.3	12445.2	11806.1	11741.5	10987.4
47.5°	11892.3	11834.8	12014.3	12438.0	12689.4	12833.0	13120.3	13026.9	12509.9	12452.4	11684.0
50°	10513.5	10592.4	11260.3	11827.6	12323.1	12818.7	13386.0	13651.7	13285.4	13228.0	12430.9
52.5°	8983.8	9062.8	9759.4	11066.4	11877.9	12710.9	13579.9	14276.5	14125.7	14061.0	13228.0
55°	7870.7	8043.1	8833.0	9781.0	11245.9	12373.4	13694.8	14915.6	15030.5	14973.0	14096.9
57.5°	6764.8	6894.1	7490.1	8330.3	10384.2	11784.5	13687.6	15511.6	15978.4	15921.0	14980.2
60°	5465.0	5630.2	6104.1	7009.0	9235.2	11080.8	13486.5	15978.4	16890.5	16847.4	15834.8
62.5°	4574.5	4624.8	4962.3	5745.1	7755.8	10190.3	13034.1	16229.8	17716.3	17687.6	16603.2
65°	3684.0	3691.2	4000.0	4653.5	6326.7	9084.4	12265.7	16136.4	18341.1	18355.5	17156.2
67.5°	2843.8	2879.7	3159.8	3655.3	5026.9	7648.1	11167.0	15504.5	18348.3	18384.2	16840.2
70°	1967.7	1996.4	2420.1	2901.3	3885.1	6096.9	9680.4	13831.2	16840.2	16868.9	15095.1
72.5°	1386.0	1400.4	1852.8	2319.6	3037.7	4596.0	7303.4	11439.8	14355.5	14377.0	12696.6
75°	1034.1	1048.5	1307.0	1759.4	2326.7	3181.3	4991.0	8761.2	11468.6	11468.6	10025.1
77.5°	732.5	739.7	847.4	1213.6	1551.2	2147.2	3001.8	5737.9	8416.5	8430.9	7303.4
80°	495.5	502.7	553.0	818.7	969.5	1163.4	1630.2	3009.0	5307.0	5328.5	4639.1
82.5°	258.5	272.9	308.8	416.5	488.3	646.3	840.2	1529.6	2937.2	2994.6	2786.4
85°	100.5	100.5	114.9	136.4	179.5	251.3	387.8	581.7	1328.5	1371.6	1228.0
87.5°	35.9	35.9	43.1	43.1	50.3	57.5	64.6	86.2	150.8	150.8	143.6
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°	7813.3	7813.3	7813.3	7813.3	7813.3	7813.3	7813.3	7813.3	7813.3	7813.3	7813.3
2.5°	7741.5	7741.5	7705.6	7719.9	7712.7	7698.4	7684.0	7705.6	7684.0	7633.7	7626.6
5°	7755.8	7741.5	7684.0	7676.8	7655.3	7626.6	7590.7	7605.0	7569.1	7526.0	7518.8
7.5°	7763.0	7734.3	7655.3	7626.6	7583.5	7526.0	7468.6	7468.6	7418.3	7375.2	7368.0
10°	7748.6	7712.7	7605.0	7547.6	7468.6	7382.4	7303.4	7281.9	7224.4	7174.1	7174.1
12.5°	7755.8	7705.6	7569.1	7475.8	7368.0	7260.3	7159.8	7131.0	7080.8	7030.5	7023.3
15°	7798.9	7727.1	7554.7	7432.7	7274.7	7152.6	7044.9	7023.3	6980.2	6944.3	6944.3
17.5°	7842.0	7748.6	7533.2	7360.9	7167.0	7030.5	6930.0	6930.0	6901.2	6879.7	6879.7
20°	7863.5	7755.8	7490.1	7260.3	7037.7	6894.1	6800.7	6815.1	6807.9	6800.7	6800.7
22.5°	7913.8	7770.2	7454.2	7167.0	6901.2	6750.4	6664.3	6685.8	6678.6	6678.6	6685.8
25°	7992.8	7806.1	7425.5	7080.8	6772.0	6606.8	6513.5	6527.8	6527.8	6527.8	6527.8
27.5°	8100.5	7877.9	7418.3	7001.8	6642.7	6456.0	6341.1	6341.1	6312.4	6319.6	6326.7
30°	8265.7	8014.4	7432.7	6930.0	6506.3	6269.3	6132.8	6111.3	6104.1	6118.5	6125.7
32.5°	8466.8	8201.1	7518.8	6879.7	6362.6	6061.0	5888.7	5881.5	5860.0	5860.0	5860.0
35°	8718.1	8380.6	7597.8	6872.5	6219.0	5838.4	5651.7	5630.2	5579.9	5558.3	5558.3
37.5°	9041.3	8660.7	7691.2	6822.3	6096.9	5623.0	5400.4	5328.5	5271.1	5263.9	5263.9
40°	9436.3	8976.6	7827.6	6764.8	5967.7	5400.4	5105.9	4983.8	4991.0	5019.7	5019.7
42.5°	9903.0	9364.4	8000.0	6736.1	5781.0	5170.5	4761.2	4617.6	4667.9	4696.6	4703.8
45°	10448.8	9824.0	8193.9	6700.2	5608.6	4912.0	4395.0	4215.4	4237.0	4244.2	4251.3
47.5°	11080.8	10333.9	8395.0	6671.4	5414.7	4588.9	3992.8	3755.8	3748.6	3705.6	3719.9
50°	11741.5	10872.5	8603.2	6621.2	5177.7	4208.3	3569.1	3289.0	3231.6	3167.0	3174.1
52.5°	12445.2	11425.5	8797.1	6542.2	4883.3	3820.5	3167.0	2865.3	2750.4	2678.6	2693.0
55°	13220.8	11992.8	8983.8	6420.1	4574.5	3432.7	2807.9	2499.1	2355.5	2298.0	2305.2
57.5°	13931.8	12538.6	9120.3	6269.3	4237.0	3080.8	2491.9	2190.3	2096.9	2089.8	2096.9
60°	14621.2	12998.2	9177.7	6061.0	3892.3	2757.6	2197.5	1967.7	1903.0	1939.0	1946.1
62.5°	15202.9	13292.6	9149.0	5781.0	3540.4	2448.8	1960.5	1795.3	1752.2	1824.1	1831.2
65°	15540.4	13386.0	8947.9	5378.8	3159.8	2147.2	1737.9	1558.3	1536.8	1579.9	1601.4
67.5°	15095.1	12804.3	8402.1	4825.8	2736.1	1867.1	1522.4	1378.8	1342.9	1378.8	1378.8
70°	13378.8	11095.1	7109.5	3949.7	2269.3	1594.3	1321.4	1220.8	1192.1	1220.8	1213.6
72.5°	11145.4	9228.0	5601.4	3080.8	1788.1	1342.9	1149.0	1055.7	1026.9	998.2	983.8
75°	8646.3	7009.0	4064.6	2262.1	1350.1	1077.2	962.3	876.1	804.3	833.0	818.7
77.5°	6333.9	4919.2	2879.7	1565.5	969.5	833.0	754.0	689.4	639.1	696.6	689.4
80°	4079.0	3181.3	1924.6	1048.5	667.9	581.7	553.0	517.1	567.3	739.7	754.0
82.5°	2491.9	2018.0	1149.0	682.2	438.1	387.8	359.1	359.1	581.7	639.1	646.3
85°	1113.1	1070.0	624.8	351.9	244.2	222.6	201.1	258.5	237.0	172.4	179.5
87.5°	179.5	186.7	136.4	122.1	93.4	93.4	71.8	50.3	35.9	21.5	21.5
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)