

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: P842176

Luminaire Tested: **ARCH4-280-730-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842176
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: ARCH4-280-730-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 1085mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40023 lumens
Efficiency: N/A
Efficacy: 143.1 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - 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



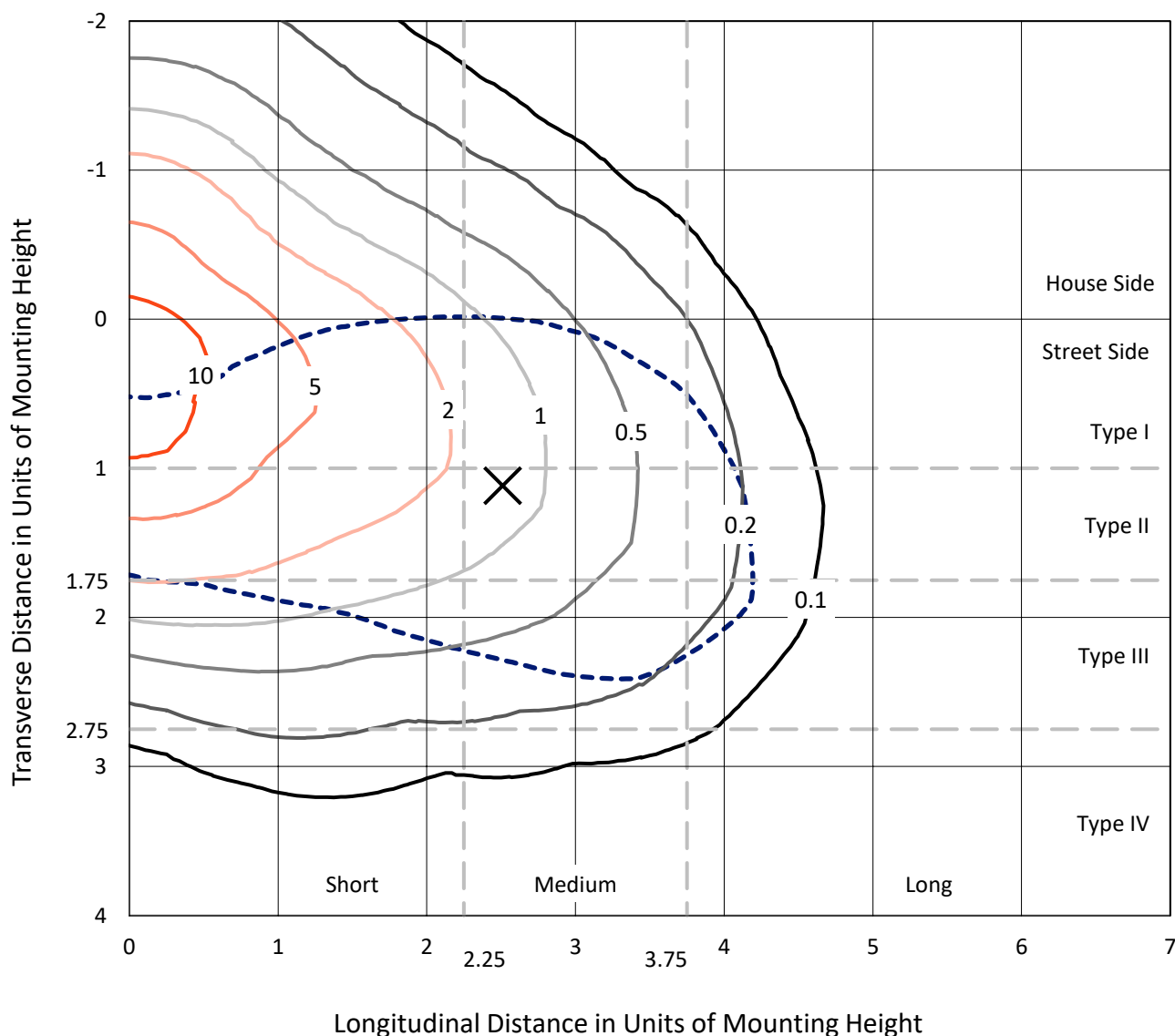
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

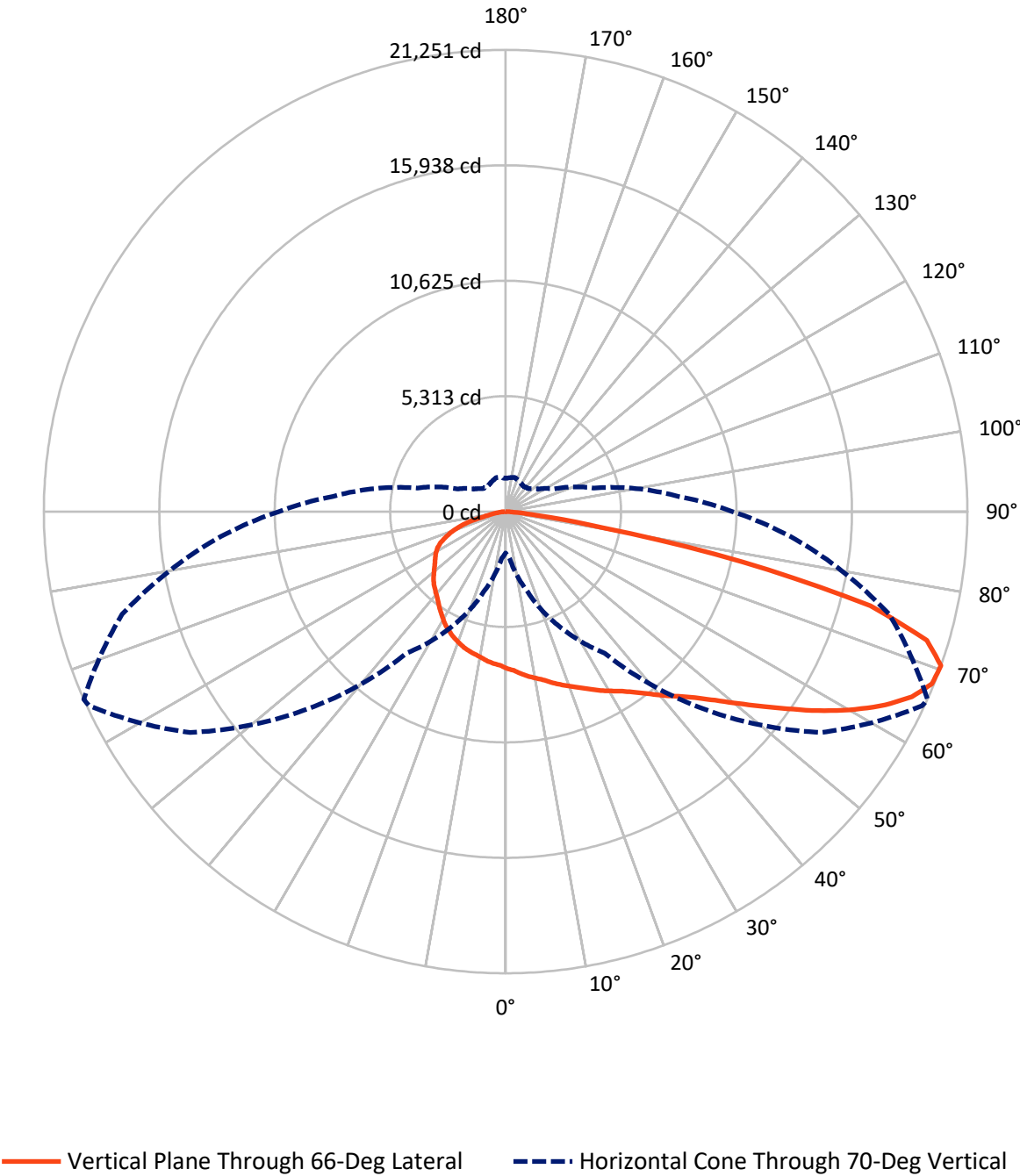
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.5 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	10605.2	0.0	10605.2
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	29417.8	0.0	29417.8
	% Fixture	73.5	0.0	73.5
Total	Lumens	40023.0	0.0	40023.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	694.1	1.7
10°-20°	2082.0	5.2
20°-30°	3490.1	8.7
30°-40°	5225.8	13.1
40°-50°	6986.9	17.5
50°-60°	8157.5	20.4
60°-70°	8111.3	20.3
70°-80°	4802.0	12.0
80°-90°	473.3	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°	40023.0	100.0
0°-180°	40023.0	100.0

Coefficient of Utilization



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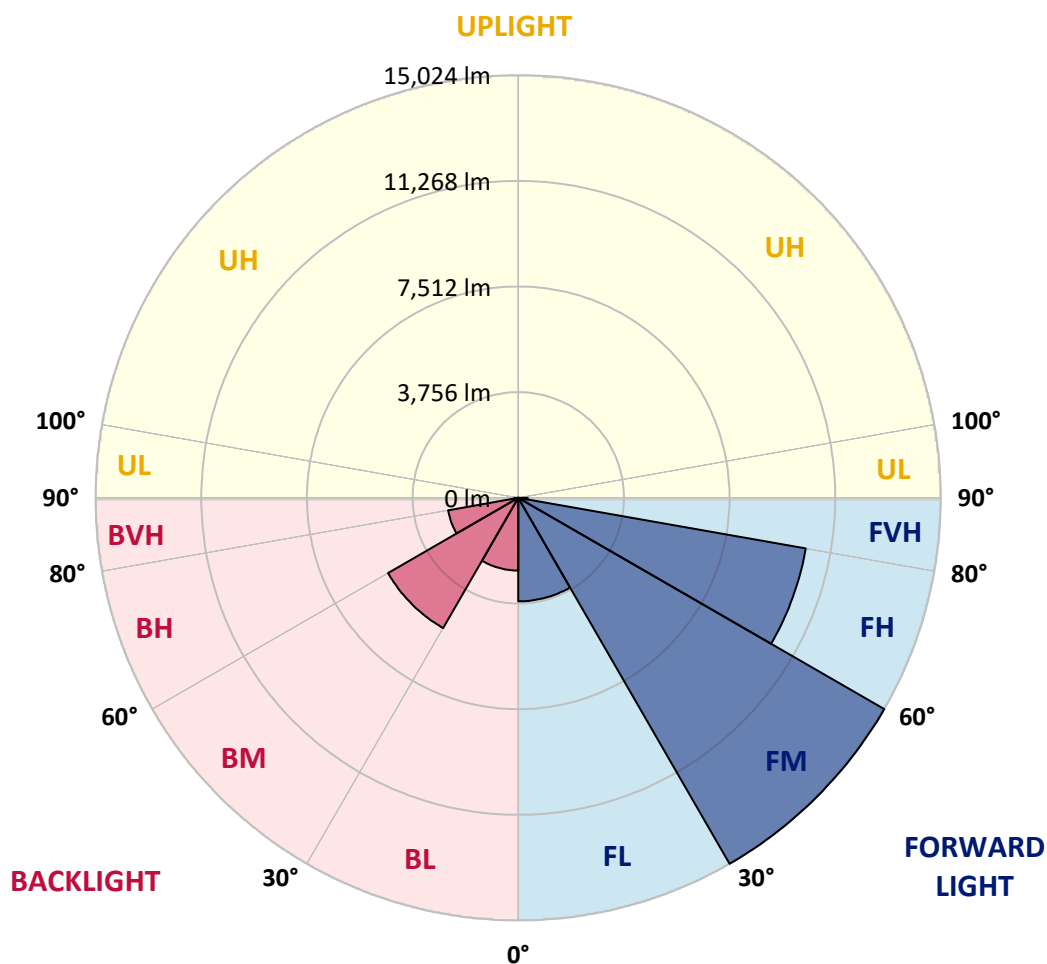
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3681.1	9.2			
FM	(30°-60°)	15024.1	37.5			
FH	(60°-80°)	10380.0	25.9			G4/12000
FVH	(80°-90°)	332.6	0.8			G3/500
BL	(0°-30°)	2585.1	6.5	B4/5000		
BM	(30°-60°)	5346.1	13.4	B4/8500		
BH	(60°-80°)	2533.3	6.3	B4/5000		G4/5000
BVH	(80°-90°)	140.7	0.4			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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	7223.2	7223.2	7223.2	7223.2	7223.2	7223.2	7223.2	7223.2	7223.2	7223.2	7223.2
2.5°	7488.8	7477.0	7471.1	7447.5	7394.4	7418.0	7364.9	7329.5	7323.6	7240.9	7193.7
5°	7795.7	7789.8	7778.0	7742.6	7659.9	7671.7	7583.2	7518.3	7500.6	7370.8	7270.5
7.5°	8055.3	8043.5	8037.6	7990.4	7901.9	7896.0	7789.8	7695.3	7665.8	7488.8	7335.4
10°	8256.0	8238.3	8250.1	8202.9	8108.4	8090.7	7955.0	7831.1	7801.6	7577.3	7364.9
12.5°	8427.1	8415.3	8433.0	8391.7	8315.0	8297.3	8161.6	8002.2	7966.8	7707.1	7429.8
15°	8616.0	8574.6	8610.1	8592.4	8539.2	8533.3	8409.4	8232.4	8185.2	7872.4	7530.1
17.5°	8716.3	8692.7	8734.0	8739.9	8716.3	8757.6	8639.6	8427.1	8385.8	8025.8	7618.6
20°	8787.1	8751.7	8798.9	8834.3	8852.0	8934.6	8840.2	8633.7	8586.4	8173.4	7701.2
22.5°	9029.1	8952.3	8958.2	8981.8	8993.6	9111.7	9052.7	8852.0	8804.8	8356.3	7801.6
25°	9636.9	9483.5	9383.1	9312.3	9229.7	9330.0	9294.6	9099.9	9058.6	8574.6	7925.5
27.5°	10581.1	10386.4	10185.7	9979.2	9654.6	9613.3	9554.3	9377.2	9330.0	8793.0	8049.4
30°	11655.1	11460.4	11224.3	10893.9	10286.0	9967.4	9831.6	9636.9	9583.8	8987.7	8167.5
32.5°	12723.3	12552.2	12316.1	11914.8	11047.3	10398.2	10109.0	9908.3	9855.2	9200.2	8309.1
35°	13555.4	13449.2	13295.7	12794.1	11802.7	10905.7	10510.3	10268.3	10209.3	9536.6	8568.7
37.5°	14228.1	14151.4	14021.6	13496.4	12351.5	11413.2	10970.6	10693.2	10628.3	9902.4	8846.1
40°	15219.6	15018.9	14912.7	14151.4	12829.5	11873.5	11489.9	11200.7	11129.9	10291.9	9070.4
42.5°	16063.4	15915.9	15786.1	14735.6	13283.9	12268.9	11979.7	11714.2	11619.7	10675.5	9312.3
45°	16205.1	16264.1	16199.2	15024.8	14003.9	12658.4	12475.4	12304.3	12215.8	11194.8	9678.2
47.5°	16211.0	16211.0	15827.4	15190.0	14895.0	13095.1	13006.6	13065.6	12971.1	11855.8	10114.9
50°	15786.1	15862.8	15662.2	15231.4	15131.0	13531.8	13655.7	13974.4	13880.0	12558.1	10587.0
52.5°	14906.8	15160.5	15154.6	15166.4	14788.8	13903.6	14340.3	15066.1	14906.8	13348.8	11088.6
55°	13354.7	13862.2	14316.7	14706.1	14493.7	14127.8	15178.2	16228.7	16063.4	14234.0	11596.1
57.5°	12026.9	12351.5	12918.0	14021.6	14145.5	14322.6	15963.1	17444.4	17296.8	15213.7	12127.3
60°	10510.3	10958.8	11525.3	13095.1	13720.6	14576.3	16824.7	18630.5	18488.9	16205.1	12640.7
62.5°	8179.3	8757.6	9890.6	11672.9	13101.0	14735.6	17503.4	19675.1	19610.2	17143.4	13101.0
65°	5700.7	6214.1	7801.6	9926.1	12115.5	14664.8	18046.3	20607.5	20548.5	17910.6	13425.5
67.5°	3328.4	3924.4	5718.4	7990.4	10374.6	14175.0	18223.3	21156.3	21156.3	18376.8	13514.1
70°	1900.2	2177.6	3771.0	5824.6	7955.0	12823.6	17727.6	21150.4	21250.7	18270.5	13148.2
72.5°	1327.8	1451.7	2537.6	3918.5	5393.8	10374.6	16429.3	20129.5	20265.2	17267.3	11897.1
75°	1032.7	1121.3	1788.1	2673.3	3399.2	7046.2	13590.8	16972.3	17332.2	14717.9	9619.2
77.5°	784.9	849.8	1044.5	1670.1	2177.6	4048.3	8970.0	11129.9	11153.5	9011.3	5157.8
80°	572.4	637.3	696.4	1020.9	1156.7	1894.3	3387.4	4650.3	4520.4	4361.1	2791.3
82.5°	342.3	407.2	424.9	554.7	566.5	808.5	1186.2	1498.9	1439.9	1917.9	1310.1
85°	147.5	206.5	218.3	253.8	242.0	330.5	472.1	395.4	354.1	407.2	283.3
87.5°	35.4	59.0	59.0	64.9	53.1	82.6	88.5	64.9	59.0	70.8	70.8
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°	7223.2	7223.2	7223.2	7223.2	7223.2	7223.2	7223.2	7223.2	7223.2	7223.2	7223.2
2.5°	7181.9	7164.2	7170.1	7069.8	7040.3	7010.8	6993.1	6981.3	6969.5	6987.2	7004.9
5°	7235.0	7193.7	7146.5	6999.0	6940.0	6875.1	6827.9	6786.5	6768.8	6768.8	6786.5
7.5°	7276.4	7205.5	7105.2	6910.5	6804.2	6715.7	6639.0	6585.9	6556.4	6556.4	6574.1
10°	7282.3	7181.9	7022.6	6786.5	6644.9	6515.1	6426.6	6367.5	6326.2	6326.2	6338.0
12.5°	7317.7	7181.9	6975.4	6692.1	6515.1	6355.7	6249.5	6161.0	6143.3	6143.3	6155.1
15°	7376.7	7211.4	6945.9	6609.5	6397.1	6214.1	6096.1	6001.7	5966.3	5989.9	5995.8
17.5°	7429.8	7229.1	6892.8	6503.3	6249.5	6048.9	5919.0	5836.4	5789.2	5842.3	5842.3
20°	7465.2	7229.1	6816.0	6367.5	6090.2	5865.9	5742.0	5641.7	5606.3	5671.2	5677.1
22.5°	7518.3	7223.2	6733.4	6231.8	5919.0	5683.0	5559.1	5482.3	5464.6	5535.5	5559.1
25°	7577.3	7235.0	6644.9	6078.4	5730.2	5500.0	5405.6	5370.2	5382.0	5470.5	5500.0
27.5°	7642.2	7258.6	6556.4	5907.2	5523.7	5317.1	5264.0	5281.7	5328.9	5441.0	5476.4
30°	7701.2	7264.5	6432.5	5706.6	5287.6	5092.9	5116.5	5193.2	5264.0	5376.1	5417.4
32.5°	7778.0	7270.5	6302.6	5488.2	5033.8	4892.2	4998.4	5122.4	5193.2	5299.4	5346.6
35°	7966.8	7370.8	6202.3	5275.8	4797.8	4721.1	4898.1	5057.4	5098.8	5193.2	5234.5
37.5°	8185.2	7536.0	6149.2	5057.4	4567.6	4549.9	4774.2	4933.5	4945.3	5004.3	5045.6
40°	8320.9	7606.8	6090.2	4874.5	4361.1	4372.9	4603.0	4727.0	4703.4	4744.7	4774.2
42.5°	8456.6	7630.4	5966.3	4721.1	4166.3	4178.1	4355.2	4443.7	4455.5	4544.0	4585.3
45°	8686.8	7695.3	5830.5	4579.4	3989.3	3948.0	4054.2	4172.2	4325.7	4496.8	4544.0
47.5°	8993.6	7831.1	5688.9	4408.3	3818.2	3682.4	3723.7	3930.3	4089.6	4249.0	4278.5
50°	9306.4	7966.8	5559.1	4201.8	3647.0	3399.2	3416.9	3605.7	3735.5	3859.5	3877.2
52.5°	9613.3	8084.8	5446.9	4007.0	3452.3	3062.8	3133.6	3328.4	3416.9	3475.9	3493.6
55°	9920.2	8185.2	5346.6	3841.8	3228.0	2797.2	2862.1	3045.1	3133.6	3163.1	3174.9
57.5°	10238.8	8303.2	5269.9	3700.1	2974.3	2561.2	2602.5	2732.3	2814.9	2850.3	2838.5
60°	10504.4	8403.5	5228.6	3552.6	2720.5	2342.8	2331.0	2449.1	2567.1	2602.5	2590.7
62.5°	10710.9	8468.4	5163.7	3363.8	2496.3	2124.5	2065.5	2218.9	2342.8	2366.4	2384.1
65°	10823.1	8474.3	5004.3	3121.8	2266.1	1888.4	1847.1	2000.6	2077.3	2100.9	2100.9
67.5°	10805.4	8379.9	4691.6	2797.2	2053.7	1676.0	1640.6	1735.0	1847.1	1864.8	1847.1
70°	10439.5	7990.4	4190.0	2455.0	1799.9	1487.1	1422.2	1516.6	1622.9	1558.0	1528.4
72.5°	9400.8	6981.3	3452.3	2077.3	1516.6	1251.1	1221.6	1316.0	1321.9	1333.7	1304.2
75°	7418.0	5199.1	2584.8	1617.0	1227.5	1050.4	1044.5	1026.8	1050.4	1097.6	1062.2
77.5°	3894.9	2596.6	1398.6	991.4	891.1	843.9	802.6	796.7	867.5	897.0	861.6
80°	2112.7	1457.6	802.6	596.0	542.9	548.8	601.9	590.1	666.9	684.6	655.0
82.5°	920.6	690.5	395.4	360.0	360.0	354.1	371.8	413.1	495.7	495.7	395.4
85°	200.6	171.1	153.4	177.0	200.6	200.6	200.6	200.6	141.6	76.7	53.1
87.5°	64.9	64.9	64.9	70.8	76.7	76.7	64.9	47.2	29.5	5.9	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)