

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: P842097

Luminaire Tested: **ARCH4-270-727-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842097
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-270-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1045mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36237 lumens
Efficiency: N/A
Efficacy: 134.7 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G4

Input Watts (W): 269
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

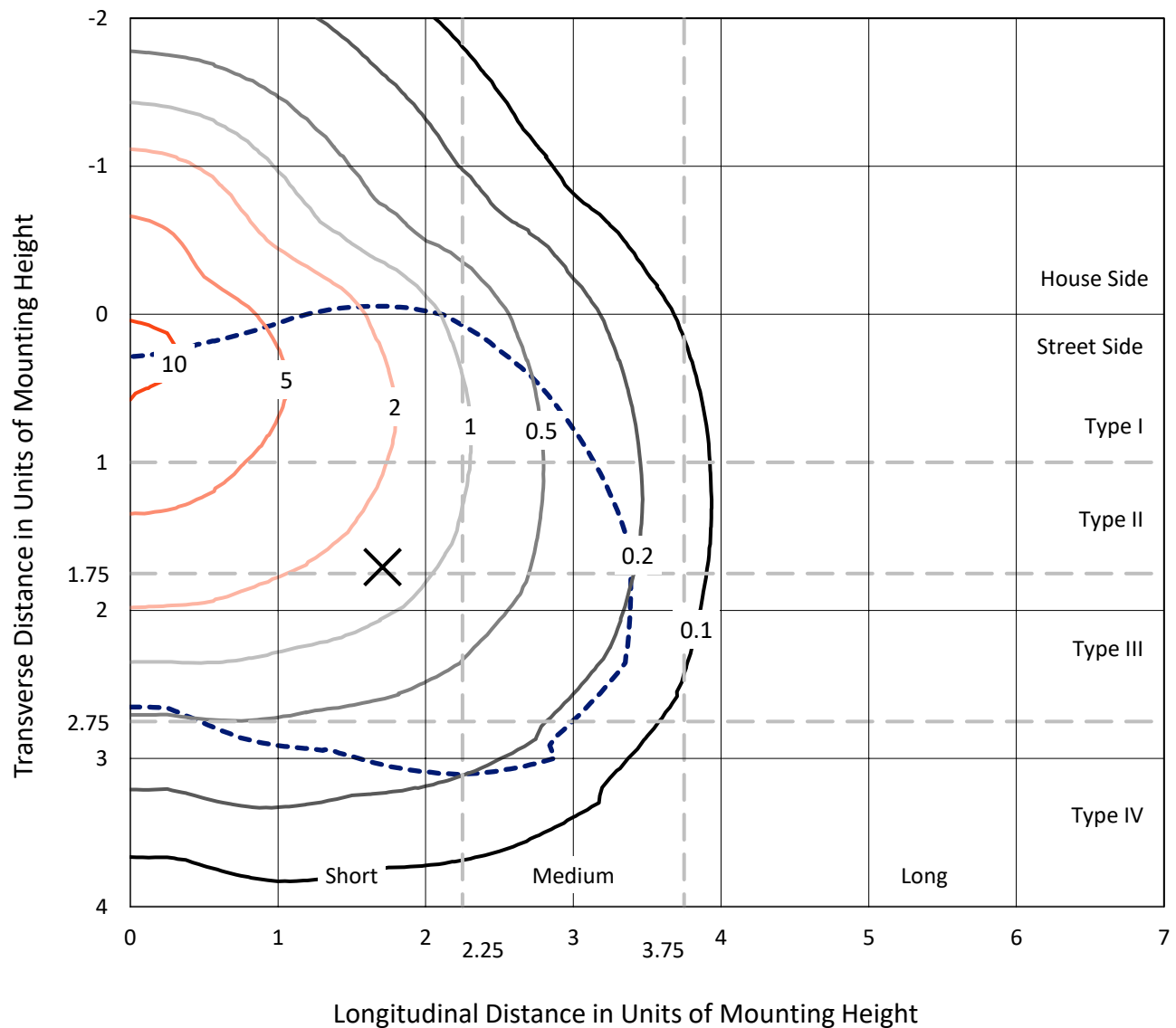


REPORT NUMBER: P842097

CATALOG NUMBER: ARCH4-270-727-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd



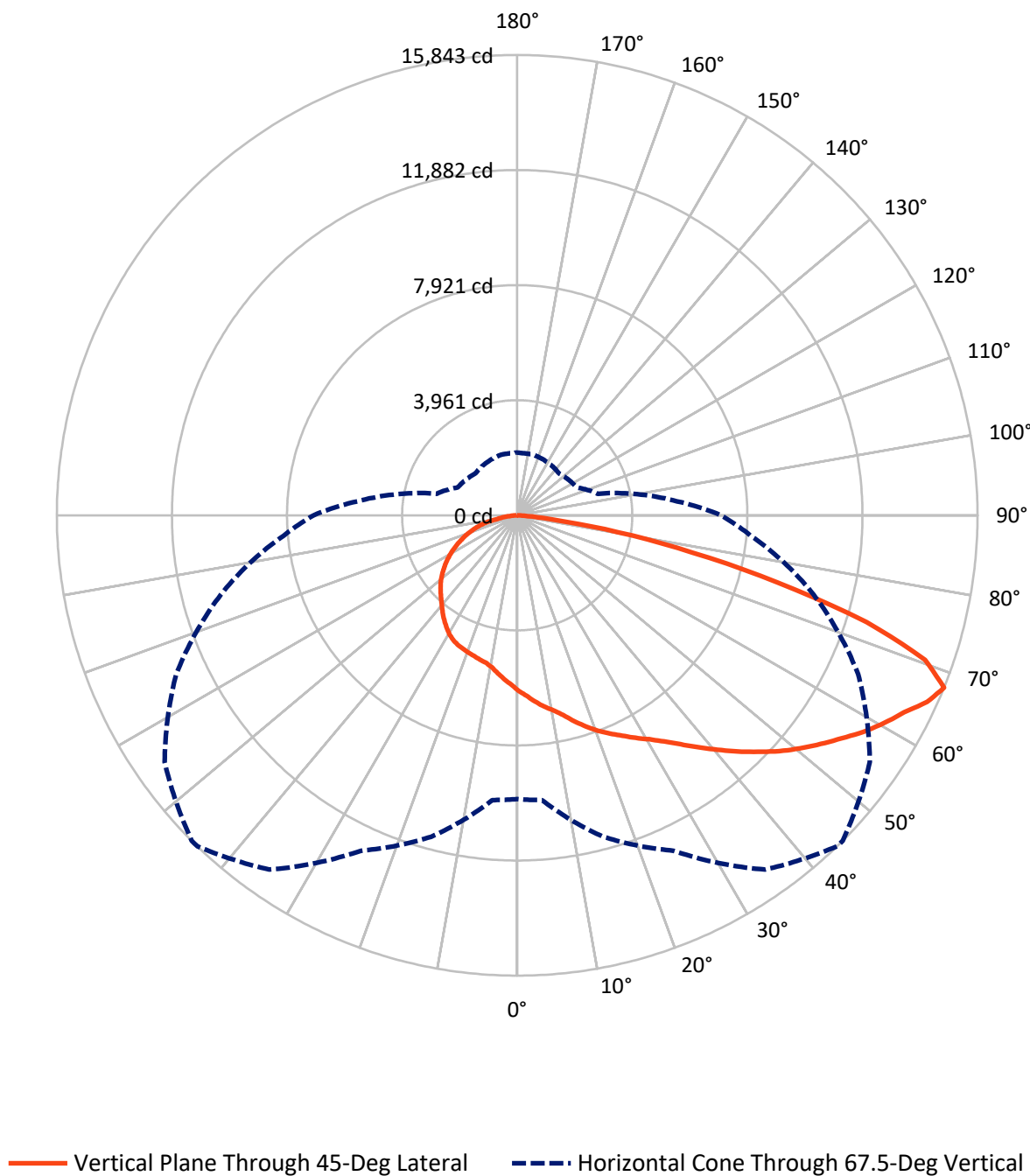
Based on 25 foot mounting height. Maximum calculated value = 11.2 fc

Type IV - Short - N/A

REPORT NUMBER: P842097

CATALOG NUMBER: ARCH4-270-727-U-T4W

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9680.7	0.0	9680.7
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	26556.3	0.0	26556.3
	% Fixture	73.3	0.0	73.3
Total	Lumens	36237.0	0.0	36237.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	578.7	1.6
10°-20°	1787.5	4.9
20°-30°	3085.5	8.5
30°-40°	4550.0	12.6
40°-50°	6164.3	17.0
50°-60°	7534.3	20.8
60°-70°	7770.5	21.4
70°-80°	4256.2	11.7
80°-90°	510.1	1.4
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°	36237.0	100.0
0°-180°	36237.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842097

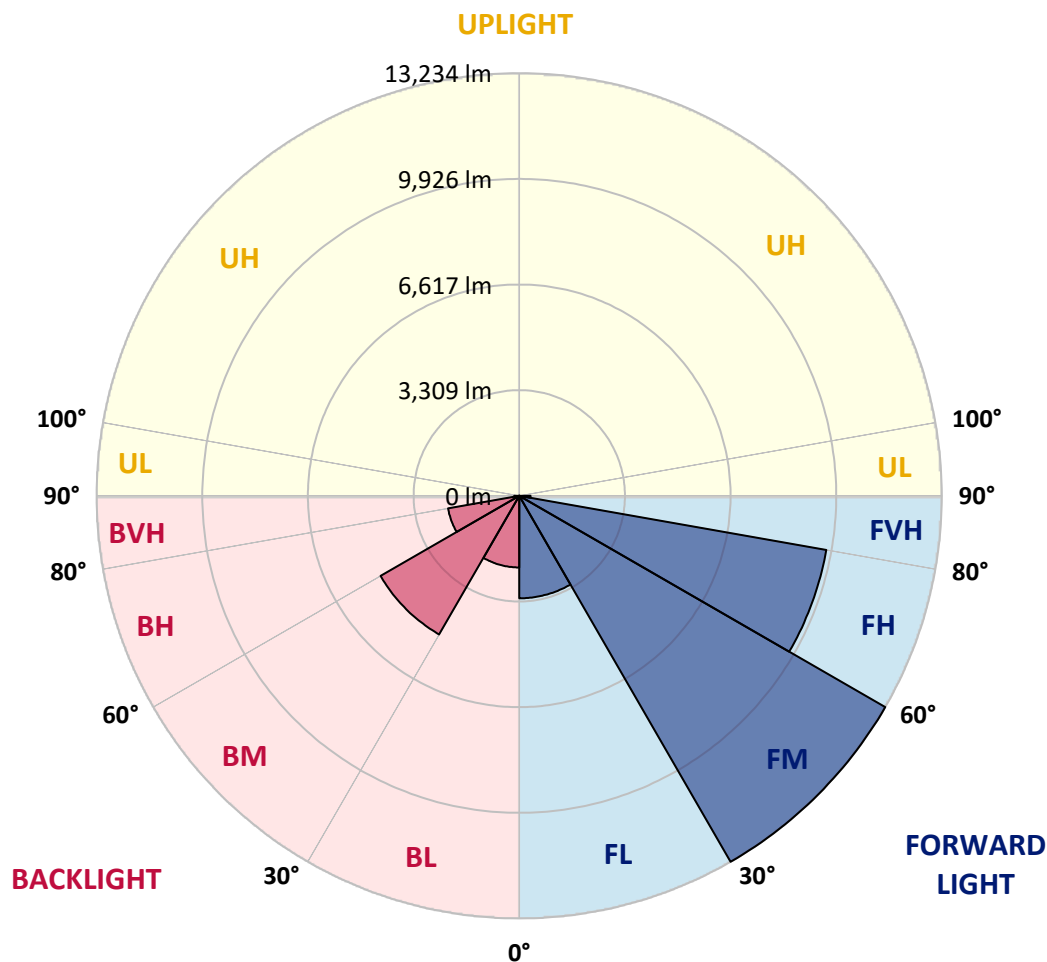
CATALOG NUMBER: ARCH4-270-727-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3208.0	8.9			
FM	(30°-60°)	13234.1	36.5			
FH	(60°-80°)	9762.8	26.9			G4/12000
FVH	(80°-90°)	351.4	1.0			G3/500
BL	(0°-30°)	2243.7	6.2	B3/2500		
BM	(30°-60°)	5014.5	13.8	B4/8500		
BH	(60°-80°)	2263.9	6.2	B3/2500		G3/2500
BVH	(80°-90°)	158.7	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 IV Short



REPORT NUMBER: P842097

CATALOG NUMBER: ARCH4-270-727-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	6043.6	6043.6	6043.6	6043.6	6043.6	6043.6	6043.6	6043.6	6043.6	6043.6	6043.6
2.5°	6308.3	6302.8	6313.8	6275.2	6225.6	6220.1	6220.1	6187.0	6148.4	6071.2	6010.6
5°	6606.1	6595.1	6600.6	6545.4	6479.3	6446.2	6440.7	6369.0	6280.8	6159.4	6049.2
7.5°	6881.8	6870.8	6865.3	6804.6	6705.4	6650.2	6644.7	6539.9	6435.2	6247.7	6087.8
10°	7141.0	7130.0	7118.9	7036.2	6914.9	6832.2	6821.2	6688.8	6556.5	6324.9	6120.8
12.5°	7471.8	7449.8	7438.8	7339.5	7163.0	7074.8	7058.3	6881.8	6716.4	6435.2	6187.0
15°	7819.2	7802.7	7786.2	7692.4	7493.9	7378.1	7350.5	7130.0	6903.9	6578.5	6286.3
17.5°	8078.4	8061.9	8061.9	7979.2	7797.2	7664.8	7642.8	7378.1	7096.9	6710.9	6363.5
20°	8238.3	8221.8	8238.3	8188.7	8050.8	7940.6	7918.5	7626.2	7289.9	6832.2	6429.6
22.5°	8354.1	8337.6	8365.2	8343.1	8243.8	8177.7	8161.1	7874.4	7488.4	6959.0	6495.8
25°	8558.2	8558.2	8558.2	8519.6	8425.8	8403.8	8403.8	8155.6	7742.0	7124.4	6595.1
27.5°	8966.2	8944.2	8916.6	8806.3	8646.4	8640.9	8674.0	8442.4	8034.3	7339.5	6716.4
30°	9567.3	9556.2	9451.5	9219.9	8949.7	8922.1	8944.2	8751.2	8348.6	7565.6	6854.2
32.5°	10344.8	10306.2	10091.1	9743.7	9357.7	9230.9	9275.0	9071.0	8679.5	7797.2	6986.6
35°	10896.2	10907.2	10752.8	10438.5	9980.8	9644.5	9677.6	9429.4	9037.9	8056.4	7152.0
37.5°	11530.3	11568.9	11337.3	11100.2	10675.6	10102.1	10135.2	9798.9	9396.3	8381.7	7328.5
40°	12407.1	12329.9	11938.4	11657.2	11188.5	10581.9	10609.5	10212.4	9809.9	8690.5	7532.5
42.5°	13140.5	13002.7	12528.4	12170.0	11607.5	11089.2	11116.8	10659.1	10229.0	9032.4	7758.6
45°	14193.7	13813.3	13129.5	12953.0	12037.7	11585.5	11613.1	11133.3	10670.1	9396.3	8001.2
47.5°	14805.8	14199.3	13763.6	13669.9	12511.9	12098.3	12131.4	11635.1	11144.3	9809.9	8254.9
50°	14767.2	14375.7	14248.9	14017.3	12931.0	12578.1	12611.1	12153.5	11624.1	10217.9	8497.5
52.5°	14513.6	14585.3	14519.1	14133.1	13350.1	13041.3	13079.9	12666.3	12114.9	10598.4	8723.6
55°	14905.1	14954.7	14827.9	14320.6	13813.3	13504.5	13548.6	13206.7	12600.1	10934.8	8916.6
57.5°	15373.8	15197.3	15070.5	14651.4	14293.0	14006.3	14055.9	13758.1	13019.2	11205.0	9065.5
60°	15351.7	14982.3	15109.1	14673.5	14618.3	14469.5	14513.6	14210.3	13339.0	11403.5	9126.1
62.5°	14221.3	14022.8	14662.5	14513.6	14883.0	14883.0	14938.2	14486.0	13532.0	11486.2	9093.0
65°	12258.2	12269.3	13394.2	14011.8	15197.3	15451.0	15495.1	14656.9	13421.7	11243.6	8784.2
67.5°	9765.8	9837.5	11453.1	12738.0	14883.0	15837.0	15842.5	14811.3	12947.5	10559.8	8067.4
70°	7146.5	7201.6	9109.6	10670.1	13399.7	14982.3	14894.1	14375.7	11916.3	9368.8	6948.0
72.5°	4830.5	4880.1	6843.2	8194.2	10995.5	12760.0	12567.0	12704.9	10157.3	7697.9	5586.0
75°	3247.9	3308.6	4869.1	5861.7	8089.4	9688.6	9258.5	9622.4	7857.8	5828.6	4075.0
77.5°	2045.8	2084.4	3093.5	3843.4	5525.3	6595.1	6165.0	6170.5	4527.2	3137.6	2189.2
80°	1301.4	1312.4	1874.9	2216.7	3198.3	3964.8	3507.1	2850.9	2040.3	1665.3	1306.9
82.5°	755.5	738.9	1119.4	1251.7	1521.9	1505.4	1246.2	1180.1	893.3	832.7	667.2
85°	303.3	281.2	490.8	457.7	463.2	490.8	363.9	363.9	292.3	226.1	165.4
87.5°	60.7	60.7	66.2	60.7	60.7	66.2	49.6	49.6	44.1	44.1	44.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P842097

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6043.6	6043.6	6043.6	6043.6	6043.6	6043.6	6043.6	6043.6	6043.6	6043.6	6043.6
2.5°	5999.5	5988.5	5960.9	5889.2	5850.6	5828.6	5795.5	5784.5	5779.0	5784.5	5801.0
5°	6016.1	5977.5	5900.3	5784.5	5707.3	5657.6	5602.5	5580.4	5563.9	5563.9	5580.4
7.5°	6027.1	5966.4	5834.1	5663.2	5552.9	5475.7	5409.5	5381.9	5376.4	5393.0	5398.5
10°	6032.6	5944.4	5756.9	5541.8	5398.5	5299.2	5233.0	5216.5	5233.0	5266.1	5271.6
12.5°	6071.2	5949.9	5712.8	5459.1	5288.2	5188.9	5139.3	5139.3	5183.4	5244.1	5249.6
15°	6137.4	5988.5	5690.7	5393.0	5216.5	5128.3	5111.7	5139.3	5205.5	5299.2	5310.2
17.5°	6187.0	6010.6	5641.1	5304.7	5122.8	5067.6	5095.2	5161.4	5255.1	5381.9	5393.0
20°	6220.1	6010.6	5569.4	5200.0	5029.0	5018.0	5095.2	5200.0	5299.2	5448.1	5464.6
22.5°	6253.2	5999.5	5486.7	5073.1	4924.2	4957.3	5100.7	5233.0	5332.3	5492.2	5519.8
25°	6313.8	6016.1	5404.0	4946.3	4814.0	4907.7	5095.2	5255.1	5359.9	5525.3	5569.4
27.5°	6396.6	6054.7	5343.3	4830.5	4703.7	4830.5	5056.6	5249.6	5359.9	5519.8	5569.4
30°	6484.8	6098.8	5271.6	4703.7	4576.8	4720.2	4973.9	5188.9	5315.8	5464.6	5525.3
32.5°	6578.5	6148.4	5211.0	4565.8	4422.4	4571.3	4852.6	5095.2	5233.0	5370.9	5437.1
35°	6705.4	6236.6	5177.9	4455.5	4284.6	4416.9	4698.2	4973.9	5122.8	5249.6	5326.8
37.5°	6859.8	6346.9	5161.4	4345.2	4135.7	4246.0	4532.7	4825.0	4984.9	5089.7	5161.4
40°	7036.2	6484.8	5155.8	4240.5	3986.8	4069.5	4361.8	4654.0	4808.4	4891.2	4951.8
42.5°	7234.7	6639.2	5144.8	4135.7	3837.9	3904.1	4196.4	4483.1	4615.4	4687.1	4742.3
45°	7444.3	6793.6	5122.8	4008.9	3678.0	3755.2	4025.4	4279.1	4416.9	4477.6	4538.2
47.5°	7653.8	6948.0	5078.6	3865.5	3534.6	3606.3	3843.4	4064.0	4174.3	4229.4	4290.1
50°	7857.8	7085.8	4973.9	3700.1	3385.8	3451.9	3633.9	3782.8	3865.5	3909.6	3970.3
52.5°	8039.8	7179.6	4825.0	3507.1	3236.9	3270.0	3391.3	3518.1	3584.3	3589.8	3644.9
55°	8194.2	7229.2	4609.9	3308.6	3077.0	3082.5	3148.7	3247.9	3275.5	3253.4	3292.0
57.5°	8282.4	7201.6	4372.8	3104.5	2911.5	2889.5	2939.1	2988.7	2994.3	2939.1	2977.7
60°	8304.5	7074.8	4064.0	2900.5	2746.1	2685.5	2702.0	2691.0	2679.9	2657.9	2691.0
62.5°	8194.2	6804.6	3722.1	2702.0	2569.7	2475.9	2470.4	2464.9	2481.4	2486.9	2492.5
65°	7791.7	6297.3	3314.1	2498.0	2382.2	2255.3	2249.8	2316.0	2338.1	2305.0	2316.0
67.5°	7014.2	5519.8	2867.4	2260.9	2145.1	2034.8	2078.9	2117.5	2156.1	2145.1	2156.1
70°	5911.3	4532.7	2459.4	1996.2	1885.9	1825.2	1874.9	1907.9	1913.5	1902.4	1913.5
72.5°	4648.5	3540.2	2078.9	1726.0	1626.7	1599.1	1659.8	1687.4	1737.0	1759.1	1764.6
75°	3358.2	2613.8	1703.9	1433.7	1351.0	1351.0	1406.1	1455.8	1499.9	1472.3	1455.8
77.5°	1874.9	1560.5	1224.2	987.1	1003.6	1080.8	1102.9	1158.0	1202.1	1196.6	1185.6
80°	1135.9	976.0	827.1	639.7	634.1	694.8	838.2	931.9	954.0	904.3	898.8
82.5°	590.0	512.8	441.1	358.4	397.0	463.2	485.3	584.5	645.2	623.1	650.7
85°	148.9	143.4	159.9	165.4	204.0	226.1	248.1	292.3	193.0	93.7	93.7
87.5°	44.1	44.1	55.1	55.1	71.7	88.2	82.7	82.7	44.1	5.5	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)