

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: P841659

Luminaire Tested: **ARCH4-210-727-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841659
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-210-727-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 835mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31369 lumens
Efficiency: N/A
Efficacy: 147.2 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 213.1
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

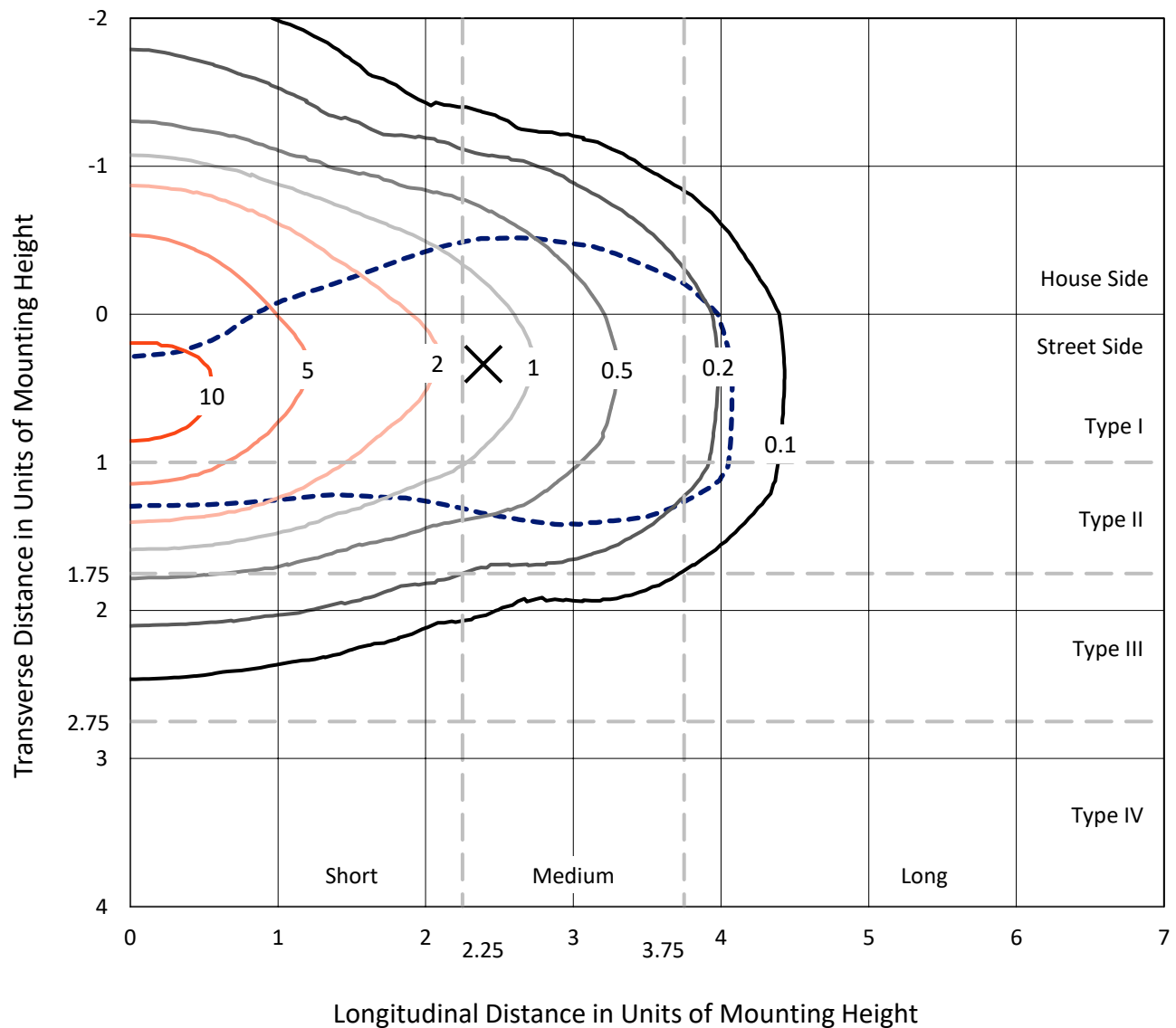


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Iso-Footcandle Lines of Horizontal Illumination

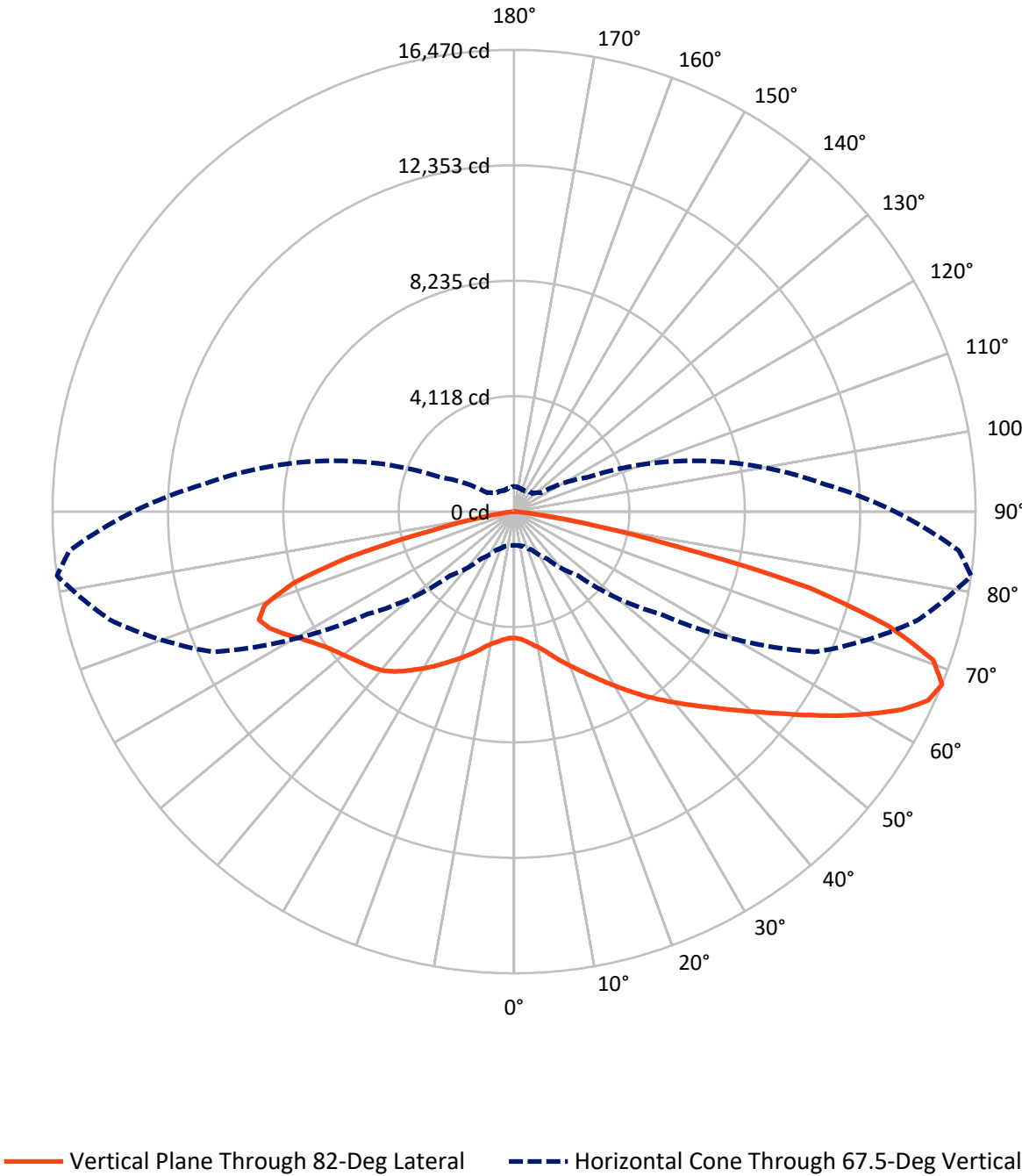
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.8 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	9553.1	0.0	9553.1
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	21815.9	0.0	21815.9
	% Fixture	69.5	0.0	69.5
Total	Lumens	31369.0	0.0	31369.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	466.0	1.5
10°-20°	1678.6	5.4
20°-30°	3373.6	10.8
30°-40°	5299.4	16.9
40°-50°	6455.8	20.6
50°-60°	6099.9	19.4
60°-70°	5037.1	16.1
70°-80°	2742.9	8.7
80°-90°	215.7	0.7
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°	31369.0	100.0
0°-180°	31369.0	100.0

Coefficient of Utilization



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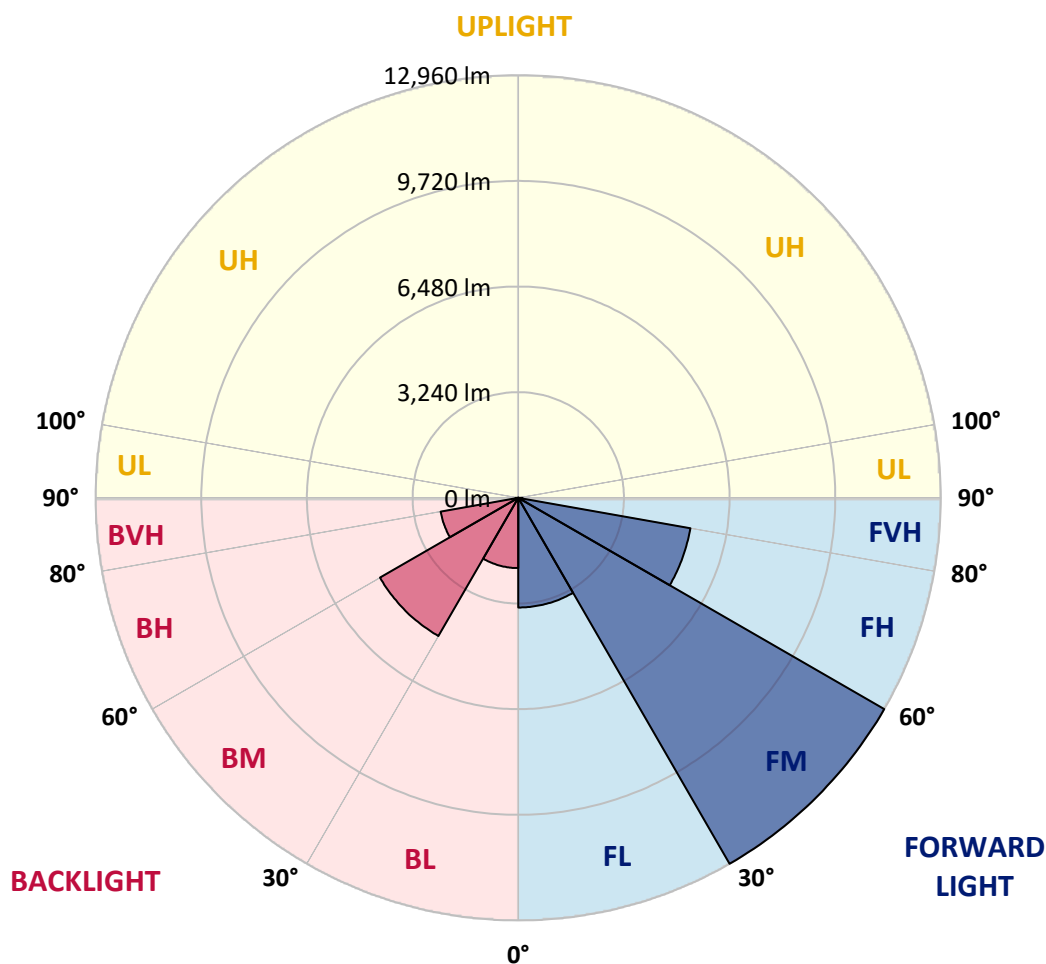
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3363.9	10.7			
FM	(30°-60°)	12959.9	41.3			
FH	(60°-80°)	5362.1	17.1			G3/7500
FVH	(80°-90°)	130.0	0.4			G2/225
BL	(0°-30°)	2154.3	6.9	B3/2500		
BM	(30°-60°)	4895.2	15.6	B3/5000		
BH	(60°-80°)	2417.9	7.7	B3/2500		G3/2500
BVH	(80°-90°)	85.7	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4509.3	4509.3	4509.3	4509.3	4509.3	4509.3	4509.3	4509.3	4509.3	4509.3	4509.3
2.5°	4714.2	4714.2	4750.7	4750.7	4718.8	4668.7	4655.0	4600.4	4550.3	4550.3	4554.8
5°	5165.2	5160.6	5187.9	5151.5	5074.1	4973.9	4905.5	4787.1	4686.9	4655.0	4650.5
7.5°	5716.3	5711.8	5725.4	5666.2	5520.4	5356.5	5219.8	5028.5	4864.6	4796.2	4778.0
10°	6331.2	6326.7	6313.0	6212.8	6016.9	5761.9	5556.9	5292.7	5046.7	4937.4	4914.7
12.5°	7037.2	7028.1	6996.2	6850.5	6581.7	6253.8	5957.7	5616.1	5288.2	5137.8	5087.7
15°	7825.2	7811.5	7752.3	7574.7	7214.8	6800.4	6417.7	5980.5	5579.7	5383.8	5315.5
17.5°	8654.2	8654.2	8563.1	8298.9	7898.1	7383.4	6909.7	6354.0	5884.8	5643.4	5561.4
20°	9496.8	9492.3	9378.4	9059.5	8585.8	7993.7	7392.5	6782.1	6199.1	5907.6	5807.4
22.5°	10385.0	10375.9	10234.7	9870.3	9305.5	8635.9	7934.5	7205.7	6545.3	6194.6	6067.0
25°	11405.3	11391.6	11218.5	10772.2	10102.6	9346.5	8544.9	7702.2	6941.6	6513.4	6363.1
27.5°	12489.3	12471.1	12266.1	11746.9	11013.6	10102.6	9219.0	8276.1	7378.8	6868.7	6700.1
30°	13455.0	13441.3	13218.1	12685.2	11842.5	10854.1	9861.2	8850.0	7838.9	7246.7	7037.2
32.5°	14183.7	14183.7	13983.3	13459.5	12585.0	11573.8	10508.0	9392.1	8317.1	7652.1	7406.1
35°	14625.5	14639.2	14466.1	14047.1	13222.7	12252.5	11177.5	10029.7	8827.3	8084.8	7820.6
37.5°	14689.3	14734.9	14634.7	14352.3	13664.5	12817.3	11833.4	10644.6	9355.6	8522.1	8226.0
40°	14393.2	14425.1	14429.7	14320.4	13846.7	13222.7	12411.9	11296.0	9915.9	8982.1	8640.5
42.5°	13801.1	13823.9	13864.9	13896.8	13714.6	13400.3	12853.7	11901.8	10512.5	9451.3	9050.4
45°	13035.9	13031.4	13099.7	13236.3	13227.2	13300.1	13099.7	12452.9	11132.0	9984.2	9505.9
47.5°	11892.7	11869.9	12111.3	12421.0	12575.9	12917.5	13104.2	12885.6	11806.1	10571.8	10025.2
50°	10102.6	10079.8	10608.2	11337.0	11792.4	12311.7	12853.7	13145.2	12512.1	11232.2	10590.0
52.5°	7925.4	7902.6	8572.2	9847.5	10840.5	11596.6	12348.1	13204.4	13181.7	11970.1	11227.6
55°	5893.9	5875.7	6527.1	7907.2	9515.0	10767.6	11728.7	13049.6	13810.2	12817.3	12002.0
57.5°	4154.0	4144.9	4709.7	5853.0	7811.5	9756.4	11132.0	12749.0	14388.7	13737.4	12876.5
60°	2915.1	2901.4	3311.4	4195.0	5907.6	8230.6	10539.9	12348.1	14821.4	14643.8	13805.7
62.5°	1963.1	1954.0	2245.5	2983.4	4195.0	6335.8	9642.6	12079.4	15067.4	15554.7	14744.0
65°	1489.4	1484.9	1617.0	2022.3	2969.7	4550.3	8216.9	12047.5	15099.2	16238.0	15541.1
67.5°	1202.5	1207.0	1279.9	1512.2	2054.2	3233.9	6372.2	11847.1	14930.7	16470.3	15928.2
70°	983.8	983.8	1015.7	1170.6	1516.8	2181.8	4450.1	10936.1	14461.6	15864.5	15468.2
72.5°	751.5	756.1	856.3	947.4	1143.3	1530.4	2851.3	9050.4	13354.7	13987.9	13687.3
75°	596.7	592.1	651.3	778.9	888.2	1093.2	1749.1	6490.6	11364.3	10931.6	10740.3
77.5°	428.2	423.6	469.1	578.5	674.1	774.3	1043.1	3274.9	6180.9	5679.9	5538.7
80°	291.5	282.4	323.4	400.8	446.4	455.5	510.1	1257.1	2696.5	2541.6	2509.7
82.5°	150.3	150.3	173.1	227.7	232.3	236.9	227.7	405.4	892.7	833.5	797.1
85°	59.2	59.2	63.8	77.4	77.4	82.0	82.0	104.8	95.7	91.1	86.5
87.5°	4.6	4.6	9.1	9.1	13.7	13.7	13.7	18.2	22.8	22.8	22.8
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°	4509.3	4509.3	4509.3	4509.3	4509.3	4509.3	4509.3	4509.3	4509.3	4509.3	4509.3
2.5°	4545.7	4527.5	4468.3	4454.6	4445.5	4431.8	4436.4	4404.5	4390.9	4395.4	4377.2
5°	4627.7	4595.8	4522.9	4491.1	4481.9	4468.3	4481.9	4459.2	4436.4	4445.5	4436.4
7.5°	4741.6	4696.0	4604.9	4573.0	4568.5	4554.8	4573.0	4554.8	4536.6	4545.7	4527.5
10°	4860.0	4800.8	4700.6	4668.7	4668.7	4664.1	4682.4	4655.0	4636.8	4641.4	4632.3
12.5°	5033.1	4955.7	4846.3	4819.0	4805.3	4819.0	4823.6	4787.1	4755.2	4759.8	4746.1
15°	5242.6	5156.1	5037.6	4996.6	4987.5	4983.0	4964.8	4919.2	4878.2	4873.7	4860.0
17.5°	5470.3	5361.0	5219.8	5178.8	5137.8	5124.2	5078.6	5019.4	4955.7	4955.7	4937.4
20°	5689.0	5566.0	5397.5	5338.3	5279.0	5224.4	5147.0	5051.3	4969.3	4955.7	4937.4
22.5°	5925.8	5780.1	5584.2	5497.7	5392.9	5283.6	5151.5	5024.0	4919.2	4896.4	4882.8
25°	6190.0	6007.8	5775.5	5648.0	5479.5	5310.9	5115.1	4951.1	4828.1	4791.7	4782.6
27.5°	6481.5	6262.9	5980.5	5793.7	5547.8	5283.6	5033.1	4837.2	4686.9	4641.4	4627.7
30°	6777.6	6518.0	6167.2	5893.9	5547.8	5197.1	4882.8	4655.0	4481.9	4418.2	4409.1
32.5°	7073.6	6782.1	6335.8	5948.6	5493.1	5051.3	4686.9	4418.2	4222.3	4144.9	4163.1
35°	7428.9	7073.6	6490.6	5971.4	5402.0	4873.7	4463.7	4149.4	3949.0	3880.7	3894.4
37.5°	7797.9	7365.2	6613.6	5953.2	5274.5	4673.3	4213.2	3908.0	3657.5	3539.1	3552.8
40°	8116.7	7629.3	6700.1	5889.4	5110.5	4445.5	3967.3	3566.4	3220.3	3106.4	3092.7
42.5°	8417.3	7825.2	6745.7	5793.7	4923.8	4181.3	3616.5	3101.8	2755.7	2614.5	2619.0
45°	8731.6	8016.5	6727.5	5666.2	4691.5	3871.6	3165.6	2646.4	2341.2	2213.6	2218.2
47.5°	9091.4	8221.5	6709.3	5529.6	4409.1	3470.8	2732.9	2245.5	1981.3	1890.3	1881.1
50°	9474.0	8449.2	6686.5	5361.0	4094.8	3024.4	2304.7	1872.0	1648.8	1589.6	1576.0
52.5°	9906.7	8695.2	6672.8	5160.6	3716.7	2550.7	1922.1	1544.1	1393.8	1352.8	1348.2
55°	10426.0	8982.1	6691.0	4919.2	3261.3	2104.3	1598.7	1330.0	1229.8	1207.0	1202.5
57.5°	11059.1	9351.1	6745.7	4636.8	2783.0	1717.2	1361.9	1197.9	1134.2	1115.9	1115.9
60°	11746.9	9770.1	6845.9	4318.0	2304.7	1416.6	1207.0	1093.2	1065.8	1088.6	1088.6
62.5°	12489.3	10262.0	7023.5	3930.8	1858.4	1197.9	1084.0	1006.6	988.4	1033.9	1038.5
65°	13177.1	10740.3	7137.4	3466.2	1475.8	1038.5	988.4	920.1	929.2	974.7	970.2
67.5°	13600.7	11136.5	6978.0	2883.2	1170.6	920.1	888.2	829.0	851.8	888.2	892.7
70°	13341.1	10913.4	6190.0	2177.2	915.5	801.6	778.9	742.4	760.7	806.2	824.4
72.5°	12070.3	9774.7	4814.5	1471.2	737.9	674.1	683.2	665.0	687.8	728.8	769.8
75°	9797.4	7387.9	3229.4	942.8	583.0	573.9	587.6	573.9	583.0	624.0	646.8
77.5°	5115.1	3602.9	1607.9	587.6	432.7	446.4	469.1	473.7	501.0	510.1	519.3
80°	2386.7	1621.5	669.6	327.9	287.0	314.3	359.8	364.4	373.5	387.2	391.7
82.5°	778.9	487.4	309.7	177.6	164.0	177.6	232.3	277.8	282.4	309.7	309.7
85°	82.0	50.1	68.3	72.9	63.8	77.4	104.8	100.2	45.5	27.3	27.3
87.5°	22.8	18.2	22.8	22.8	18.2	18.2	13.7	4.6	0.0	0.0	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)