

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: P841769

Luminaire Tested: **ARCH4-220-750-U-T2U**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841769
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: ARCH4-220-750-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 870mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35348 lumens
Efficiency: N/A
Efficacy: 159.4 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): 221.8
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



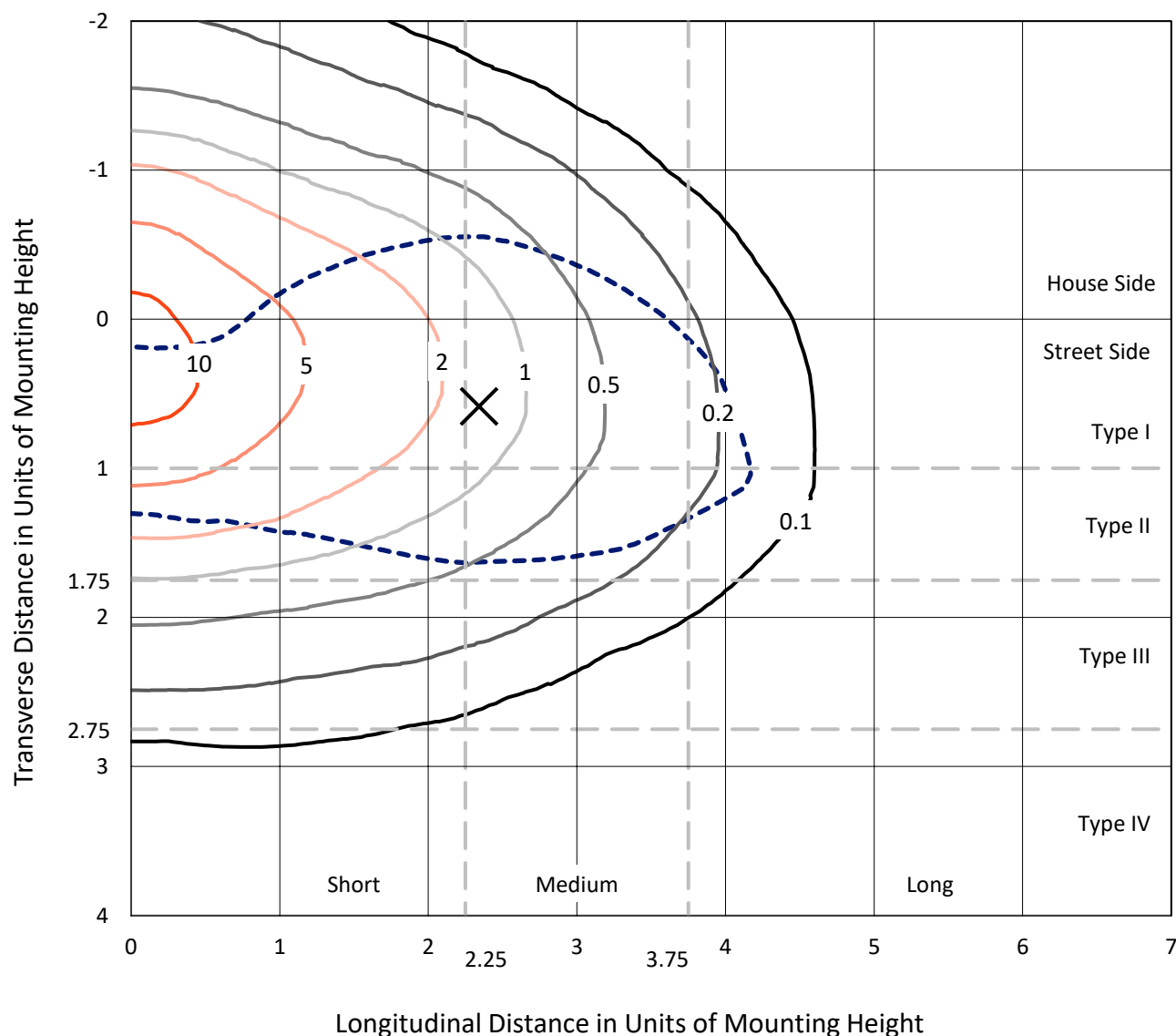
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

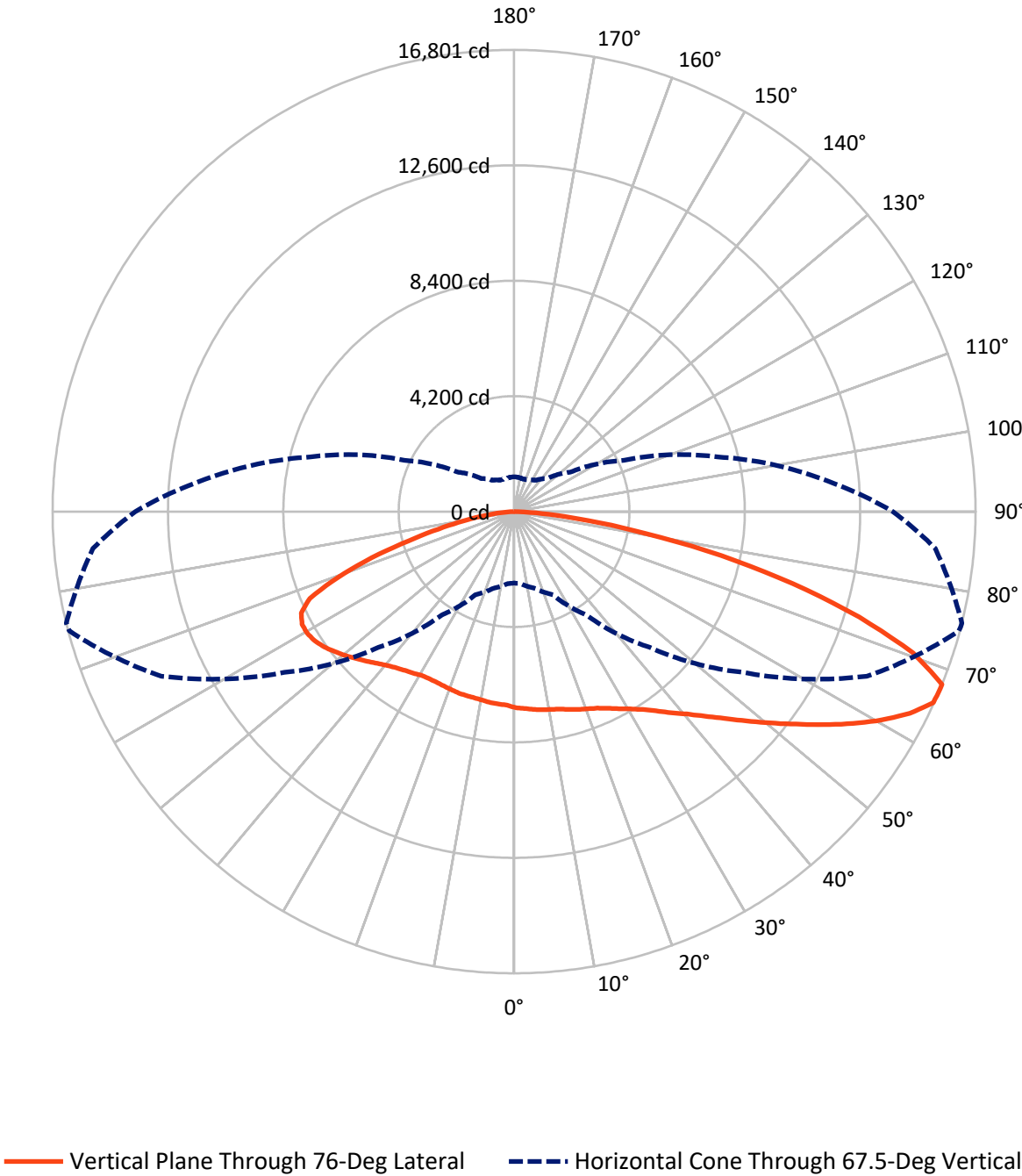
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.9 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	11944.3	0.0	11944.3
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	23403.7	0.0	23403.7
	% Fixture	66.2	0.0	66.2
Total	Lumens	35348.0	0.0	35348.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	688.5	1.9
10°-20°	2104.9	6.0
20°-30°	3576.3	10.1
30°-40°	5088.6	14.4
40°-50°	6426.7	18.2
50°-60°	6958.1	19.7
60°-70°	6471.8	18.3
70°-80°	3476.0	9.8
80°-90°	557.0	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°	35348.0	100.0
0°-180°	35348.0	100.0

Coefficient of Utilization



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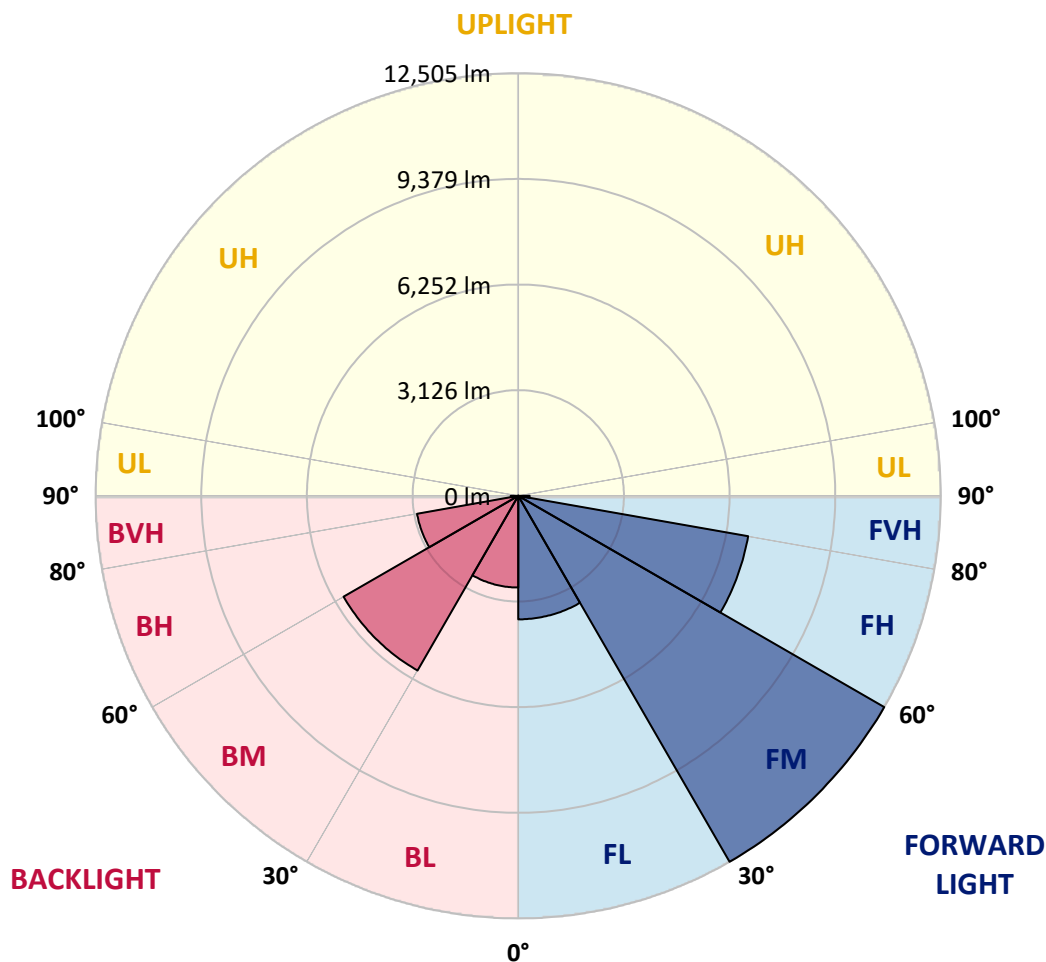
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3655.4	10.3			
FM	(30°-60°)	12504.8	35.4			
FH	(60°-80°)	6906.7	19.5			G3/7500
FVH	(80°-90°)	336.9	1.0			G3/500
BL	(0°-30°)	2714.4	7.7	B4/5000		
BM	(30°-60°)	5968.7	16.9	B4/8500		
BH	(60°-80°)	3041.1	8.6	B4/5000		G4/5000
BVH	(80°-90°)	220.1	0.6			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	7140.2	7140.2	7140.2	7140.2	7140.2	7140.2	7140.2	7140.2	7140.2	7140.2	7140.2
2.5°	7356.8	7343.7	7291.2	7297.7	7297.7	7291.2	7212.4	7179.6	7179.6	7173.0	7100.8
5°	7619.3	7599.6	7540.5	7527.4	7501.2	7468.4	7343.7	7271.5	7238.7	7232.1	7133.7
7.5°	7927.7	7901.5	7829.3	7789.9	7724.3	7639.0	7481.5	7369.9	7291.2	7284.6	7146.8
10°	8236.2	8209.9	8124.6	8052.4	7960.6	7822.7	7619.3	7455.2	7330.5	7317.4	7153.3
12.5°	8603.7	8577.4	8472.4	8380.6	8242.8	8059.0	7789.9	7566.8	7396.2	7376.5	7173.0
15°	8990.9	8951.5	8846.5	8741.5	8570.9	8334.6	8013.1	7717.7	7501.2	7468.4	7232.1
17.5°	9312.5	9260.0	9174.7	9069.7	8879.3	8603.7	8236.2	7868.7	7599.6	7573.4	7291.2
20°	9588.1	9548.7	9456.9	9358.4	9155.0	8853.1	8446.2	8019.6	7691.5	7658.7	7337.1
22.5°	9850.6	9798.1	9745.6	9673.4	9450.3	9115.6	8689.0	8203.4	7809.6	7770.2	7396.2
25°	10152.5	10093.4	10073.7	10034.4	9771.9	9430.6	8984.3	8433.1	7973.7	7927.7	7501.2
27.5°	10526.6	10460.9	10421.6	10421.6	10106.6	9752.2	9299.3	8702.1	8164.0	8124.6	7632.4
30°	10920.3	10841.6	10782.5	10782.5	10428.1	10073.7	9607.8	8971.2	8380.6	8334.6	7803.1
32.5°	11268.2	11189.4	11123.8	11117.2	10749.7	10395.3	9929.4	9266.5	8643.1	8584.0	8013.1
35°	11537.2	11465.0	11406.0	11419.1	11071.3	10723.5	10290.3	9660.3	8971.2	8905.6	8288.7
37.5°	11701.3	11675.0	11642.2	11688.2	11366.6	11038.5	10664.4	10040.9	9345.3	9286.2	8630.0
40°	11786.6	11766.9	11898.2	11957.2	11616.0	11320.7	11038.5	10434.7	9752.2	9686.5	9023.7
42.5°	11911.3	12075.4	12127.9	12114.7	11799.7	11537.2	11379.7	10861.3	10231.2	10172.2	9496.2
45°	11465.0	11425.7	11714.4	11871.9	11812.9	11675.0	11701.3	11373.2	10789.1	10730.0	10040.9
47.5°	10867.8	10815.3	10979.4	11366.6	11596.3	11727.5	11990.1	11904.7	11432.2	11379.7	10677.5
50°	9607.8	9680.0	10290.3	10808.8	11261.6	11714.4	12232.9	12475.7	12141.0	12088.5	11360.0
52.5°	8209.9	8282.1	8918.7	10113.1	10854.7	11616.0	12410.1	13046.6	12908.8	12849.8	12088.5
55°	7192.7	7350.2	8072.1	8938.4	10277.2	11307.5	12515.1	13630.7	13735.7	13683.2	12882.6
57.5°	6182.1	6300.2	6844.9	7612.7	9489.7	10769.4	12508.5	14175.4	14602.0	14549.5	13689.8
60°	4994.2	5145.2	5578.3	6405.2	8439.6	10126.2	12324.8	14602.0	15435.5	15396.1	14470.8
62.5°	4180.4	4226.4	4534.8	5250.2	7087.7	9312.5	11911.3	14831.7	16190.2	16163.9	15173.0
65°	3366.7	3373.2	3655.4	4252.6	5781.7	8301.8	11209.1	14746.4	16761.1	16774.3	15678.3
67.5°	2598.8	2631.6	2887.6	3340.4	4593.9	6989.3	10205.0	14168.9	16767.7	16800.5	15389.5
70°	1798.2	1824.4	2211.6	2651.3	3550.4	5571.7	8846.5	12639.8	15389.5	15415.8	13794.8
72.5°	1266.6	1279.7	1693.2	2119.8	2776.0	4200.1	6674.3	10454.4	13118.8	13138.5	11602.9
75°	945.0	958.2	1194.4	1607.9	2126.3	2907.3	4561.1	8006.5	10480.6	10480.6	9161.5
77.5°	669.4	676.0	774.4	1109.1	1417.5	1962.2	2743.2	5243.6	7691.5	7704.6	6674.3
80°	452.8	459.4	505.3	748.1	886.0	1063.2	1489.7	2749.8	4849.8	4869.5	4239.5
82.5°	236.3	249.4	282.2	380.6	446.3	590.6	767.8	1397.9	2684.1	2736.6	2546.3
85°	91.9	91.9	105.0	124.7	164.1	229.7	354.4	531.6	1214.1	1253.5	1122.2
87.5°	32.8	32.8	39.4	39.4	45.9	52.5	59.1	78.8	137.8	137.8	131.3
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°	7140.2	7140.2	7140.2	7140.2	7140.2	7140.2	7140.2	7140.2	7140.2	7140.2	7140.2
2.5°	7074.6	7074.6	7041.8	7054.9	7048.3	7035.2	7022.1	7041.8	7022.1	6976.2	6969.6
5°	7087.7	7074.6	7022.1	7015.5	6995.8	6969.6	6936.8	6949.9	6917.1	6877.7	6871.1
7.5°	7094.3	7068.0	6995.8	6969.6	6930.2	6877.7	6825.2	6825.2	6779.3	6739.9	6733.3
10°	7081.2	7048.3	6949.9	6897.4	6825.2	6746.5	6674.3	6654.6	6602.1	6556.1	6556.1
12.5°	7087.7	7041.8	6917.1	6831.8	6733.3	6634.9	6543.0	6516.8	6470.8	6424.9	6418.3
15°	7127.1	7061.5	6904.0	6792.4	6648.0	6536.4	6438.0	6418.3	6378.9	6346.1	6346.1
17.5°	7166.5	7081.2	6884.3	6726.8	6549.6	6424.9	6333.0	6333.0	6306.8	6287.1	6287.1
20°	7186.2	7087.7	6844.9	6634.9	6431.4	6300.2	6214.9	6228.0	6221.4	6214.9	6214.9
22.5°	7232.1	7100.8	6812.1	6549.6	6306.8	6168.9	6090.2	6109.9	6103.3	6103.3	6109.9
25°	7304.3	7133.7	6785.8	6470.8	6188.6	6037.7	5952.4	5965.5	5965.5	5965.5	5965.5
27.5°	7402.7	7199.3	6779.3	6398.6	6070.5	5899.9	5794.9	5794.9	5768.6	5775.2	5781.7
30°	7553.7	7324.0	6792.4	6333.0	5945.8	5729.2	5604.5	5584.9	5578.3	5591.4	5598.0
32.5°	7737.4	7494.6	6871.1	6287.1	5814.6	5538.9	5381.4	5374.9	5355.2	5355.2	5355.2
35°	7967.1	7658.7	6943.3	6280.5	5683.3	5335.5	5164.8	5145.2	5099.2	5079.5	5079.5
37.5°	8262.4	7914.6	7028.7	6234.6	5571.7	5138.6	4935.2	4869.5	4817.0	4810.5	4810.5
40°	8623.4	8203.4	7153.3	6182.1	5453.6	4935.2	4666.1	4554.5	4561.1	4587.3	4587.3
42.5°	9050.0	8557.8	7310.8	6155.8	5283.0	4725.1	4351.1	4219.8	4265.8	4292.0	4298.6
45°	9548.7	8977.8	7488.0	6123.0	5125.5	4488.9	4016.4	3852.3	3872.0	3878.6	3885.1
47.5°	10126.2	9443.7	7671.8	6096.7	4948.3	4193.6	3648.9	3432.3	3425.7	3386.4	3399.5
50°	10730.0	9935.9	7862.1	6050.8	4731.7	3845.7	3261.7	3005.7	2953.2	2894.2	2900.7
52.5°	11373.2	10441.3	8039.3	5978.6	4462.6	3491.4	2894.2	2618.5	2513.5	2447.9	2461.0
55°	12081.9	10959.7	8209.9	5867.1	4180.4	3137.0	2566.0	2283.8	2152.6	2100.1	2106.6
57.5°	12731.6	11458.5	8334.6	5729.2	3872.0	2815.4	2277.3	2001.6	1916.3	1909.7	1916.3
60°	13361.7	11878.5	8387.1	5538.9	3557.0	2520.1	2008.2	1798.2	1739.1	1771.9	1778.5
62.5°	13893.2	12147.6	8360.9	5283.0	3235.4	2237.9	1791.6	1640.7	1601.3	1666.9	1673.5
65°	14201.7	12232.9	8177.1	4915.5	2887.6	1962.2	1588.2	1424.1	1404.4	1443.8	1463.5
67.5°	13794.8	11701.3	7678.4	4410.1	2500.4	1706.3	1391.3	1260.0	1227.2	1260.0	1260.0
70°	12226.3	10139.4	6497.1	3609.5	2073.8	1456.9	1207.5	1115.7	1089.4	1115.7	1109.1
72.5°	10185.3	8433.1	5118.9	2815.4	1634.1	1227.2	1050.0	964.7	938.5	912.2	899.1
75°	7901.5	6405.2	3714.5	2067.3	1233.8	984.4	879.4	800.6	735.0	761.3	748.1
77.5°	5788.3	4495.4	2631.6	1430.7	886.0	761.3	689.1	630.0	584.1	636.6	630.0
80°	3727.6	2907.3	1758.8	958.2	610.3	531.6	505.3	472.5	518.5	676.0	689.1
82.5°	2277.3	1844.1	1050.0	623.5	400.3	354.4	328.1	328.1	531.6	584.1	590.6
85°	1017.2	977.8	571.0	321.6	223.1	203.4	183.8	236.3	216.6	157.5	164.1
87.5°	164.1	170.6	124.7	111.6	85.3	85.3	65.6	45.9	32.8	19.7	19.7
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)