

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: P842091

Luminaire Tested: **ARCH4-270-727-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842091
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: ARCH4-270-727-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1045mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37213 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): 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

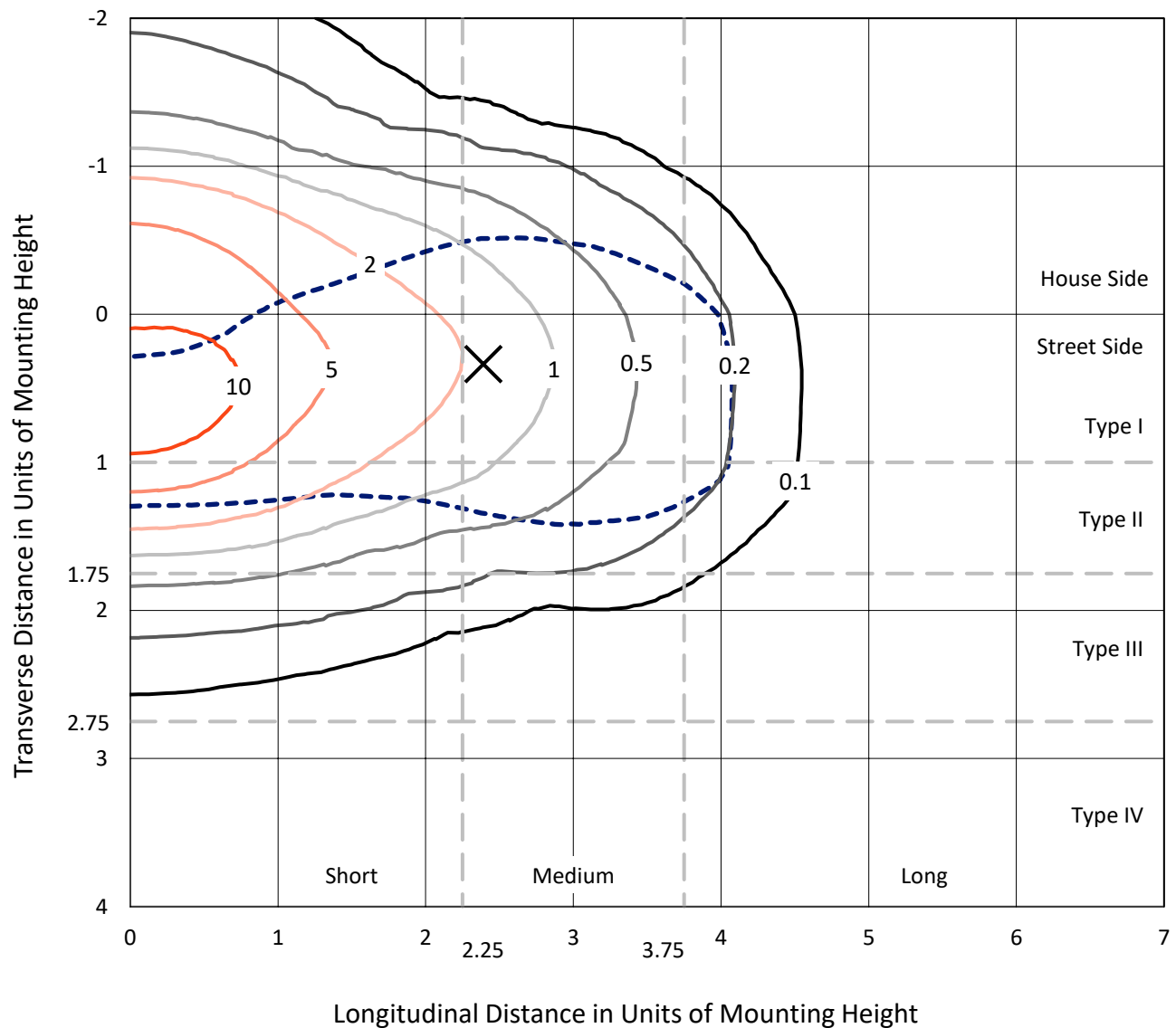


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Iso-Footcandle Lines of Horizontal Illumination

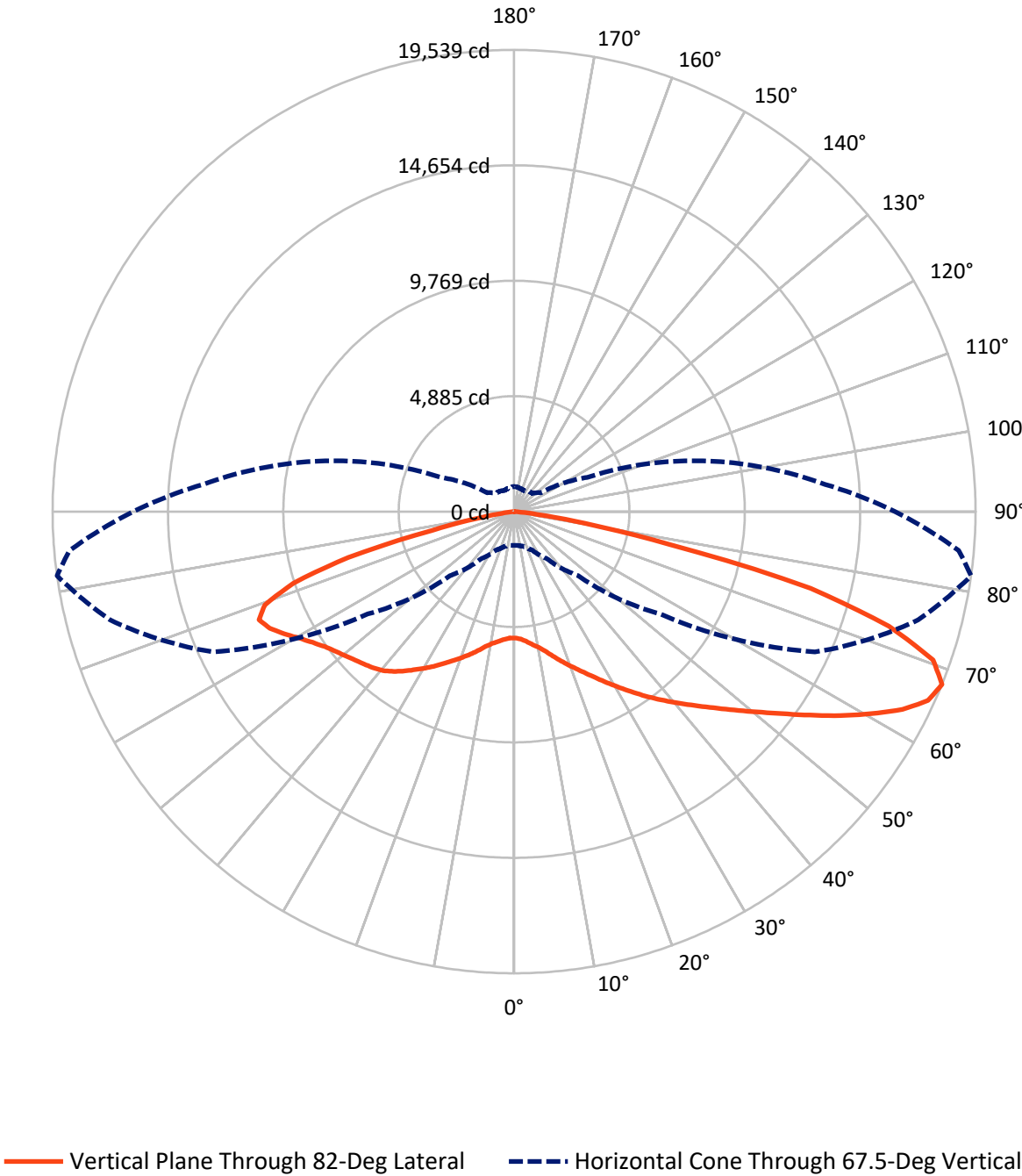
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16.4 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	11332.9	0.0	11332.9
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	25880.1	0.0	25880.1
	% Fixture	69.5	0.0	69.5
Total	Lumens	37213.0	0.0	37213.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	552.8	1.5
10°-20°	1991.3	5.4
20°-30°	4002.1	10.8
30°-40°	6286.7	16.9
40°-50°	7658.5	20.6
50°-60°	7236.3	19.4
60°-70°	5975.5	16.1
70°-80°	3253.9	8.7
80°-90°	255.8	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°	37213.0	100.0
0°-180°	37213.0	100.0

Coefficient of Utilization



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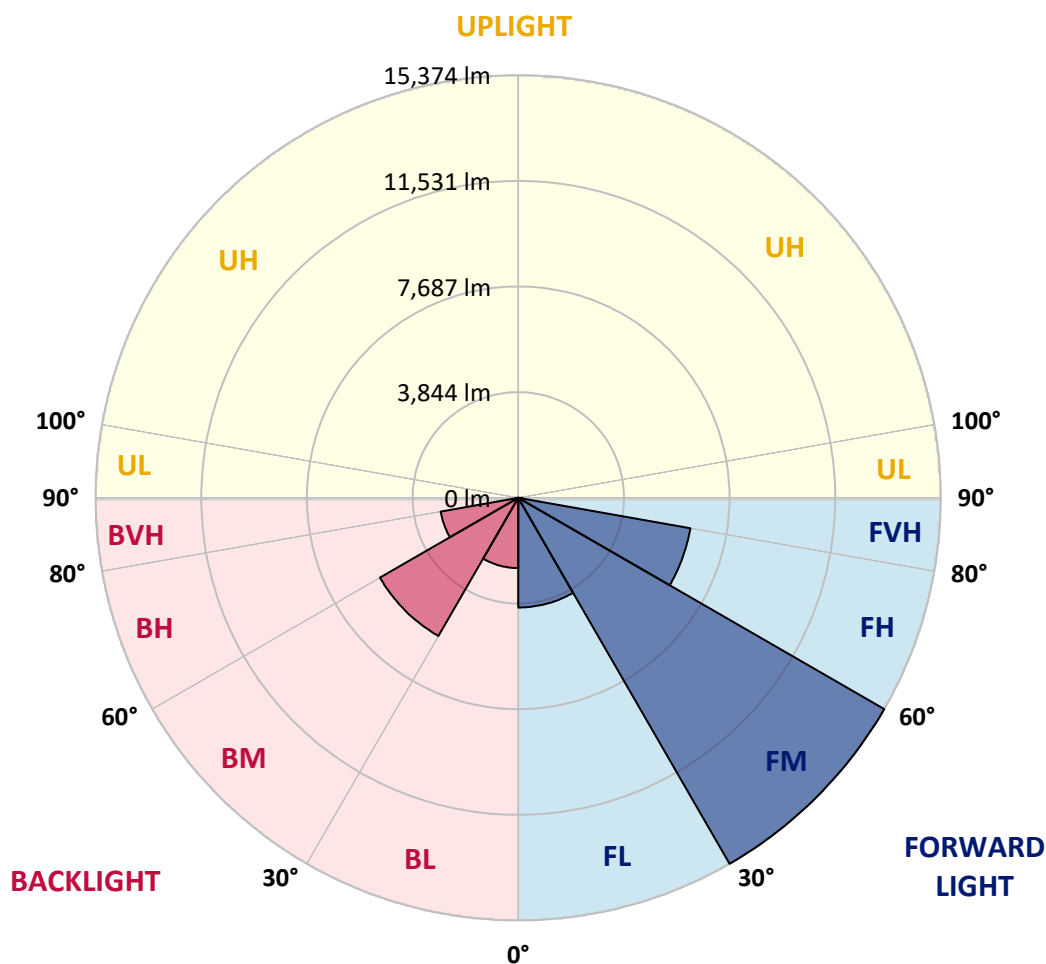
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3990.6	10.7			
FM	(30°-60°)	15374.3	41.3			
FH	(60°-80°)	6361.0	17.1			G3/7500
FVH	(80°-90°)	154.2	0.4			G2/225
BL	(0°-30°)	2555.6	6.9	B4/5000		
BM	(30°-60°)	5807.2	15.6	B4/8500		
BH	(60°-80°)	2868.4	7.7	B4/5000		G4/5000
BVH	(80°-90°)	101.6	0.3			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°	82°	85°
0°	5349.3	5349.3	5349.3	5349.3	5349.3	5349.3	5349.3	5349.3	5349.3	5349.3	5349.3
2.5°	5592.5	5592.5	5635.7	5635.7	5597.9	5538.5	5522.3	5457.4	5398.0	5398.0	5403.4
5°	6127.4	6122.0	6154.5	6111.2	6019.4	5900.5	5819.4	5679.0	5560.1	5522.3	5516.9
7.5°	6781.2	6775.8	6792.1	6721.8	6548.9	6354.4	6192.3	5965.3	5770.8	5689.8	5668.1
10°	7510.7	7505.3	7489.1	7370.2	7137.9	6835.3	6592.1	6278.7	5986.9	5857.3	5830.3
12.5°	8348.2	8337.4	8299.6	8126.7	7807.9	7418.8	7067.6	6662.4	6273.3	6095.0	6035.6
15°	9283.0	9266.8	9196.6	8985.8	8559.0	8067.3	7613.4	7094.6	6619.1	6386.8	6305.7
17.5°	10266.4	10266.4	10158.4	9845.0	9369.5	8758.9	8196.9	7537.7	6981.2	6694.8	6597.5
20°	11266.1	11260.7	11125.6	10747.3	10185.4	9482.9	8769.7	8045.6	7354.0	7008.2	6889.3
22.5°	12319.7	12308.9	12141.4	11709.1	11039.1	10244.8	9412.7	8548.2	7764.7	7348.6	7197.3
25°	13530.1	13513.9	13308.5	12779.0	11984.7	11087.7	10136.7	9137.1	8234.8	7726.8	7548.5
27.5°	14816.1	14794.5	14551.3	13935.3	13065.4	11984.7	10936.4	9817.9	8753.5	8148.3	7948.4
30°	15961.6	15945.4	15680.6	15048.4	14048.8	12876.3	11698.3	10498.8	9299.2	8596.8	8348.2
32.5°	16826.1	16826.1	16588.4	15967.0	14929.5	13730.0	12465.6	11141.8	9866.6	9077.7	8785.9
35°	17350.3	17366.5	17161.1	16664.0	15686.0	14535.1	13259.9	11898.3	10471.8	9591.0	9277.6
37.5°	17425.9	17479.9	17361.1	17026.1	16210.2	15205.1	14038.0	12627.7	11098.5	10109.7	9758.5
40°	17074.7	17112.5	17117.9	16988.2	16426.3	15686.0	14724.2	13400.4	11763.2	10655.5	10250.2
42.5°	16372.3	16399.3	16447.9	16485.7	16269.6	15896.8	15248.3	14119.0	12471.0	11212.0	10736.5
45°	15464.5	15459.1	15540.1	15702.2	15691.4	15777.9	15540.1	14772.9	13205.9	11844.2	11276.9
47.5°	14108.2	14081.2	14367.6	14735.0	14918.7	15324.0	15545.5	15286.2	14005.6	12541.3	11892.8
50°	11984.7	11957.7	12584.5	13449.0	13989.4	14605.3	15248.3	15594.2	14843.1	13324.7	12562.9
52.5°	9401.9	9374.9	10169.2	11682.1	12860.1	13757.0	14648.6	15664.4	15637.4	14200.1	13319.3
55°	6992.0	6970.4	7743.0	9380.3	11287.7	12773.6	13913.7	15480.7	16383.1	15205.1	14237.9
57.5°	4927.9	4917.1	5587.1	6943.3	9266.8	11574.0	13205.9	15124.1	17069.3	16296.6	15275.4
60°	3458.2	3442.0	3928.3	4976.5	7008.2	9763.9	12503.4	14648.6	17582.6	17371.9	16377.7
62.5°	2328.9	2318.1	2663.9	3539.2	4976.5	7516.1	11439.0	14329.8	17874.4	18452.6	17490.8
65°	1766.9	1761.5	1918.2	2399.1	3523.0	5398.0	9747.7	14291.9	17912.2	19263.1	18436.3
67.5°	1426.5	1431.9	1518.4	1793.9	2436.9	3836.4	7559.3	14054.2	17712.3	19538.6	18895.6
70°	1167.1	1167.1	1205.0	1388.7	1799.3	2588.2	5279.1	12973.5	17155.7	18820.0	18349.9
72.5°	891.6	897.0	1015.8	1123.9	1356.2	1815.5	3382.5	10736.5	15842.7	16593.8	16237.2
75°	707.8	702.4	772.7	924.0	1053.7	1296.8	2074.9	7699.8	13481.4	12968.1	12741.2
77.5°	507.9	502.5	556.5	686.2	799.7	918.6	1237.4	3885.0	7332.4	6738.0	6570.5
80°	345.8	335.0	383.6	475.5	529.5	540.3	605.2	1491.3	3198.8	3015.1	2977.3
82.5°	178.3	178.3	205.3	270.2	275.6	281.0	270.2	480.9	1059.1	988.8	945.6
85°	70.2	70.2	75.6	91.9	91.9	97.3	97.3	124.3	113.5	108.1	102.7
87.5°	5.4	5.4	10.8	10.8	16.2	16.2	16.2	21.6	27.0	27.0	27.0
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°	5349.3	5349.3	5349.3	5349.3	5349.3	5349.3	5349.3	5349.3	5349.3	5349.3	5349.3
2.5°	5392.6	5371.0	5300.7	5284.5	5273.7	5257.5	5262.9	5225.1	5208.9	5214.3	5192.7
5°	5489.8	5452.0	5365.6	5327.7	5316.9	5300.7	5316.9	5289.9	5262.9	5273.7	5262.9
7.5°	5624.9	5570.9	5462.8	5425.0	5419.6	5403.4	5425.0	5403.4	5381.8	5392.6	5371.0
10°	5765.4	5695.2	5576.3	5538.5	5538.5	5533.1	5554.7	5522.3	5500.6	5506.0	5495.2
12.5°	5970.7	5878.9	5749.2	5716.8	5700.6	5716.8	5722.2	5679.0	5641.1	5646.5	5630.3
15°	6219.3	6116.6	5976.1	5927.5	5916.7	5911.3	5889.7	5835.7	5787.0	5781.6	5765.4
17.5°	6489.5	6359.8	6192.3	6143.6	6095.0	6078.8	6024.8	5954.5	5878.9	5878.9	5857.3
20°	6748.8	6602.9	6403.0	6332.8	6262.5	6197.7	6105.8	5992.4	5895.1	5878.9	5857.3
22.5°	7029.8	6856.9	6624.5	6521.9	6397.6	6267.9	6111.2	5959.9	5835.7	5808.6	5792.4
25°	7343.2	7127.1	6851.5	6700.2	6500.3	6300.3	6068.0	5873.5	5727.6	5684.4	5673.6
27.5°	7689.0	7429.7	7094.6	6873.1	6581.3	6267.9	5970.7	5738.4	5560.1	5506.0	5489.8
30°	8040.2	7732.2	7316.2	6992.0	6581.3	6165.3	5792.4	5522.3	5316.9	5241.3	5230.5
32.5°	8391.5	8045.6	7516.1	7056.8	6516.5	5992.4	5560.1	5241.3	5008.9	4917.1	4938.7
35°	8812.9	8391.5	7699.8	7083.8	6408.4	5781.6	5295.3	4922.5	4684.7	4603.7	4619.9
37.5°	9250.6	8737.3	7845.7	7062.2	6257.1	5543.9	4998.1	4636.1	4338.9	4198.4	4214.6
40°	9628.8	9050.7	7948.4	6986.6	6062.6	5273.7	4706.3	4230.8	3820.2	3685.1	3668.9
42.5°	9985.5	9283.0	8002.4	6873.1	5841.1	4960.3	4290.3	3679.7	3269.0	3101.5	3106.9
45°	10358.3	9510.0	7980.8	6721.8	5565.5	4592.9	3755.4	3139.4	2777.3	2626.0	2631.4
47.5°	10785.2	9753.1	7959.2	6559.7	5230.5	4117.4	3242.0	2663.9	2350.5	2242.4	2231.6
50°	11239.0	10023.3	7932.2	6359.8	4857.6	3587.8	2734.1	2220.8	1956.0	1885.8	1869.6
52.5°	11752.4	10315.1	7916.0	6122.0	4409.2	3025.9	2280.2	1831.7	1653.4	1604.8	1599.4
55°	12368.3	10655.5	7937.6	5835.7	3868.8	2496.4	1896.6	1577.8	1458.9	1431.9	1426.5
57.5°	13119.4	11093.1	8002.4	5500.6	3301.5	2037.1	1615.6	1421.1	1345.4	1323.8	1323.8
60°	13935.3	11590.3	8121.3	5122.4	2734.1	1680.5	1431.9	1296.8	1264.4	1291.4	1291.4
62.5°	14816.1	12173.8	8332.0	4663.1	2204.6	1421.1	1286.0	1194.1	1172.5	1226.6	1232.0
65°	15632.0	12741.2	8467.1	4112.0	1750.7	1232.0	1172.5	1091.5	1102.3	1156.3	1150.9
67.5°	16134.5	13211.3	8278.0	3420.3	1388.7	1091.5	1053.7	983.4	1010.4	1053.7	1059.1
70°	15826.5	12946.5	7343.2	2582.8	1086.1	951.0	924.0	880.8	902.4	956.4	978.0
72.5°	14319.0	11595.7	5711.4	1745.3	875.3	799.7	810.5	788.9	815.9	864.5	913.2
75°	11622.7	8764.3	3831.0	1118.5	691.6	680.8	697.0	680.8	691.6	740.3	767.3
77.5°	6068.0	4274.1	1907.4	697.0	513.3	529.5	556.5	562.0	594.4	605.2	616.0
80°	2831.4	1923.6	794.3	389.0	340.4	372.8	426.9	432.3	443.1	459.3	464.7
82.5°	924.0	578.2	367.4	210.7	194.5	210.7	275.6	329.6	335.0	367.4	367.4
85°	97.3	59.4	81.1	86.5	75.6	91.9	124.3	118.9	54.0	32.4	32.4
87.5°	27.0	21.6	27.0	27.0	21.6	21.6	16.2	5.4	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)