

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: P842343

Luminaire Tested: **ARCH4-300-750-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842343
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: ARCH4-300-750-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1155mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 44080 lumens
Efficiency: N/A
Efficacy: 147.3 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): 299.2
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

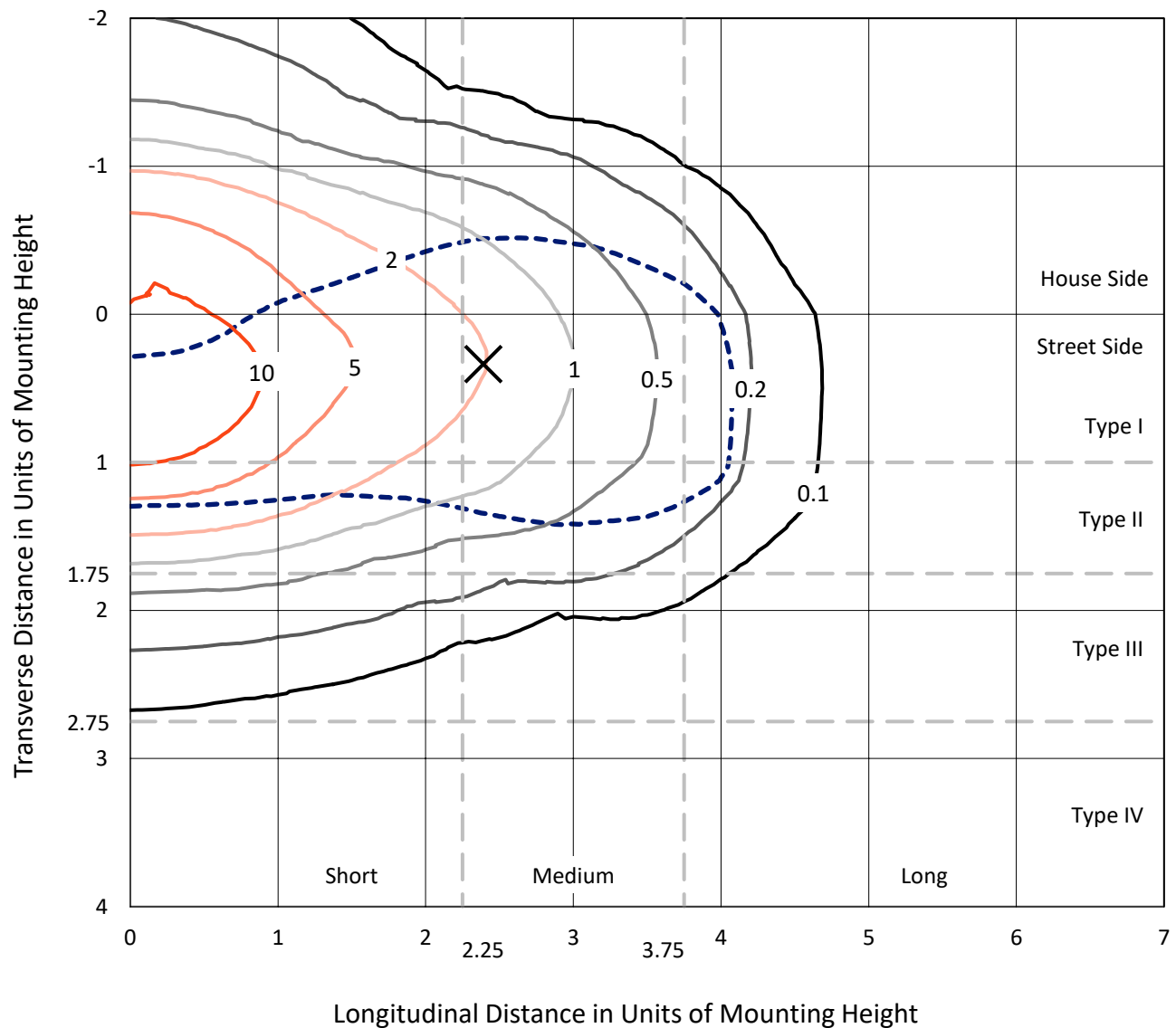


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Iso-Footcandle Lines of Horizontal Illumination

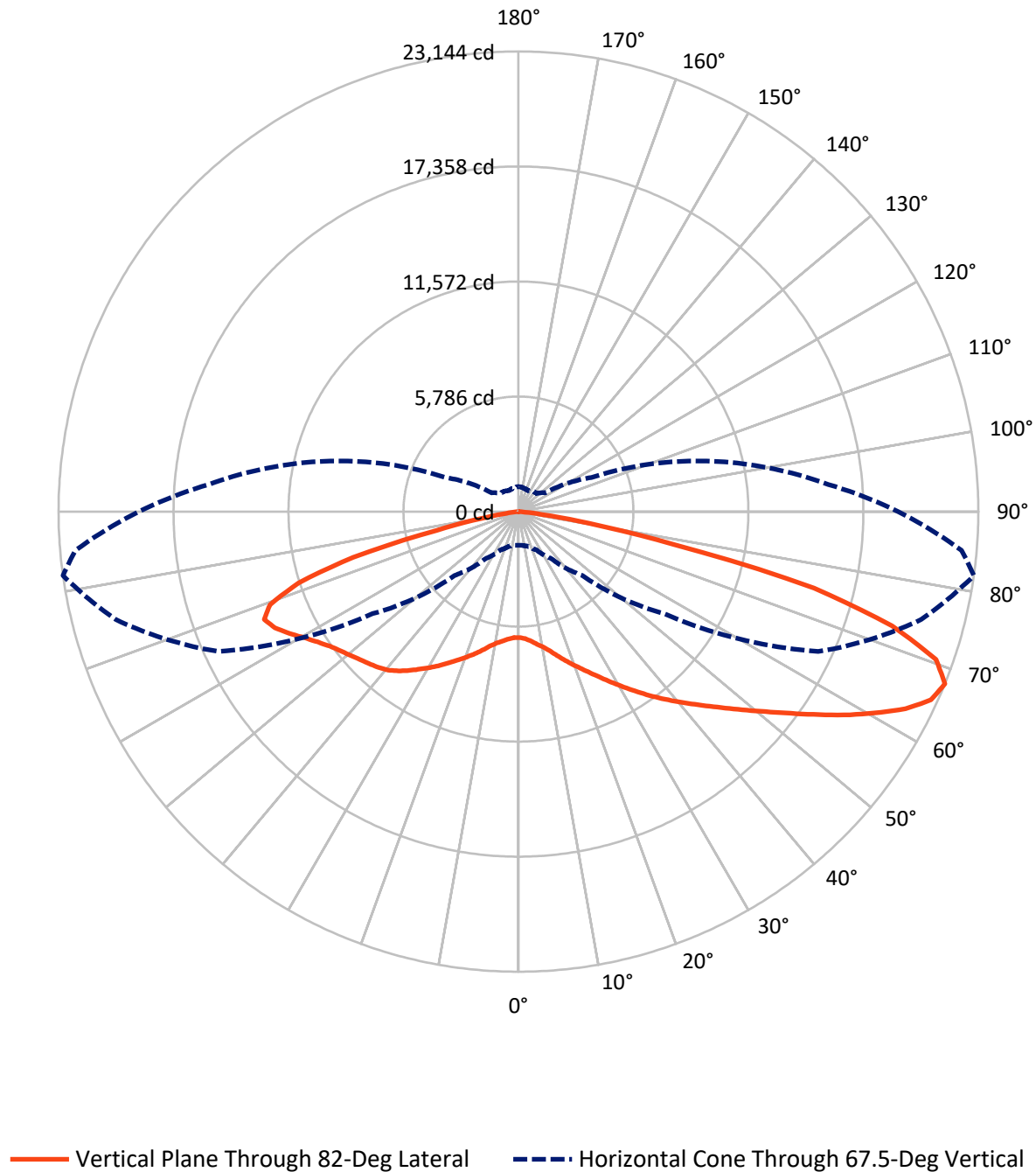
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 19.4 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	13424.1	0.0	13424.1
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	30655.8	0.0	30655.8
	% Fixture	69.5	0.0	69.5
Total	Lumens	44080.0	0.0	44080.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	654.9	1.5
10°-20°	2358.8	5.4
20°-30°	4740.6	10.8
30°-40°	7446.8	16.9
40°-50°	9071.7	20.6
50°-60°	8571.6	19.4
60°-70°	7078.2	16.1
70°-80°	3854.4	8.7
80°-90°	303.0	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°	44080.0	100.0
0°-180°	44080.0	100.0

Coefficient of Utilization



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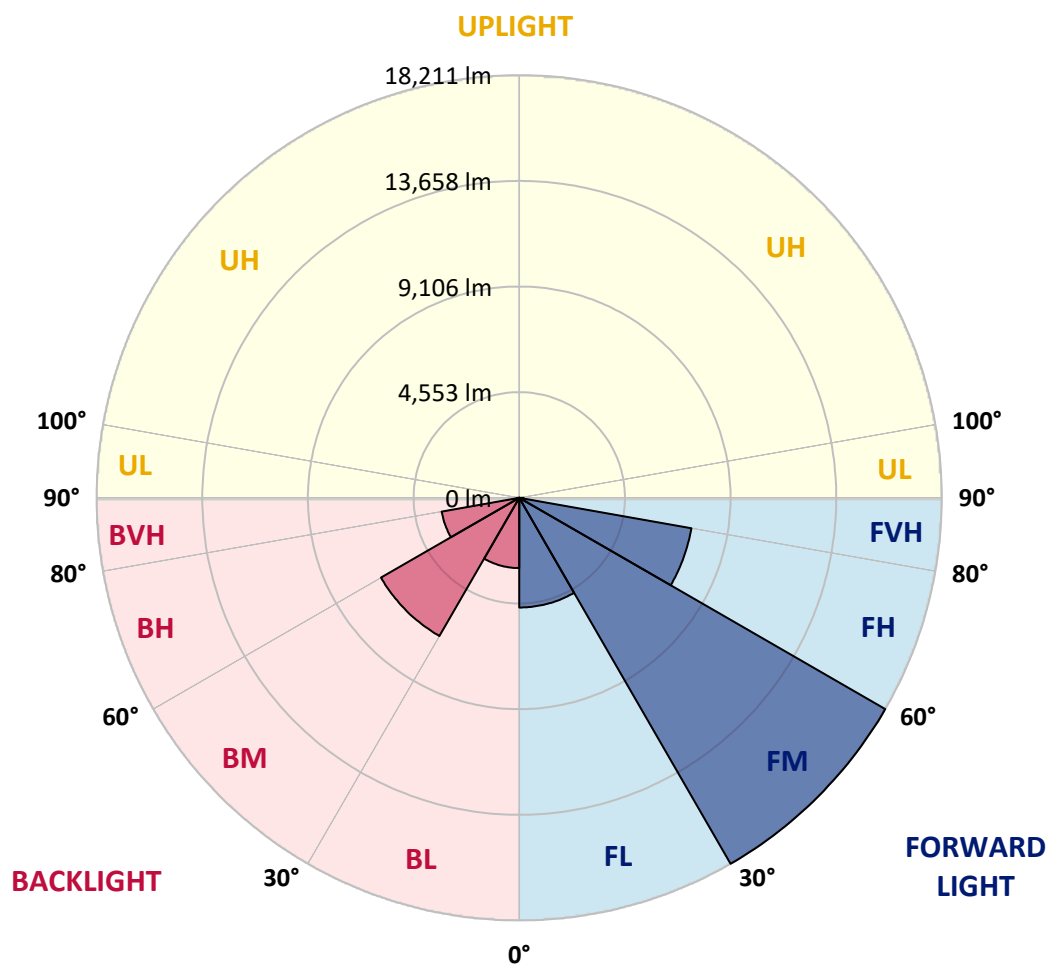
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4727.0	10.7			
FM	(30°-60°)	18211.3	41.3			
FH	(60°-80°)	7534.9	17.1			G4/12000
FVH	(80°-90°)	182.7	0.4			G2/225
BL	(0°-30°)	3027.2	6.9	B4/5000		
BM	(30°-60°)	6878.8	15.6	B4/8500		
BH	(60°-80°)	3397.7	7.7	B4/5000		G4/5000
BVH	(80°-90°)	120.4	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°	6336.5	6336.5	6336.5	6336.5	6336.5	6336.5	6336.5	6336.5	6336.5	6336.5	6336.5
2.5°	6624.5	6624.5	6675.7	6675.7	6630.9	6560.5	6541.3	6464.5	6394.1	6394.1	6400.5
5°	7258.1	7251.7	7290.1	7238.9	7130.1	6989.3	6893.3	6726.9	6586.1	6541.3	6534.9
7.5°	8032.6	8026.2	8045.4	7962.2	7757.4	7527.0	7335.0	7066.1	6835.7	6739.7	6714.1
10°	8896.7	8890.3	8871.1	8730.3	8455.0	8096.6	7808.6	7437.4	7091.7	6938.1	6906.1
12.5°	9888.7	9875.9	9831.1	9626.3	9248.7	8787.9	8371.8	7891.8	7431.0	7219.7	7149.3
15°	10996.0	10976.8	10893.6	10644.0	10138.4	9555.9	9018.3	8403.8	7840.6	7565.4	7469.4
17.5°	12160.9	12160.9	12032.9	11661.7	11098.4	10375.2	9709.5	8928.7	8269.4	7930.2	7815.0
20°	13345.0	13338.6	13178.6	12730.6	12064.9	11232.8	10388.0	9530.3	8711.1	8301.4	8160.6
22.5°	14593.1	14580.3	14381.9	13869.8	13076.2	12135.3	11149.6	10125.6	9197.5	8704.7	8525.4
25°	16026.8	16007.6	15764.4	15137.1	14196.3	13133.8	12007.3	10823.2	9754.3	9152.7	8941.5
27.5°	17550.1	17524.5	17236.5	16506.8	15476.4	14196.3	12954.6	11629.7	10368.8	9651.9	9415.1
30°	18907.0	18887.8	18574.2	17825.3	16641.3	15252.3	13857.0	12436.1	11015.2	10183.2	9888.7
32.5°	19931.1	19931.1	19649.5	18913.4	17684.5	16263.6	14765.9	13197.8	11687.3	10752.8	10407.2
35°	20551.9	20571.1	20327.9	19739.1	18580.6	17217.3	15706.8	14093.9	12404.1	11360.9	10989.6
37.5°	20641.6	20705.6	20564.7	20167.9	19201.4	18011.0	16628.5	14957.9	13146.6	11975.3	11559.3
40°	20225.5	20270.3	20276.7	20123.1	19457.5	18580.6	17441.3	15873.2	13933.8	12621.8	12141.7
42.5°	19393.5	19425.5	19483.1	19527.9	19271.9	18830.2	18062.2	16724.5	14772.3	13281.0	12717.8
45°	18318.2	18311.8	18407.8	18599.8	18587.0	18689.4	18407.8	17498.9	15642.8	14029.9	13357.8
47.5°	16711.7	16679.7	17018.9	17454.1	17671.7	18151.8	18414.2	18107.0	16590.0	14855.5	14087.5
50°	14196.3	14164.3	14906.7	15930.8	16570.8	17300.5	18062.2	18471.8	17582.1	15783.6	14881.1
52.5°	11136.8	11104.8	12045.7	13837.8	15233.1	16295.6	17351.7	18555.0	18523.0	16820.5	15777.2
55°	8282.2	8256.6	9171.9	11111.2	13370.6	15130.7	16481.2	18337.4	19406.3	18011.0	16865.3
57.5°	5837.2	5824.4	6618.1	8224.6	10976.8	13709.8	15642.8	17914.9	20219.1	19303.9	18094.2
60°	4096.3	4077.1	4653.2	5894.8	8301.4	11565.7	14810.7	17351.7	20827.2	20577.5	19399.9
62.5°	2758.6	2745.8	3155.4	4192.3	5894.8	8903.1	13549.8	16974.1	21172.8	21857.6	20718.4
65°	2093.0	2086.6	2272.2	2841.8	4173.1	6394.1	11546.5	16929.3	21217.6	22817.7	21838.4
67.5°	1689.7	1696.1	1798.5	2125.0	2886.6	4544.3	8954.3	16647.7	20980.8	23144.1	22382.5
70°	1382.5	1382.5	1427.3	1644.9	2131.4	3065.8	6253.3	15367.6	20321.5	22292.9	21736.0
72.5°	1056.1	1062.5	1203.3	1331.3	1606.5	2150.6	4006.7	12717.8	18766.2	19655.9	19233.4
75°	838.5	832.1	915.3	1094.5	1248.1	1536.1	2457.8	9120.7	15969.2	15361.2	15092.3
77.5°	601.6	595.2	659.2	812.9	947.3	1088.1	1465.7	4601.9	8685.5	7981.4	7783.0
80°	409.6	396.8	454.4	563.2	627.2	640.0	716.9	1766.5	3789.1	3571.5	3526.7
82.5°	211.2	211.2	243.2	320.0	326.4	332.8	320.0	569.6	1254.5	1171.3	1120.1
85°	83.2	83.2	89.6	108.8	108.8	115.2	115.2	147.2	134.4	128.0	121.6
87.5°	6.4	6.4	12.8	12.8	19.2	19.2	19.2	25.6	32.0	32.0	32.0
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°	6336.5	6336.5	6336.5	6336.5	6336.5	6336.5	6336.5	6336.5	6336.5	6336.5	6336.5
2.5°	6387.7	6362.1	6278.9	6259.7	6246.9	6227.7	6234.1	6189.3	6170.1	6176.5	6150.9
5°	6502.9	6458.1	6355.7	6310.9	6298.1	6278.9	6298.1	6266.1	6234.1	6246.9	6234.1
7.5°	6662.9	6598.9	6470.9	6426.1	6419.7	6400.5	6426.1	6400.5	6374.9	6387.7	6362.1
10°	6829.3	6746.1	6605.3	6560.5	6560.5	6554.1	6579.7	6541.3	6515.7	6522.1	6509.3
12.5°	7072.5	6963.7	6810.1	6771.7	6752.5	6771.7	6778.1	6726.9	6682.1	6688.5	6669.3
15°	7367.0	7245.3	7078.9	7021.3	7008.5	7002.1	6976.5	6912.5	6854.9	6848.5	6829.3
17.5°	7687.0	7533.4	7335.0	7277.3	7219.7	7200.5	7136.5	7053.3	6963.7	6963.7	6938.1
20°	7994.2	7821.4	7584.6	7501.4	7418.2	7341.4	7232.5	7098.1	6982.9	6963.7	6938.1
22.5°	8327.0	8122.2	7847.0	7725.4	7578.2	7424.6	7238.9	7059.7	6912.5	6880.5	6861.3
25°	8698.3	8442.2	8115.8	7936.6	7699.8	7463.0	7187.7	6957.3	6784.5	6733.3	6720.5
27.5°	9107.9	8800.7	8403.8	8141.4	7795.8	7424.6	7072.5	6797.3	6586.1	6522.1	6502.9
30°	9523.9	9159.1	8666.3	8282.2	7795.8	7302.9	6861.3	6541.3	6298.1	6208.5	6195.7
32.5°	9939.9	9530.3	8903.1	8359.0	7719.0	7098.1	6586.1	6208.5	5933.2	5824.4	5850.0
35°	10439.2	9939.9	9120.7	8391.0	7591.0	6848.5	6272.5	5830.8	5549.2	5453.2	5472.4
37.5°	10957.6	10349.6	9293.5	8365.4	7411.8	6566.9	5920.4	5491.6	5139.6	4973.2	4992.4
40°	11405.7	10720.8	9415.1	8275.8	7181.3	6246.9	5574.8	5011.6	4525.1	4365.1	4345.9
42.5°	11828.1	10996.0	9479.1	8141.4	6918.9	5875.6	5082.0	4358.7	3872.3	3673.9	3680.3
45°	12269.7	11264.8	9453.5	7962.2	6592.5	5440.4	4448.3	3718.7	3289.8	3110.6	3117.0
47.5°	12775.4	11552.9	9427.9	7770.2	6195.7	4877.2	3840.3	3155.4	2784.2	2656.2	2643.4
50°	13313.0	11872.9	9395.9	7533.4	5754.0	4249.9	3238.6	2630.6	2317.0	2233.8	2214.6
52.5°	13921.0	12218.5	9376.7	7251.7	5222.8	3584.3	2701.0	2169.8	1958.5	1900.9	1894.5
55°	14650.7	12621.8	9402.3	6912.5	4582.7	2957.0	2246.6	1868.9	1728.1	1696.1	1689.7
57.5°	15540.4	13140.2	9479.1	6515.7	3910.7	2413.0	1913.7	1683.3	1593.7	1568.1	1568.1
60°	16506.8	13729.0	9619.9	6067.7	3238.6	1990.5	1696.1	1536.1	1497.7	1529.7	1529.7
62.5°	17550.1	14420.3	9869.5	5523.6	2611.4	1683.3	1523.3	1414.5	1388.9	1452.9	1459.3
65°	18516.6	15092.3	10029.6	4870.8	2073.8	1459.3	1388.9	1292.9	1305.7	1369.7	1363.3
67.5°	19111.8	15649.2	9805.5	4051.5	1644.9	1292.9	1248.1	1164.9	1196.9	1248.1	1254.5
70°	18747.0	15335.6	8698.3	3059.4	1286.5	1126.5	1094.5	1043.3	1068.9	1132.9	1158.5
72.5°	16961.3	13735.4	6765.3	2067.4	1036.9	947.3	960.1	934.5	966.5	1024.1	1081.7
75°	13767.4	10381.6	4537.9	1324.9	819.3	806.5	825.7	806.5	819.3	876.9	908.9
77.5°	7187.7	5062.8	2259.4	825.7	608.0	627.2	659.2	665.7	704.1	716.9	729.7
80°	3353.9	2278.6	940.9	460.8	403.2	441.6	505.6	512.0	524.8	544.0	550.4
82.5°	1094.5	684.9	435.2	249.6	230.4	249.6	326.4	390.4	396.8	435.2	435.2
85°	115.2	70.4	96.0	102.4	89.6	108.8	147.2	140.8	64.0	38.4	38.4
87.5°	32.0	25.6	32.0	32.0	25.6	25.6	19.2	6.4	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)