

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: P841985

Luminaire Tested: **ARCH4-250-750-U-T2U**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841985
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: ARCH4-250-750-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 975mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38745 lumens
Efficiency: N/A
Efficacy: 155.3 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): 249.5
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

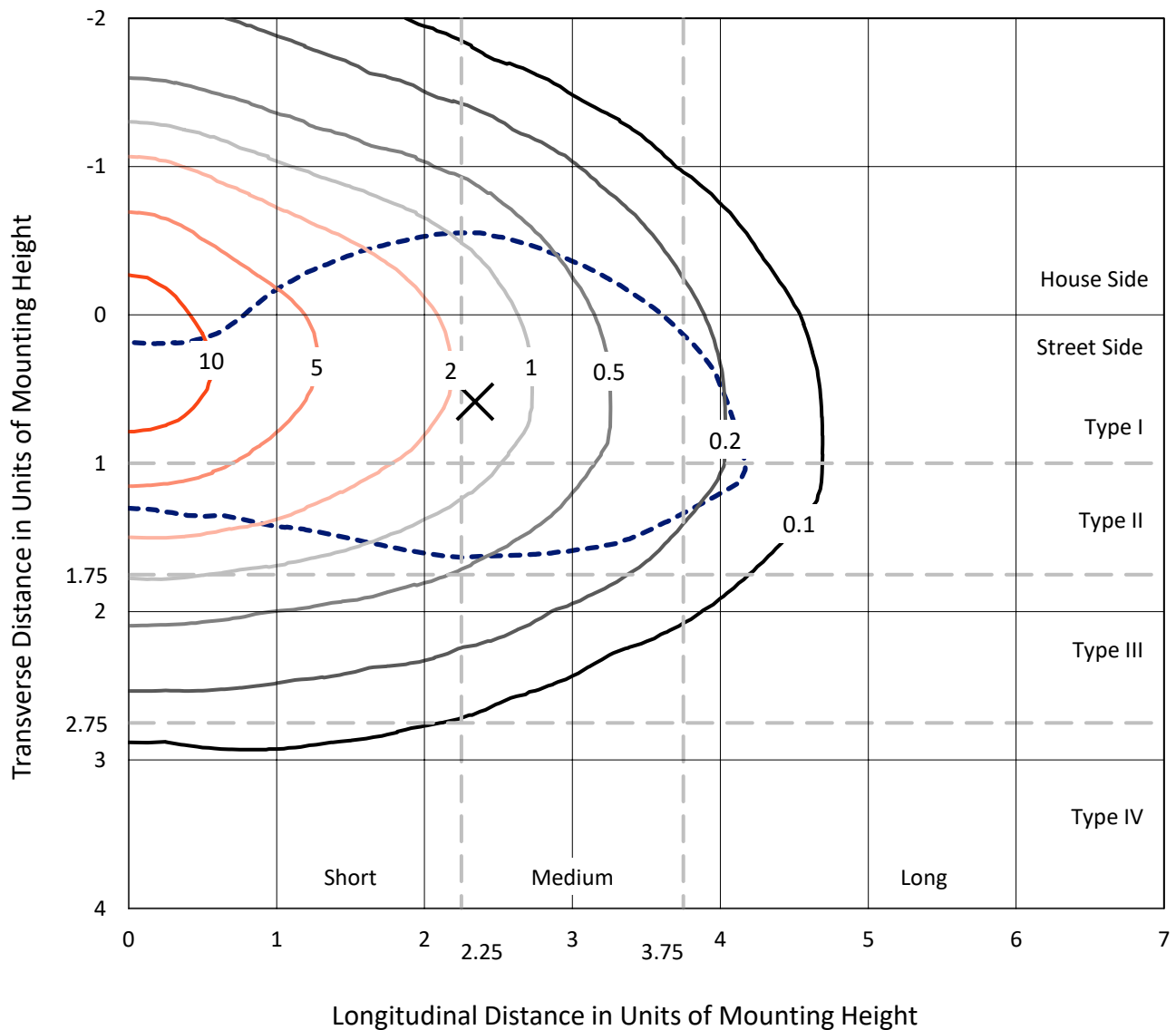


REPORT NUMBER: P841985

CATALOG NUMBER: ARCH4-250-750-U-T2U

Iso-Footcandle Lines of Horizontal Illumination

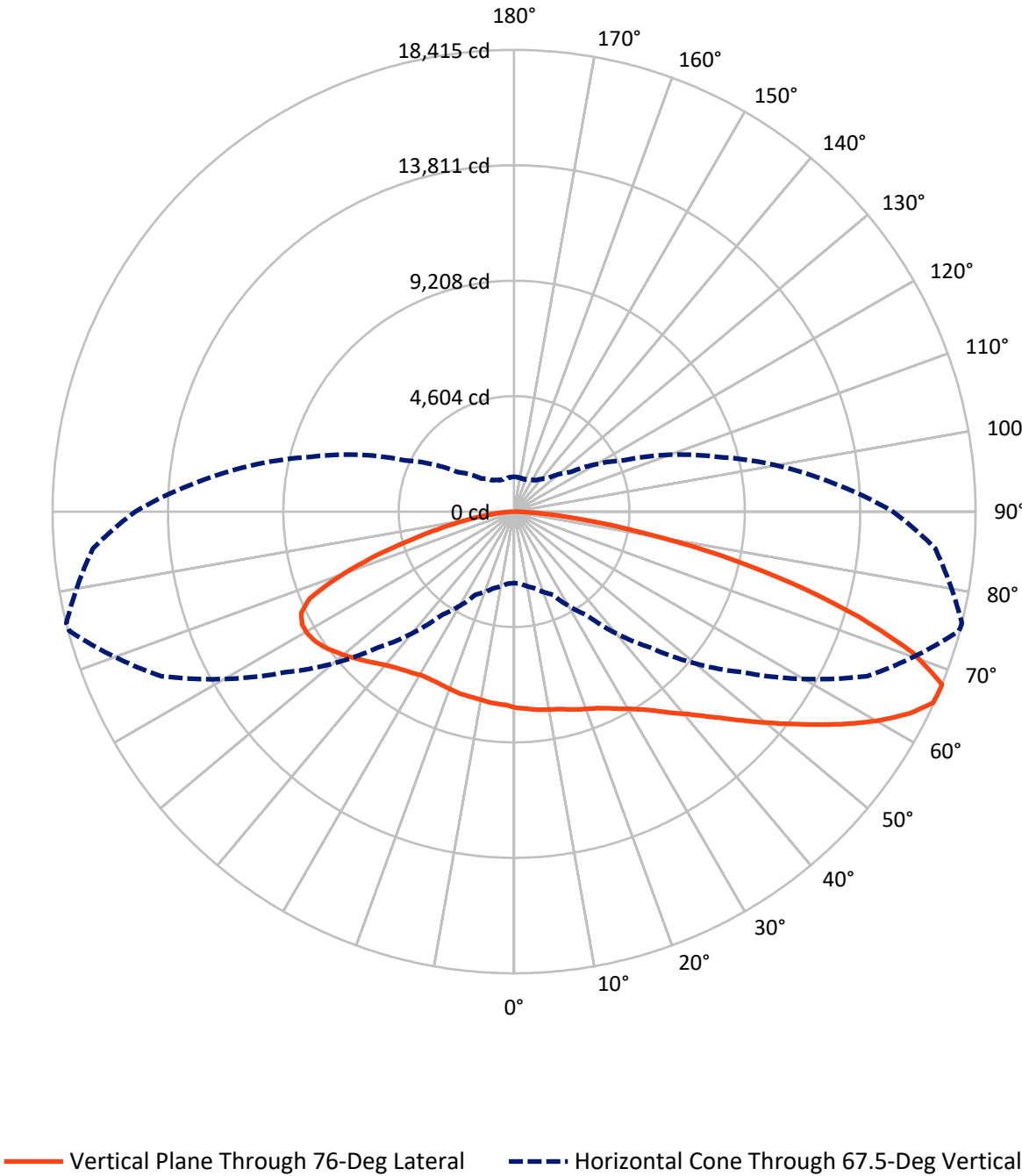
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.2 fc
Type II - Medium - N/A

REPORT NUMBER: P841985
CATALOG NUMBER: ARCH4-250-750-U-T2U

Luminous Intensity Polar Plot



REPORT NUMBER: P841985

CATALOG NUMBER: ARCH4-250-750-U-T2U

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13092.1	0.0	13092.1
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	25652.9	0.0	25652.9
	% Fixture	66.2	0.0	66.2
Total	Lumens	38745.0	0.0	38745.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	754.7	1.9
10°-20°	2307.2	6.0
20°-30°	3920.0	10.1
30°-40°	5577.7	14.4
40°-50°	7044.3	18.2
50°-60°	7626.8	19.7
60°-70°	7093.8	18.3
70°-80°	3810.0	9.8
80°-90°	610.5	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°	38745.0	100.0
0°-180°	38745.0	100.0

Coefficient of Utilization



REPORT NUMBER: P841985

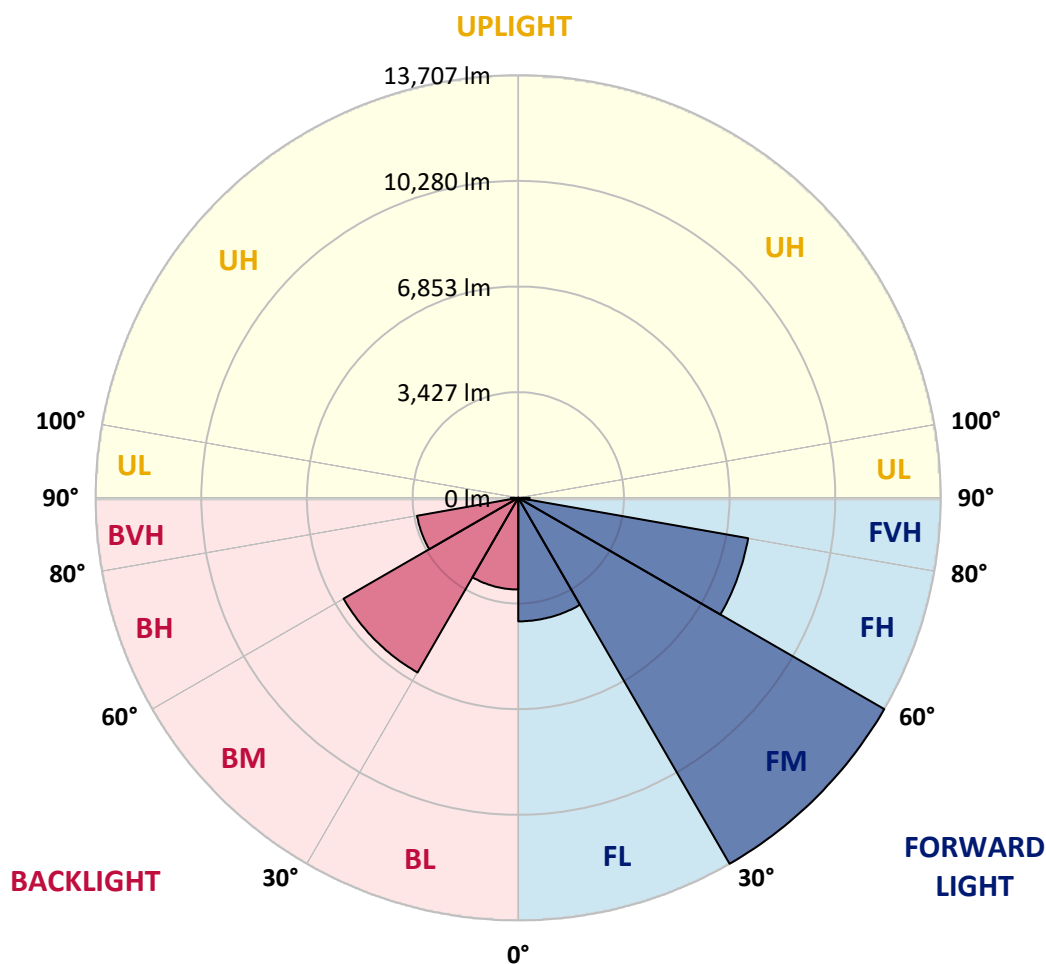
CATALOG NUMBER: ARCH4-250-750-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4006.6	10.3			
FM	(30°-60°)	13706.5	35.4			
FH	(60°-80°)	7570.4	19.5			G4/12000
FVH	(80°-90°)	369.3	1.0			G3/500
BL	(0°-30°)	2975.2	7.7	B4/5000		
BM	(30°-60°)	6542.3	16.9	B4/8500		
BH	(60°-80°)	3333.4	8.6	B4/5000		G4/5000
BVH	(80°-90°)	241.2	0.6			G3/500
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



REPORT NUMBER: P841985

CATALOG NUMBER: ARCH4-250-750-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	7826.4	7826.4	7826.4	7826.4	7826.4	7826.4	7826.4	7826.4	7826.4	7826.4	7826.4
2.5°	8063.8	8049.4	7991.9	7999.0	7999.0	7991.9	7905.5	7869.6	7869.6	7862.4	7783.2
5°	8351.5	8329.9	8265.2	8250.8	8222.0	8186.1	8049.4	7970.3	7934.3	7927.1	7819.2
7.5°	8689.6	8660.8	8581.7	8538.5	8466.6	8373.1	8200.5	8078.2	7991.9	7984.7	7833.6
10°	9027.7	8998.9	8905.4	8826.3	8725.6	8574.5	8351.5	8171.7	8035.0	8020.6	7840.8
12.5°	9430.5	9401.8	9286.7	9186.0	9034.9	8833.5	8538.5	8294.0	8106.9	8085.4	7862.4
15°	9854.9	9811.8	9696.7	9581.6	9394.6	9135.6	8783.1	8459.4	8222.0	8186.1	7927.1
17.5°	10207.4	10149.9	10056.4	9941.3	9732.7	9430.5	9027.7	8624.9	8329.9	8301.2	7991.9
20°	10509.5	10466.4	10365.7	10257.8	10034.8	9703.9	9257.9	8790.3	8430.6	8394.7	8042.2
22.5°	10797.3	10739.7	10682.2	10603.1	10358.5	9991.6	9524.0	8991.7	8560.1	8517.0	8106.9
25°	11128.2	11063.4	11041.8	10998.7	10711.0	10336.9	9847.7	9243.5	8740.0	8689.6	8222.0
27.5°	11538.2	11466.3	11423.1	11423.1	11077.8	10689.4	10193.0	9538.4	8948.6	8905.4	8365.9
30°	11969.8	11883.5	11818.7	11818.7	11430.3	11041.8	10531.1	9833.4	9186.0	9135.6	8552.9
32.5°	12351.0	12264.7	12192.8	12185.6	11782.8	11394.3	10883.6	10157.1	9473.7	9408.9	8783.1
35°	12646.0	12566.8	12502.1	12516.5	12135.2	11754.0	11279.2	10588.7	9833.4	9761.4	9085.2
37.5°	12825.8	12797.0	12761.1	12811.4	12458.9	12099.3	11689.3	11005.9	10243.4	10178.6	9459.3
40°	12919.3	12897.7	13041.6	13106.4	12732.3	12408.6	12099.3	11437.5	10689.4	10617.4	9890.9
42.5°	13056.0	13235.8	13293.4	13279.0	12933.7	12646.0	12473.3	11905.1	11214.5	11149.7	10408.8
45°	12566.8	12523.7	12840.2	13012.8	12948.1	12797.0	12825.8	12466.1	11825.9	11761.2	11005.9
47.5°	11912.2	11854.7	12034.5	12458.9	12710.7	12854.6	13142.3	13048.8	12530.9	12473.3	11703.6
50°	10531.1	10610.2	11279.2	11847.5	12343.9	12840.2	13408.5	13674.6	13307.8	13250.2	12451.8
52.5°	8998.9	9078.1	9775.8	11085.0	11897.9	12732.3	13602.7	14300.5	14149.4	14084.7	13250.2
55°	7884.0	8056.6	8847.9	9797.4	11264.8	12394.2	13717.8	14940.7	15055.8	14998.2	14120.6
57.5°	6776.2	6905.7	7502.7	8344.3	10401.6	11804.3	13710.6	15537.7	16005.3	15947.7	15005.4
60°	5474.2	5639.6	6114.4	7020.7	9250.7	11099.4	13509.2	16005.3	16918.8	16875.7	15861.4
62.5°	4582.2	4632.5	4970.6	5754.7	7768.9	10207.4	13056.0	16257.1	17746.1	17717.3	16631.1
65°	3690.2	3697.4	4006.7	4661.3	6337.4	9099.6	12286.3	16163.5	18371.9	18386.3	17185.0
67.5°	2848.6	2884.5	3165.1	3661.4	5035.4	7661.0	11185.7	15530.5	18379.1	18415.1	16868.5
70°	1971.0	1999.8	2424.2	2906.1	3891.6	6107.2	9696.7	13854.5	16868.5	16897.3	15120.5
72.5°	1388.3	1402.7	1855.9	2323.5	3042.8	4603.8	7315.7	11459.1	14379.6	14401.2	12717.9
75°	1035.8	1050.2	1309.2	1762.4	2330.7	3186.7	4999.4	8775.9	11487.8	11487.8	10042.0
77.5°	733.7	740.9	848.8	1215.7	1553.8	2150.8	3006.8	5747.5	8430.6	8445.0	7315.7
80°	496.3	503.5	553.9	820.0	971.1	1165.3	1632.9	3014.0	5315.9	5337.5	4646.9
82.5°	259.0	273.3	309.3	417.2	489.2	647.4	841.6	1532.2	2942.1	2999.6	2791.0
85°	100.7	100.7	115.1	136.7	179.8	251.8	388.4	582.7	1330.8	1373.9	1230.1
87.5°	36.0	36.0	43.2	43.2	50.4	57.5	64.7	86.3	151.1	151.1	143.9
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: P841985

CATALOG NUMBER: ARCH4-250-750-U-T2U

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7826.4	7826.4	7826.4	7826.4	7826.4	7826.4	7826.4	7826.4	7826.4	7826.4	7826.4
2.5°	7754.5	7754.5	7718.5	7732.9	7725.7	7711.3	7696.9	7718.5	7696.9	7646.6	7639.4
5°	7768.9	7754.5	7696.9	7689.7	7668.1	7639.4	7603.4	7617.8	7581.8	7538.7	7531.5
7.5°	7776.1	7747.3	7668.1	7639.4	7596.2	7538.7	7481.1	7481.1	7430.8	7387.6	7380.4
10°	7761.7	7725.7	7617.8	7560.2	7481.1	7394.8	7315.7	7294.1	7236.5	7186.2	7186.2
12.5°	7768.9	7718.5	7581.8	7488.3	7380.4	7272.5	7171.8	7143.0	7092.7	7042.3	7035.1
15°	7812.0	7740.1	7567.4	7445.2	7286.9	7164.6	7056.7	7035.1	6992.0	6956.0	6956.0
17.5°	7855.2	7761.7	7545.9	7373.2	7179.0	7042.3	6941.6	6941.6	6912.8	6891.3	6891.3
20°	7876.8	7768.9	7502.7	7272.5	7049.5	6905.7	6812.1	6826.5	6819.3	6812.1	6812.1
22.5°	7927.1	7783.2	7466.7	7179.0	6912.8	6761.8	6675.5	6697.0	6689.8	6689.8	6697.0
25°	8006.2	7819.2	7438.0	7092.7	6783.4	6617.9	6524.4	6538.8	6538.8	6538.8	6538.8
27.5°	8114.1	7891.1	7430.8	7013.6	6653.9	6466.9	6351.8	6351.8	6323.0	6330.2	6337.4
30°	8279.6	8027.8	7445.2	6941.6	6517.2	6279.8	6143.2	6121.6	6114.4	6128.8	6136.0
32.5°	8481.0	8214.8	7531.5	6891.3	6373.3	6071.2	5898.6	5891.4	5869.8	5869.8	5869.8
35°	8732.8	8394.7	7610.6	6884.1	6229.5	5848.2	5661.2	5639.6	5589.3	5567.7	5567.7
37.5°	9056.5	8675.2	7704.1	6833.7	6107.2	5632.4	5409.4	5337.5	5279.9	5272.8	5272.8
40°	9452.1	8991.7	7840.8	6776.2	5977.7	5409.4	5114.5	4992.2	4999.4	5028.2	5028.2
42.5°	9919.7	9380.2	8013.4	6747.4	5790.7	5179.2	4769.2	4625.3	4675.7	4704.5	4711.7
45°	10466.4	9840.6	8207.7	6711.4	5618.0	4920.3	4402.4	4222.5	4244.1	4251.3	4258.5
47.5°	11099.4	10351.3	8409.1	6682.7	5423.8	4596.6	3999.5	3762.1	3754.9	3711.8	3726.2
50°	11761.2	10890.8	8617.7	6632.3	5186.4	4215.3	3575.1	3294.6	3237.0	3172.3	3179.5
52.5°	12466.1	11444.7	8811.9	6553.2	4891.5	3826.9	3172.3	2870.2	2755.1	2683.1	2697.5
55°	13243.0	12013.0	8998.9	6430.9	4582.2	3438.4	2812.6	2503.3	2359.4	2301.9	2309.1
57.5°	13955.2	12559.7	9135.6	6279.8	4244.1	3086.0	2496.1	2194.0	2100.5	2093.3	2100.5
60°	14645.7	13020.0	9193.1	6071.2	3898.8	2762.3	2201.2	1971.0	1906.2	1942.2	1949.4
62.5°	15228.4	13315.0	9164.4	5790.7	3546.3	2452.9	1963.8	1798.3	1755.2	1827.1	1834.3
65°	15566.5	13408.5	8963.0	5387.8	3165.1	2150.8	1740.8	1561.0	1539.4	1582.5	1604.1
67.5°	15120.5	12825.8	8416.3	4834.0	2740.7	1870.3	1525.0	1381.1	1345.2	1381.1	1381.1
70°	13401.3	11113.8	7121.5	3956.4	2273.1	1596.9	1323.6	1222.9	1194.1	1222.9	1215.7
72.5°	11164.1	9243.5	5610.8	3086.0	1791.2	1345.2	1150.9	1057.4	1028.7	999.9	985.5
75°	8660.8	7020.7	4071.5	2265.9	1352.4	1079.0	963.9	877.6	805.7	834.4	820.0
77.5°	6344.6	4927.5	2884.5	1568.2	971.1	834.4	755.3	690.6	640.2	697.8	690.6
80°	4085.8	3186.7	1927.8	1050.2	669.0	582.7	553.9	517.9	568.3	740.9	755.3
82.5°	2496.1	2021.3	1150.9	683.4	438.8	388.4	359.7	359.7	582.7	640.2	647.4
85°	1115.0	1071.8	625.8	352.5	244.6	223.0	201.4	259.0	237.4	172.6	179.8
87.5°	179.8	187.0	136.7	122.3	93.5	93.5	71.9	50.4	36.0	21.6	21.6
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)