

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: P841977

Luminaire Tested: **ARCH4-250-740-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841977
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-250-740-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 975mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26163 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - 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

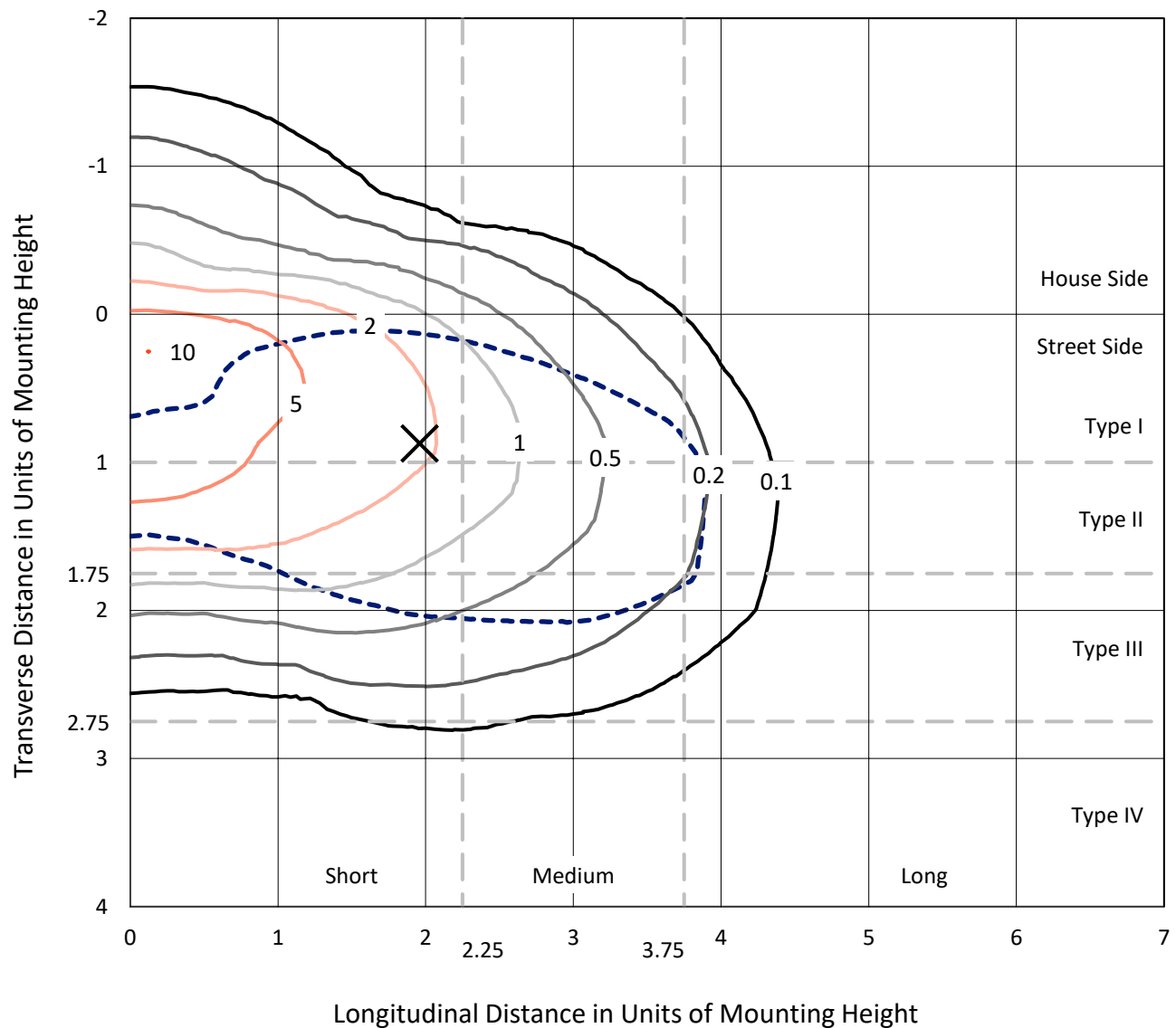


REPORT NUMBER: P841977

CATALOG NUMBER: ARCH4-250-740-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

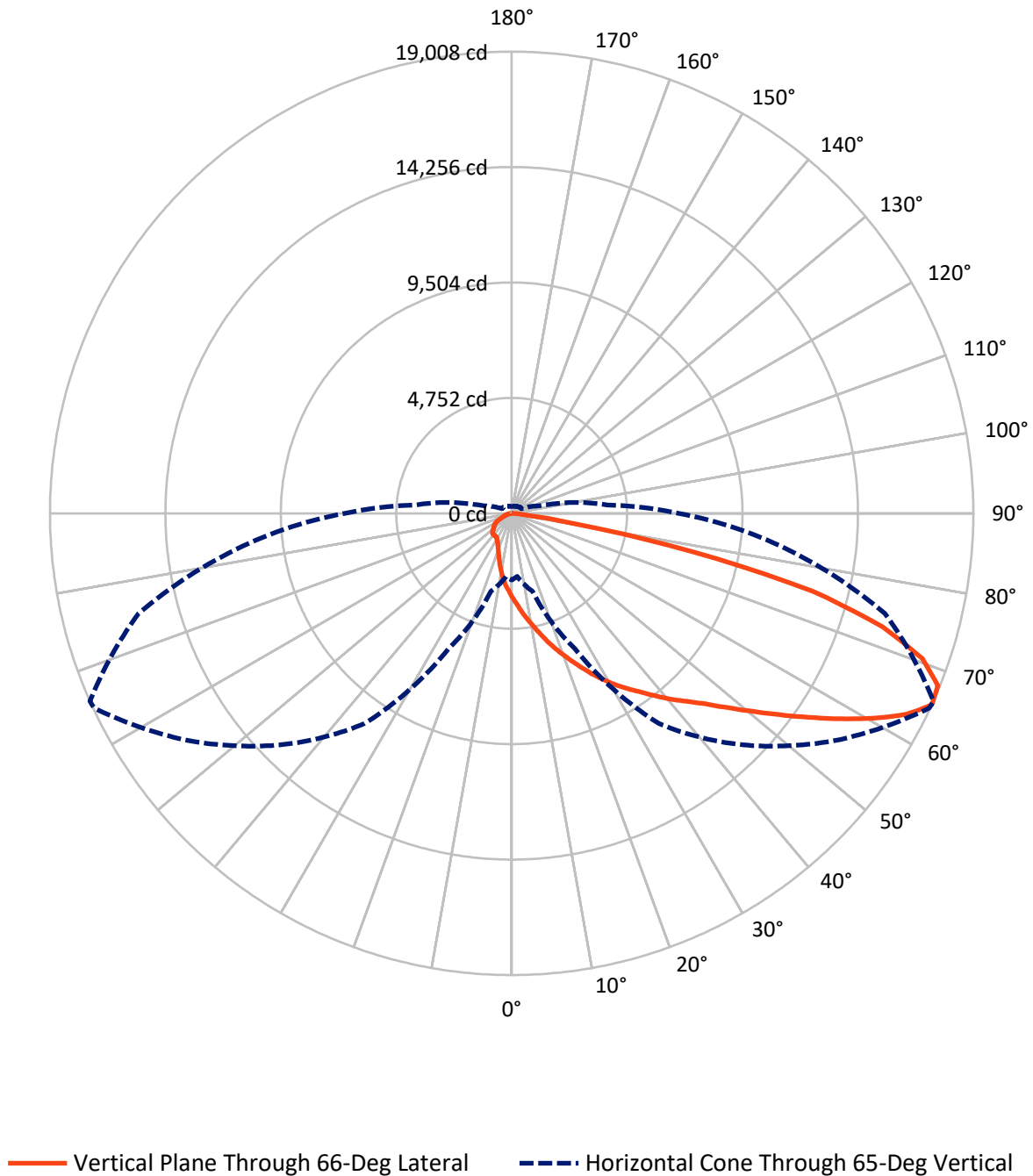


Based on 25 foot mounting height. Maximum calculated value = 10 fc

Type III - Short - N/A

REPORT NUMBER: P841977
CATALOG NUMBER: ARCH4-250-740-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P841977

CATALOG NUMBER: ARCH4-250-740-U-T3-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2767.3	0.0	2767.3
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	23395.7	0.0	23395.7
	% Fixture	89.4	0.0	89.4
Total	Lumens	26163.0	0.0	26163.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	341.8	1.3
10°-20°	1113.9	4.3
20°-30°	2015.3	7.7
30°-40°	3151.4	12.0
40°-50°	4780.7	18.3
50°-60°	6074.1	23.2
60°-70°	5675.6	21.7
70°-80°	2820.7	10.8
80°-90°	189.5	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°	26163.0	100.0
0°-180°	26163.0	100.0

Coefficient of Utilization



REPORT NUMBER: P841977

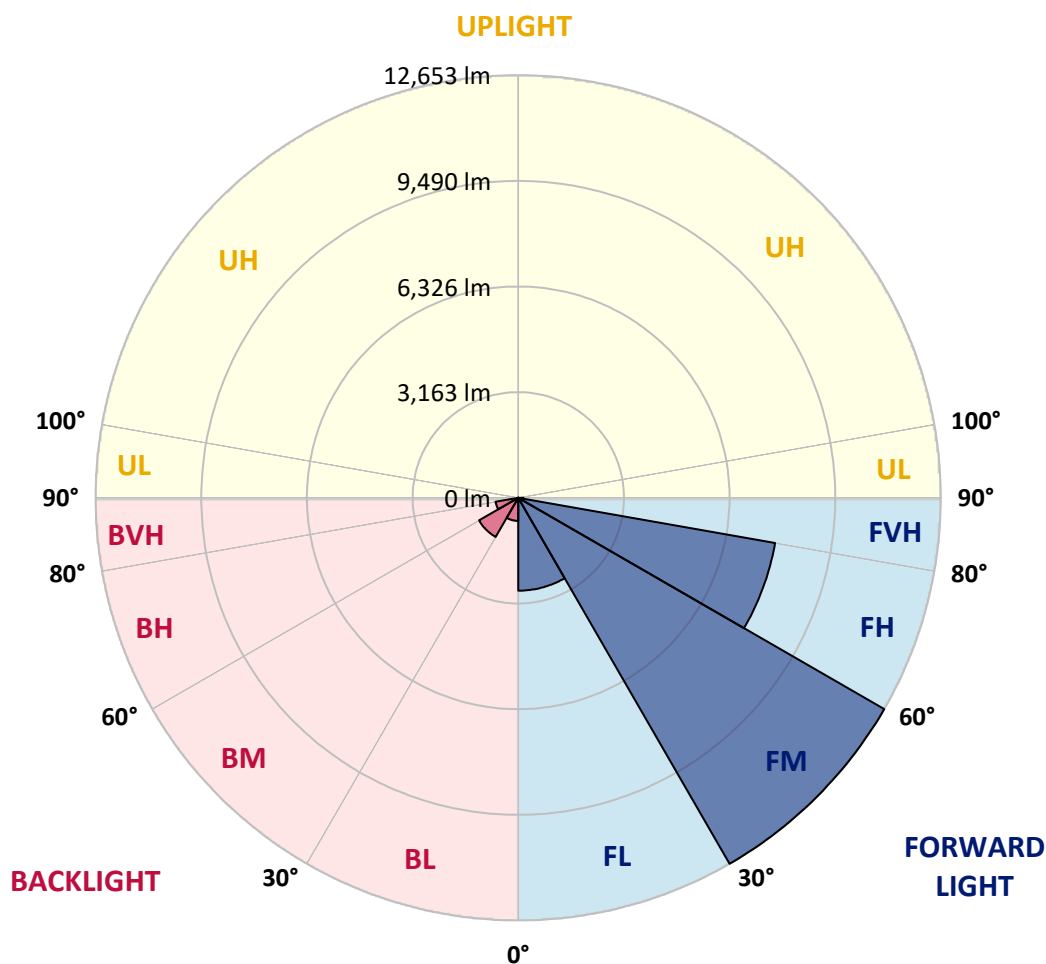
CATALOG NUMBER: ARCH4-250-740-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2779.8	10.6			
FM	(30°-60°)	12652.7	48.4			
FH	(60°-80°)	7807.1	29.8			G4/12000
FVH	(80°-90°)	156.0	0.6			G2/225
BL	(0°-30°)	691.1	2.6	B2/1000		
BM	(30°-60°)	1353.5	5.2	B2/2500		
BH	(60°-80°)	689.2	2.6	B2/1000		G2/1000
BVH	(80°-90°)	33.5	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type III Short



REPORT NUMBER: P841977

CATALOG NUMBER: ARCH4-250-740-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3462.5	3462.5	3462.5	3462.5	3462.5	3462.5	3462.5	3462.5	3462.5	3462.5	3462.5
2.5°	4044.2	4077.1	4093.6	4099.1	3972.9	3918.0	3863.1	3736.9	3709.5	3638.1	3544.8
5°	4757.5	4801.4	4790.5	4768.5	4614.9	4439.3	4296.6	4060.7	4022.2	3852.1	3643.6
7.5°	5459.9	5498.3	5487.4	5405.1	5234.9	4988.0	4752.1	4406.4	4351.5	4077.1	3742.4
10°	6047.1	6080.0	6074.5	5992.2	5789.2	5487.4	5202.0	4741.1	4675.2	4285.6	3824.7
12.5°	6530.0	6573.9	6568.4	6513.5	6332.4	6003.2	5679.4	5125.2	5042.9	4538.1	3939.9
15°	6908.6	6963.5	6963.5	6941.5	6815.3	6540.9	6173.3	5547.7	5449.0	4828.9	4082.6
17.5°	7139.1	7183.0	7221.4	7259.8	7172.0	6963.5	6628.7	5970.3	5866.0	5114.2	4230.8
20°	7259.8	7303.7	7331.1	7413.4	7429.9	7325.6	7062.2	6387.3	6277.5	5438.0	4400.9
22.5°	7457.3	7495.7	7501.2	7572.6	7605.5	7632.9	7468.3	6798.8	6711.1	5794.7	4592.9
25°	7786.6	7830.5	7814.0	7846.9	7852.4	7885.3	7868.9	7270.8	7183.0	6200.7	4823.4
27.5°	8209.1	8264.0	8253.0	8220.1	8170.7	8143.3	8214.6	7748.2	7665.9	6606.8	5059.4
30°	8664.6	8730.4	8713.9	8648.1	8516.4	8401.2	8499.9	8198.1	8121.3	7023.8	5322.7
32.5°	9125.5	9202.3	9196.8	9087.1	8862.1	8664.6	8812.7	8620.7	8565.8	7473.8	5608.1
35°	9427.3	9526.1	9515.1	9449.2	9158.4	8988.3	9169.4	9054.2	9015.7	8022.5	6019.6
37.5°	9915.7	10019.9	9926.6	9762.0	9427.3	9339.5	9559.0	9542.5	9515.1	8604.2	6453.1
40°	11100.9	11254.6	11007.7	10332.7	9784.0	9707.2	10019.9	10085.8	10058.3	9180.4	6842.7
42.5°	12341.1	12571.6	12187.4	11254.6	10431.5	10151.6	10524.8	10618.1	10585.1	9674.2	7193.9
45°	13092.9	13191.6	12807.5	12083.2	11578.3	10689.4	11062.5	11216.2	11188.7	10266.9	7643.9
47.5°	13707.4	13669.0	13230.0	12741.7	12835.0	11446.7	11671.6	11973.4	11951.5	10919.9	8137.8
50°	13839.1	13751.3	13575.7	13268.5	13515.4	12214.9	12313.7	12835.0	12813.0	11644.2	8637.1
52.5°	12911.8	12796.5	13273.9	13531.9	13449.5	12774.6	13021.5	13778.8	13767.8	12428.9	9114.5
55°	10596.1	10502.8	11786.9	13120.3	13378.2	13169.7	13806.2	14761.0	14821.4	13263.0	9548.0
57.5°	8335.3	8236.5	9498.6	12088.7	13114.8	13531.9	14722.6	15885.9	15962.8	14168.4	9959.6
60°	6645.2	6497.0	7462.8	10464.4	12620.9	13811.7	15606.1	17120.6	17131.6	14997.0	10212.0
62.5°	4516.1	4351.5	5421.5	8406.6	11792.4	13855.6	16286.5	18185.1	18229.0	15617.1	10255.9
65°	2743.7	2606.5	3330.8	6140.4	10568.7	13482.5	16297.5	18969.8	19008.2	15902.4	9992.5
67.5°	1591.3	1536.5	1904.1	3824.7	8538.3	12478.3	15611.6	18849.1	18920.4	15781.7	9394.4
70°	927.4	921.9	1059.1	1893.1	6025.1	10486.4	14080.6	17833.9	17938.2	15150.6	8478.0
72.5°	680.4	691.4	746.3	1015.2	3490.0	7550.6	11924.1	15792.6	15951.8	13916.0	7172.0
75°	537.8	543.2	592.6	691.4	1832.8	4269.2	8933.4	12675.8	12802.0	11715.5	5602.6
77.5°	400.6	411.6	450.0	488.4	850.5	1959.0	5026.4	7808.5	7600.0	6431.2	2705.3
80°	290.8	318.3	334.7	351.2	450.0	757.3	1509.0	2721.7	2699.8	2809.5	1278.6
82.5°	186.6	208.5	225.0	236.0	268.9	362.2	450.0	609.1	658.5	1092.0	510.3
85°	82.3	93.3	104.3	126.2	115.2	126.2	186.6	120.7	104.3	164.6	93.3
87.5°	0.0	0.0	16.5	27.4	21.9	11.0	32.9	21.9	16.5	16.5	16.5
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: P841977

CATALOG NUMBER: ARCH4-250-740-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3462.5	3462.5	3462.5	3462.5	3462.5	3462.5	3462.5	3462.5	3462.5	3462.5	3462.5
2.5°	3495.5	3435.1	3308.9	3188.2	3116.8	3023.5	2941.2	2864.4	2858.9	2837.0	2798.6
5°	3539.4	3424.1	3188.2	2963.2	2793.1	2612.0	2458.3	2337.6	2293.7	2260.8	2216.9
7.5°	3583.3	3402.2	3051.0	2721.7	2452.9	2200.4	2019.4	1854.7	1805.3	1761.4	1734.0
10°	3599.7	3363.8	2891.8	2452.9	2101.7	1832.8	1640.7	1520.0	1476.1	1454.2	1437.7
12.5°	3649.1	3341.8	2743.7	2200.4	1794.4	1547.4	1410.3	1338.9	1322.5	1306.0	1289.5
15°	3714.9	3341.8	2595.5	1953.5	1552.9	1355.4	1273.1	1223.7	1212.7	1207.2	1196.2
17.5°	3786.3	3341.8	2452.9	1745.0	1377.3	1229.2	1168.8	1141.4	1135.9	1130.4	1124.9
20°	3885.1	3347.3	2299.2	1563.9	1251.1	1135.9	1086.5	1053.6	1048.1	1042.6	1042.6
22.5°	3983.8	3358.3	2151.0	1426.7	1168.8	1064.5	1004.2	971.3	960.3	960.3	960.3
25°	4110.0	3391.2	2013.9	1311.5	1097.5	998.7	921.9	894.4	889.0	889.0	883.5
27.5°	4258.2	3429.6	1893.1	1223.7	1026.1	921.9	845.1	817.6	806.6	806.6	801.2
30°	4417.3	3468.0	1794.4	1157.8	954.8	845.1	773.7	740.8	729.8	735.3	729.8
32.5°	4592.9	3522.9	1717.5	1113.9	889.0	779.2	713.4	674.9	669.5	669.5	664.0
35°	4889.2	3676.5	1706.6	1092.0	834.1	729.8	664.0	625.6	620.1	620.1	614.6
37.5°	5207.5	3852.1	1756.0	1081.0	790.2	685.9	625.6	587.1	581.7	581.7	581.7
40°	5476.4	3983.8	1810.8	1081.0	762.7	647.5	592.6	559.7	559.7	559.7	559.7
42.5°	5657.5	3994.8	1799.9	1081.0	740.8	620.1	570.7	537.8	537.8	543.2	537.8
45°	5926.4	4049.7	1756.0	1064.5	724.3	598.1	548.7	521.3	515.8	521.3	521.3
47.5°	6244.6	4148.5	1712.1	998.7	718.8	576.2	532.3	499.4	493.9	499.4	493.9
50°	6546.4	4236.2	1690.1	910.9	707.9	554.2	510.3	477.4	471.9	477.4	471.9
52.5°	6798.8	4274.7	1651.7	850.5	680.4	532.3	488.4	455.5	444.5	450.0	450.0
55°	7001.9	4263.7	1596.8	801.2	631.0	510.3	460.9	433.5	417.0	417.0	411.6
57.5°	7188.5	4269.2	1547.4	751.8	576.2	477.4	439.0	406.1	384.1	378.6	373.1
60°	7259.8	4241.7	1459.6	685.9	521.3	450.0	411.6	373.1	351.2	345.7	340.2
62.5°	7161.0	4143.0	1344.4	570.7	471.9	417.0	384.1	345.7	323.8	318.3	312.8
65°	6881.2	3956.4	1168.8	450.0	428.0	378.6	351.2	323.8	296.3	285.3	279.9
67.5°	6403.8	3687.5	949.3	362.2	378.6	345.7	329.2	296.3	263.4	252.4	246.9
70°	5723.3	3330.8	713.4	307.3	334.7	307.3	296.3	263.4	236.0	225.0	219.5
72.5°	4768.5	2754.7	499.4	263.4	290.8	268.9	257.9	236.0	208.5	192.1	192.1
75°	3605.2	1975.5	329.2	225.0	241.4	230.5	214.0	197.5	181.1	170.1	164.6
77.5°	1552.9	768.2	203.0	170.1	197.5	192.1	170.1	159.1	153.6	142.7	142.7
80°	669.5	312.8	126.2	126.2	142.7	137.2	131.7	120.7	120.7	115.2	109.7
82.5°	246.9	126.2	76.8	93.3	104.3	93.3	93.3	93.3	93.3	87.8	87.8
85°	60.4	38.4	38.4	54.9	60.4	54.9	60.4	54.9	54.9	54.9	49.4
87.5°	16.5	16.5	21.9	21.9	21.9	21.9	21.9	16.5	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)