

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: P836137

Luminaire Tested: **ARCH3-140-750-U-T2U-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836137
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-140-750-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1110mA LIGHTSQUARE WITH 40 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14780 lumens
Efficiency: N/A
Efficacy: 103.7 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

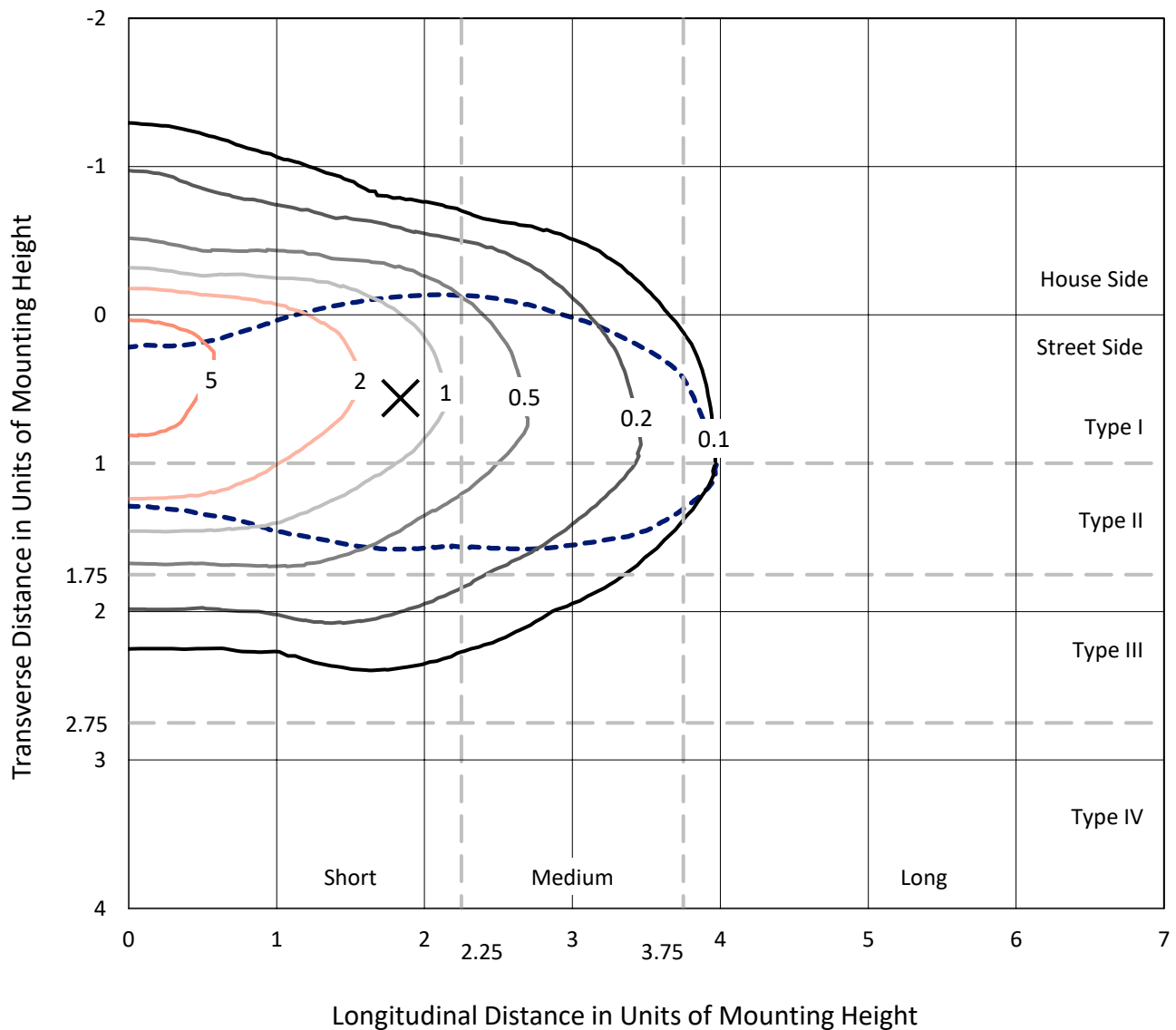
Input Watts (W): 142.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

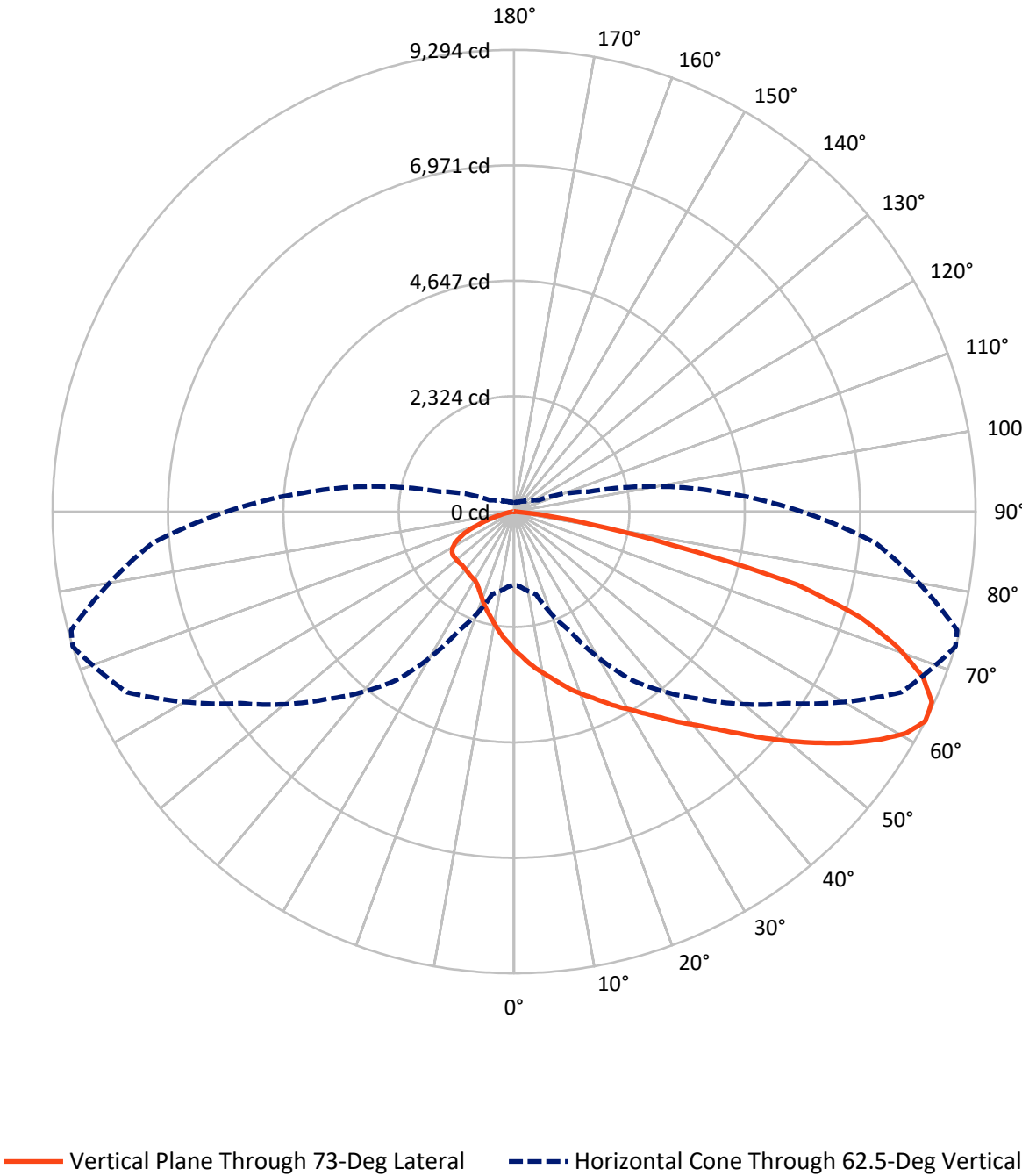
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2291.1	0.0	2291.1
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	12488.9	0.0	12488.9
	% Fixture	84.5	0.0	84.5
Total	Lumens	14780.0	0.0	14780.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	270.4	1.8
10°-20°	815.8	5.5
20°-30°	1358.0	9.2
30°-40°	2049.0	13.9
40°-50°	2863.9	19.4
50°-60°	3163.4	21.4
60°-70°	2755.7	18.6
70°-80°	1392.0	9.4
80°-90°	111.7	0.8
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°	14780.0	100.0
0°-180°	14780.0	100.0

Coefficient of Utilization



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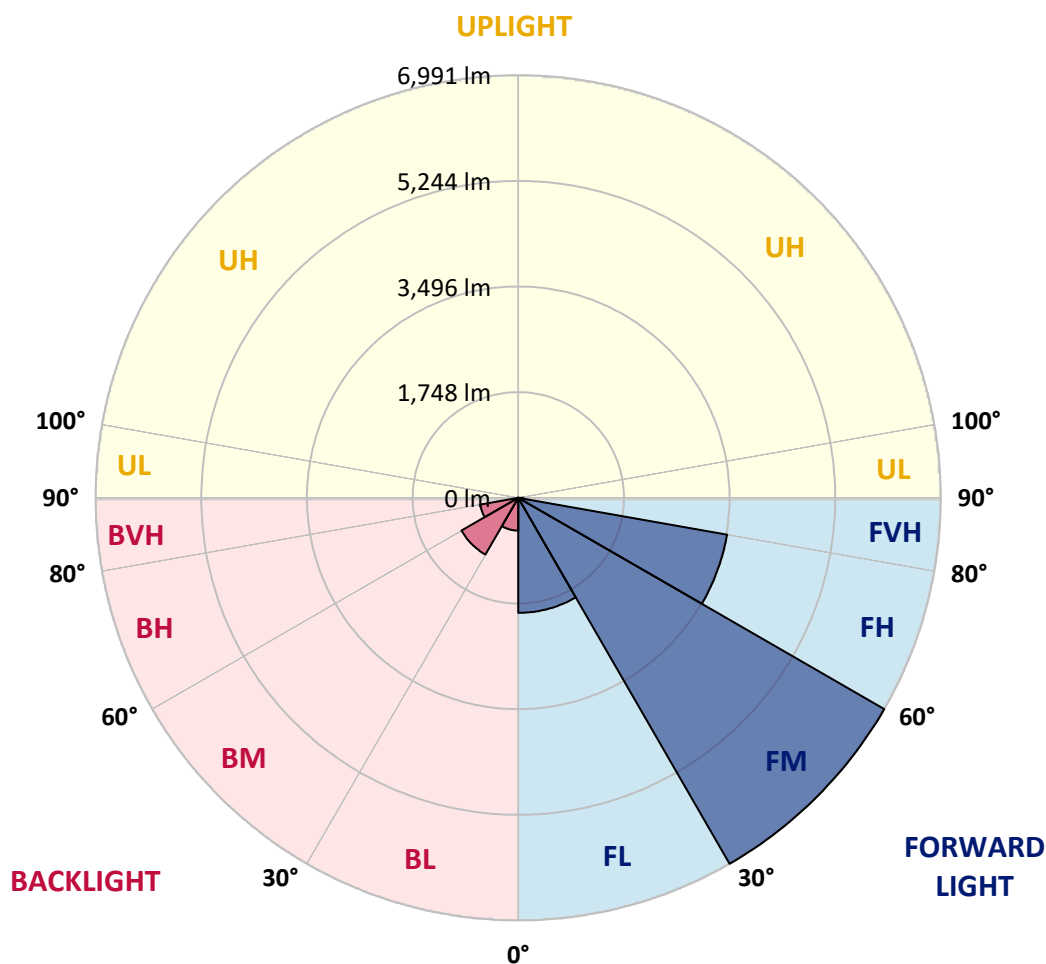
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1902.6	12.9			
FM	(30°-60°)	6991.5	47.3			
FH	(60°-80°)	3508.3	23.7			G2/5000
FVH	(80°-90°)	86.5	0.6			G1/100
BL	(0°-30°)	541.5	3.7	B2/1000		
BM	(30°-60°)	1084.8	7.3	B2/2500		
BH	(60°-80°)	639.5	4.3	B2/1000		G2/1000
BVH	(80°-90°)	25.3	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	2798.6	2798.6	2798.6	2798.6	2798.6	2798.6	2798.6	2798.6	2798.6	2798.6	2798.6
2.5°	3185.1	3220.5	3201.2	3214.1	3149.7	3107.8	3059.5	2966.1	2914.6	2908.1	2846.9
5°	3652.1	3690.7	3658.5	3648.8	3536.1	3439.5	3330.0	3165.8	3056.3	3036.9	2901.7
7.5°	4119.0	4154.5	4115.8	4086.8	3935.5	3764.8	3603.8	3362.2	3191.5	3159.3	2946.8
10°	4447.5	4479.7	4450.7	4421.8	4264.0	4090.0	3861.4	3545.8	3313.9	3262.4	2975.8
12.5°	4695.5	4714.8	4701.9	4676.2	4528.0	4341.2	4122.3	3751.9	3452.4	3388.0	3020.8
15°	4898.4	4930.6	4914.5	4895.2	4753.5	4566.7	4357.4	3967.7	3613.4	3532.9	3088.5
17.5°	5033.7	5056.2	5059.4	5059.4	4933.8	4750.3	4547.4	4164.1	3774.4	3671.4	3152.9
20°	5094.8	5120.6	5136.7	5162.5	5059.4	4901.6	4695.5	4331.6	3925.8	3809.9	3214.1
22.5°	5123.8	5146.4	5188.2	5246.2	5162.5	5030.4	4840.4	4486.2	4077.2	3954.8	3284.9
25°	5146.4	5175.4	5236.6	5346.0	5288.1	5175.4	5011.1	4663.3	4257.5	4131.9	3388.0
27.5°	5207.6	5243.0	5301.0	5433.0	5362.2	5307.4	5191.5	4853.3	4447.5	4318.7	3513.6
30°	5420.1	5449.1	5445.9	5529.6	5442.7	5426.6	5346.0	5036.9	4631.1	4502.3	3661.7
32.5°	5806.6	5835.6	5764.7	5732.5	5542.5	5545.7	5513.5	5233.3	4850.1	4718.0	3832.4
35°	6222.0	6254.2	6160.8	6106.1	5787.3	5693.9	5710.0	5478.1	5094.8	4962.8	4045.0
37.5°	6592.4	6631.0	6550.5	6470.0	6148.0	5932.2	5929.0	5751.8	5375.0	5239.8	4280.1
40°	6795.3	6840.4	6888.7	6843.6	6505.4	6267.1	6164.1	6032.0	5652.0	5513.5	4534.5
42.5°	6891.9	7017.5	7104.4	7075.5	6798.5	6557.0	6434.6	6325.1	5990.2	5854.9	4837.2
45°	6621.4	6624.6	6808.2	6966.0	6914.4	6753.4	6730.9	6653.6	6376.6	6247.8	5178.6
47.5°	6283.2	6257.5	6386.3	6666.5	6811.4	6853.2	6985.3	7017.5	6817.8	6689.0	5526.4
50°	5471.6	5487.8	5906.4	6309.0	6592.4	6862.9	7165.6	7391.1	7271.9	7149.5	5893.5
52.5°	4450.7	4489.4	4969.2	5854.9	6302.5	6766.3	7271.9	7764.7	7735.7	7619.7	6260.7
55°	3568.3	3629.5	4138.4	5098.1	5932.2	6550.5	7317.0	8106.0	8215.5	8109.2	6621.4
57.5°	2727.8	2792.2	3220.5	4206.0	5458.8	6199.5	7284.8	8405.5	8663.2	8595.5	6953.1
60°	2054.7	2119.1	2392.8	3410.5	4866.2	5806.6	7123.8	8602.0	9065.7	8994.9	7194.6
62.5°	1471.8	1523.3	1726.2	2653.7	4144.8	5339.6	6727.6	8605.2	9294.4	9236.4	7310.6
65°	1059.5	1059.5	1223.8	1893.7	3468.5	4779.2	6128.6	8209.1	9246.1	9230.0	7230.0
67.5°	763.3	769.7	901.7	1323.6	2766.4	4099.7	5352.5	7503.8	8872.5	8953.0	6940.2
70°	541.0	557.1	618.3	924.3	2090.1	3236.6	4521.6	6579.5	8199.4	8341.1	6379.8
72.5°	418.7	428.3	470.2	644.1	1526.5	2405.7	3603.8	5548.9	7300.9	7461.9	5616.6
75°	322.1	331.7	363.9	473.4	1095.0	1687.5	2560.3	4305.8	5887.1	6173.7	4511.9
77.5°	235.1	248.0	270.5	344.6	637.7	1072.4	1552.3	2421.8	3249.5	3384.8	2363.9
80°	109.5	125.6	157.8	222.2	344.6	505.6	550.7	933.9	1561.9	1632.8	1281.8
82.5°	61.2	77.3	90.2	135.3	173.9	180.3	186.8	235.1	589.4	650.5	537.8
85°	29.0	38.6	41.9	58.0	58.0	51.5	61.2	45.1	96.6	115.9	112.7
87.5°	0.0	3.2	6.4	16.1	12.9	9.7	9.7	9.7	9.7	12.9	9.7
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°	2798.6	2798.6	2798.6	2798.6	2798.6	2798.6	2798.6	2798.6	2798.6	2798.6	2798.6
2.5°	2817.9	2776.1	2679.5	2595.7	2541.0	2492.7	2428.3	2399.3	2347.8	2357.4	2328.4
5°	2834.0	2756.8	2586.1	2428.3	2312.3	2209.3	2096.6	2032.1	1961.3	1954.9	1932.3
7.5°	2843.7	2724.6	2479.8	2257.6	2080.5	1922.6	1771.3	1687.5	1600.6	1581.3	1561.9
10°	2834.0	2676.2	2370.3	2080.5	1845.4	1648.9	1478.2	1371.9	1281.8	1259.2	1239.9
12.5°	2843.7	2650.5	2267.2	1916.2	1636.0	1413.8	1220.6	1111.1	1027.3	1004.8	991.9
15°	2866.3	2634.4	2180.3	1768.1	1449.2	1201.3	1011.2	917.8	850.2	827.7	821.2
17.5°	2885.6	2618.3	2086.9	1623.1	1262.4	1014.5	850.2	772.9	715.0	692.4	686.0
20°	2911.3	2595.7	1993.5	1484.7	1098.2	866.3	721.4	653.8	608.7	592.6	589.4
22.5°	2933.9	2579.6	1906.5	1346.2	946.8	747.2	624.8	570.0	537.8	521.7	521.7
25°	2991.9	2586.1	1832.5	1217.4	834.1	653.8	550.7	508.8	483.1	473.4	473.4
27.5°	3059.5	2611.8	1774.5	1107.9	737.5	582.9	499.2	463.8	450.9	438.0	441.2
30°	3156.1	2663.4	1735.9	1017.7	666.6	528.2	457.3	431.5	418.7	415.4	415.4
32.5°	3278.5	2747.1	1732.6	959.7	615.1	486.3	428.3	405.8	399.3	396.1	396.1
35°	3423.4	2821.2	1713.3	933.9	582.9	457.3	405.8	389.7	386.5	386.5	386.5
37.5°	3597.3	2943.5	1700.4	898.5	566.8	441.2	389.7	376.8	376.8	376.8	376.8
40°	3777.7	3043.4	1681.1	866.3	560.4	431.5	380.0	363.9	363.9	363.9	363.9
42.5°	3993.4	3188.3	1674.7	850.2	550.7	425.1	367.1	347.8	351.0	351.0	354.3
45°	4254.3	3352.6	1671.4	834.1	547.5	418.7	354.3	331.7	334.9	331.7	331.7
47.5°	4518.4	3542.6	1681.1	824.5	544.3	412.2	344.6	315.6	315.6	312.4	312.4
50°	4795.3	3716.5	1687.5	814.8	537.8	399.3	328.5	302.7	296.3	289.8	293.1
52.5°	5056.2	3877.5	1690.8	798.7	518.5	380.0	315.6	286.6	277.0	267.3	270.5
55°	5317.1	4032.1	1697.2	779.4	492.7	360.7	299.5	270.5	257.6	244.8	244.8
57.5°	5552.2	4167.3	1681.1	731.1	463.8	341.4	283.4	251.2	231.9	219.0	219.0
60°	5713.2	4264.0	1632.8	660.2	425.1	318.8	267.3	231.9	209.3	199.7	199.7
62.5°	5790.5	4280.1	1545.8	544.3	376.8	296.3	248.0	212.6	193.2	186.8	186.8
65°	5716.4	4209.2	1410.6	409.0	325.3	270.5	228.7	196.5	177.1	161.0	161.0
67.5°	5458.8	4009.5	1223.8	309.2	277.0	244.8	209.3	180.3	157.8	144.9	144.9
70°	4940.3	3594.1	946.8	248.0	235.1	212.6	190.0	161.0	141.7	125.6	125.6
72.5°	4260.7	3046.6	666.6	199.7	199.7	180.3	161.0	141.7	122.4	109.5	109.5
75°	3268.8	2254.4	447.7	161.0	164.2	151.4	132.0	115.9	103.1	93.4	93.4
77.5°	1784.2	1114.3	273.7	119.2	122.4	115.9	103.1	93.4	87.0	77.3	77.3
80°	866.3	489.5	157.8	83.7	87.0	83.7	77.3	67.6	67.6	61.2	61.2
82.5°	363.9	183.6	83.7	58.0	58.0	51.5	48.3	48.3	48.3	45.1	45.1
85°	90.2	35.4	35.4	32.2	32.2	32.2	29.0	29.0	29.0	22.5	25.8
87.5°	12.9	12.9	12.9	12.9	12.9	12.9	9.7	3.2	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)