

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: P841302

Luminaire Tested: **ARCH4-160-727-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841302
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: ARCH4-160-727-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1305mA 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: 17014 lumens
Efficiency: N/A
Efficacy: 105.9 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G3

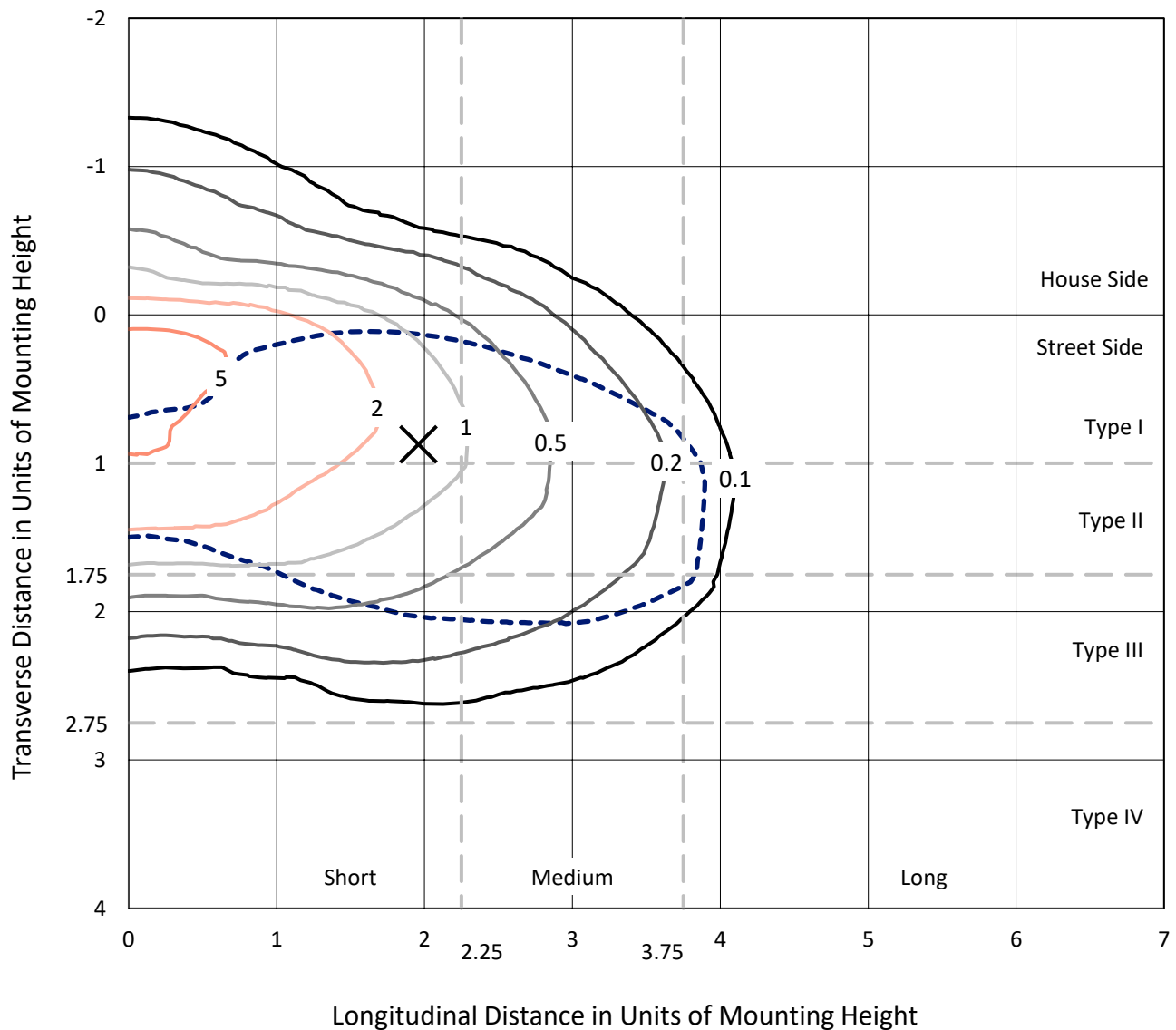
Input Watts (W): 160.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

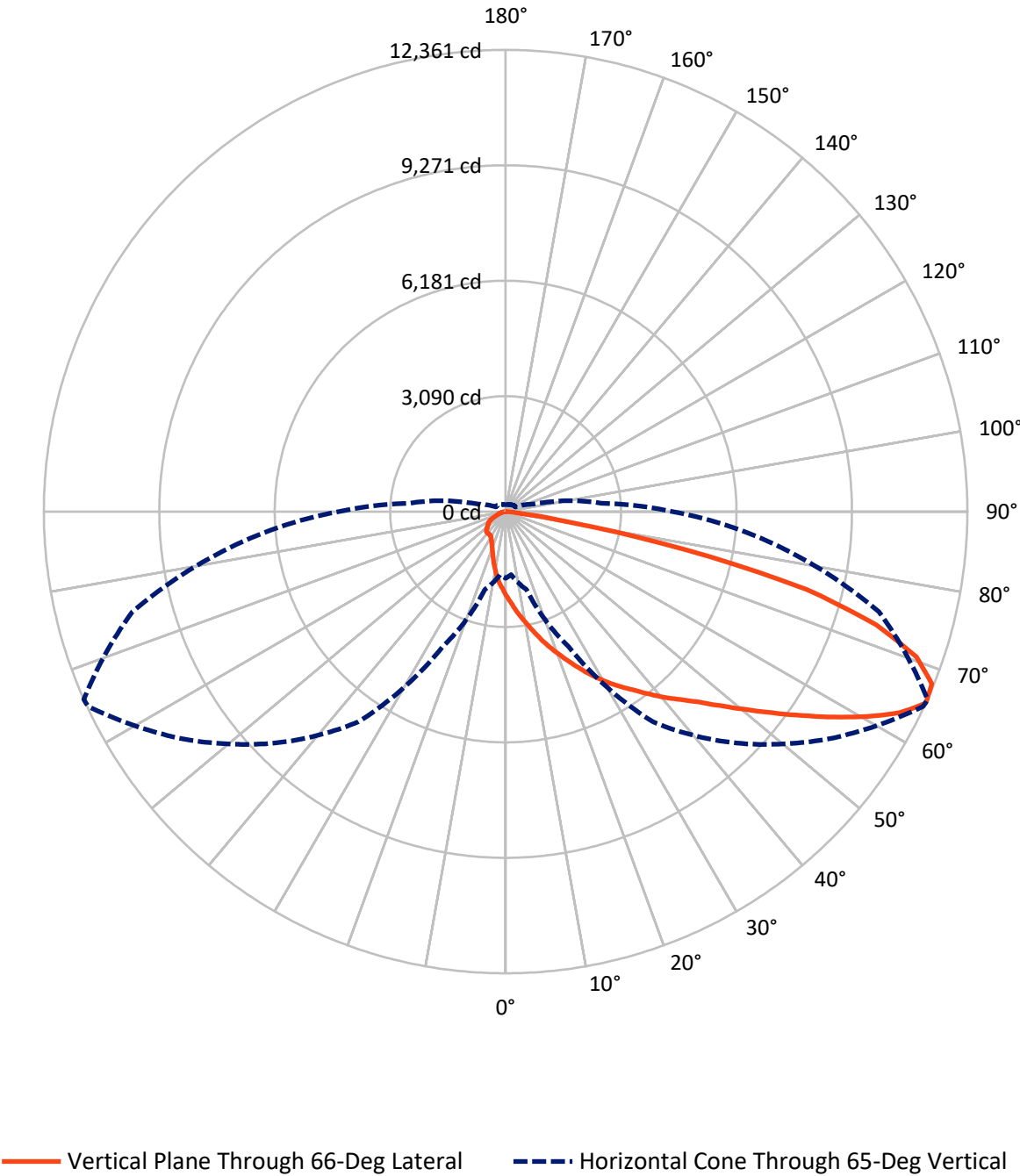
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1799.6	0.0	1799.6
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	15214.4	0.0	15214.4
	% Fixture	89.4	0.0	89.4
Total	Lumens	17014.0	0.0	17014.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.2	1.3
10°-20°	724.4	4.3
20°-30°	1310.6	7.7
30°-40°	2049.4	12.0
40°-50°	3108.9	18.3
50°-60°	3950.0	23.2
60°-70°	3690.9	21.7
70°-80°	1834.3	10.8
80°-90°	123.3	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°	17014.0	100.0
0°-180°	17014.0	100.0

Coefficient of Utilization



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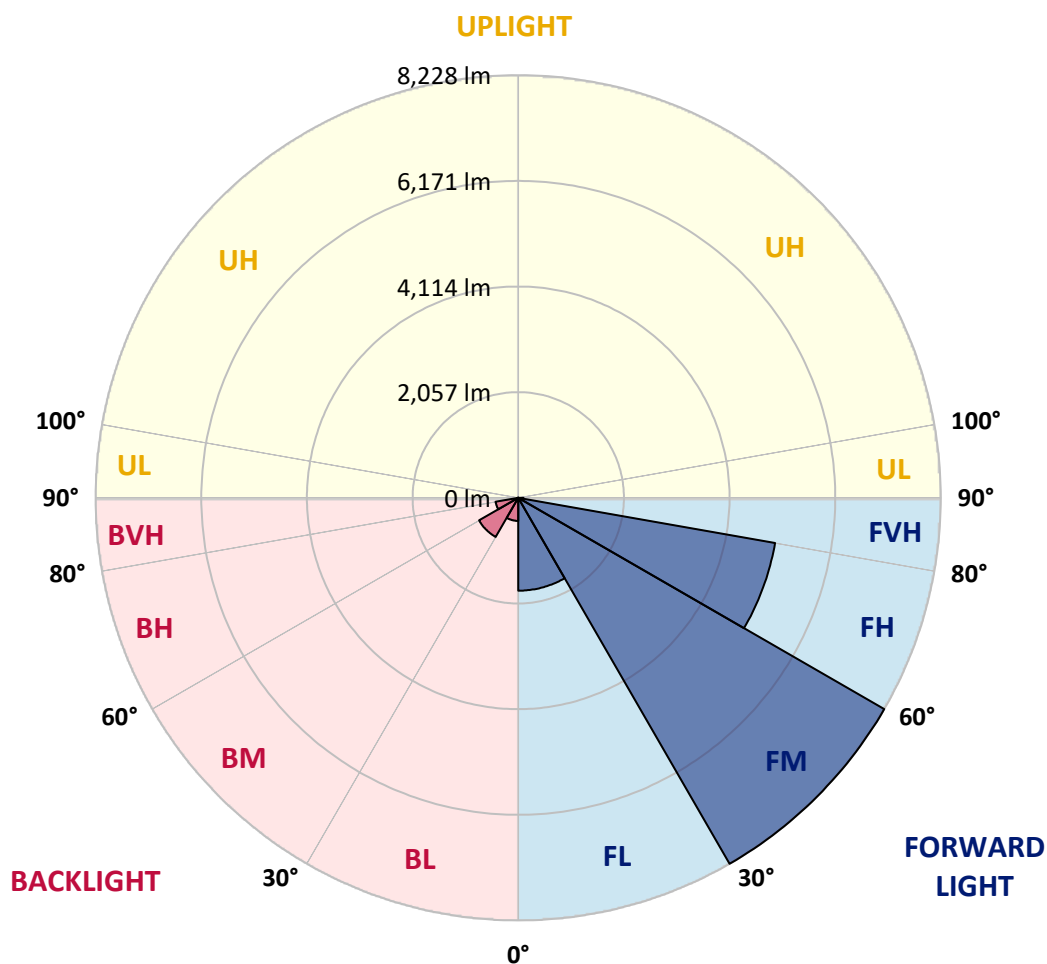
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1807.7	10.6			
FM	(30°-60°)	8228.2	48.4			
FH	(60°-80°)	5077.1	29.8			G3/7500
FVH	(80°-90°)	101.4	0.6			G2/225
BL	(0°-30°)	449.4	2.6	B1/500		
BM	(30°-60°)	880.2	5.2	B1/1000		
BH	(60°-80°)	448.2	2.6	B1/500		G1/500
BVH	(80°-90°)	21.8	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2251.7	2251.7	2251.7	2251.7	2251.7	2251.7	2251.7	2251.7	2251.7	2251.7	2251.7
2.5°	2630.0	2651.4	2662.1	2665.7	2583.6	2547.9	2512.2	2430.1	2412.3	2365.9	2305.2
5°	3093.9	3122.4	3115.3	3101.0	3001.1	2886.9	2794.1	2640.7	2615.7	2505.1	2369.5
7.5°	3550.6	3575.6	3568.5	3515.0	3404.3	3243.7	3090.3	2865.5	2829.8	2651.4	2433.7
10°	3932.5	3953.9	3950.3	3896.8	3764.7	3568.5	3382.9	3083.2	3040.3	2787.0	2487.2
12.5°	4246.5	4275.0	4271.5	4235.8	4118.0	3903.9	3693.4	3333.0	3279.4	2951.1	2562.2
15°	4492.7	4528.4	4528.4	4514.1	4432.0	4253.6	4014.5	3607.7	3543.5	3140.3	2654.9
17.5°	4642.6	4671.1	4696.1	4721.1	4664.0	4528.4	4310.7	3882.5	3814.7	3325.8	2751.3
20°	4721.1	4749.6	4767.5	4821.0	4831.7	4763.9	4592.6	4153.7	4082.3	3536.4	2861.9
22.5°	4849.6	4874.5	4878.1	4924.5	4945.9	4963.8	4856.7	4421.3	4364.2	3768.3	2986.8
25°	5063.7	5092.2	5081.5	5102.9	5106.5	5127.9	5117.2	4728.2	4671.1	4032.4	3136.7
27.5°	5338.4	5374.1	5367.0	5345.6	5313.5	5295.6	5342.0	5038.7	4985.2	4296.4	3290.1
30°	5634.6	5677.4	5666.7	5623.9	5538.3	5463.3	5527.6	5331.3	5281.3	4567.7	3461.4
32.5°	5934.4	5984.3	5980.8	5909.4	5763.1	5634.6	5731.0	5606.1	5570.4	4860.3	3647.0
35°	6130.6	6194.9	6187.7	6144.9	5955.8	5845.2	5962.9	5888.0	5863.0	5217.1	3914.6
37.5°	6448.2	6516.0	6455.4	6348.3	6130.6	6073.5	6216.3	6205.6	6187.7	5595.4	4196.5
40°	7219.0	7318.9	7158.4	6719.4	6362.6	6312.6	6516.0	6558.9	6541.0	5970.1	4449.9
42.5°	8025.5	8175.4	7925.6	7318.9	6783.7	6601.7	6844.3	6905.0	6883.6	6291.2	4678.3
45°	8514.4	8578.6	8328.8	7857.8	7529.5	6951.4	7194.1	7294.0	7276.1	6676.6	4970.9
47.5°	8914.1	8889.1	8603.6	8286.0	8346.7	7443.8	7590.2	7786.4	7772.1	7101.3	5292.1
50°	8999.7	8942.6	8828.4	8628.6	8789.2	7943.4	8007.7	8346.7	8332.4	7572.3	5616.8
52.5°	8396.6	8321.7	8632.1	8799.9	8746.3	8307.4	8468.0	8960.4	8953.3	8082.6	5927.2
55°	6890.7	6830.1	7665.1	8532.2	8699.9	8564.3	8978.3	9599.2	9638.5	8625.0	6209.2
57.5°	5420.5	5356.3	6177.0	7861.4	8528.7	8799.9	9574.2	10330.7	10380.7	9213.8	6476.8
60°	4321.4	4225.1	4853.1	6805.1	8207.5	8981.9	10148.8	11133.7	11140.8	9752.7	6640.9
62.5°	2936.9	2829.8	3525.7	5466.9	7668.7	9010.4	10591.2	11825.9	11854.5	10155.9	6669.5
65°	1784.2	1695.0	2166.1	3993.1	6872.9	8767.8	10598.4	12336.2	12361.2	10341.4	6498.2
67.5°	1034.9	999.2	1238.3	2487.2	5552.6	8114.7	10152.3	12257.7	12304.1	10262.9	6109.2
70°	603.1	599.5	688.7	1231.1	3918.2	6819.4	9156.7	11597.6	11665.4	9852.6	5513.3
72.5°	442.5	449.6	485.3	660.2	2269.6	4910.2	7754.3	10270.1	10373.6	9049.7	4664.0
75°	349.7	353.3	385.4	449.6	1191.9	2776.3	5809.5	8243.2	8325.3	7618.7	3643.4
77.5°	260.5	267.6	292.6	317.6	553.1	1273.9	3268.7	5077.9	4942.3	4182.3	1759.3
80°	189.1	207.0	217.7	228.4	292.6	492.4	981.3	1770.0	1755.7	1827.1	831.5
82.5°	121.3	135.6	146.3	153.4	174.9	235.5	292.6	396.1	428.2	710.1	331.9
85°	53.5	60.7	67.8	82.1	74.9	82.1	121.3	78.5	67.8	107.1	60.7
87.5°	0.0	0.0	10.7	17.8	14.3	7.1	21.4	14.3	10.7	10.7	10.7
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°	2251.7	2251.7	2251.7	2251.7	2251.7	2251.7	2251.7	2251.7	2251.7	2251.7	2251.7
2.5°	2273.1	2233.9	2151.8	2073.3	2026.9	1966.2	1912.7	1862.7	1859.2	1844.9	1819.9
5°	2301.7	2226.7	2073.3	1927.0	1816.4	1698.6	1598.7	1520.2	1491.6	1470.2	1441.7
7.5°	2330.2	2212.5	1984.1	1770.0	1595.1	1431.0	1313.2	1206.1	1174.0	1145.5	1127.6
10°	2340.9	2187.5	1880.6	1595.1	1366.7	1191.9	1067.0	988.5	959.9	945.6	934.9
12.5°	2373.0	2173.2	1784.2	1431.0	1166.9	1006.3	917.1	870.7	860.0	849.3	838.6
15°	2415.9	2173.2	1687.9	1270.4	1009.9	881.4	827.9	795.8	788.6	785.1	777.9
17.5°	2462.2	2173.2	1595.1	1134.8	895.7	799.3	760.1	742.2	738.7	735.1	731.5
20°	2526.5	2176.8	1495.2	1017.0	813.6	738.7	706.6	685.1	681.6	678.0	678.0
22.5°	2590.7	2183.9	1398.8	927.8	760.1	692.3	653.0	631.6	624.5	624.5	624.5
25°	2672.8	2205.3	1309.6	852.9	713.7	649.5	599.5	581.7	578.1	578.1	574.5
27.5°	2769.1	2230.3	1231.1	795.8	667.3	599.5	549.5	531.7	524.6	524.6	521.0
30°	2872.6	2255.3	1166.9	752.9	620.9	549.5	503.2	481.7	474.6	478.2	474.6
32.5°	2986.8	2291.0	1116.9	724.4	578.1	506.7	463.9	438.9	435.4	435.4	431.8
35°	3179.5	2390.9	1109.8	710.1	542.4	474.6	431.8	406.8	403.2	403.2	399.7
37.5°	3386.5	2505.1	1141.9	703.0	513.9	446.1	406.8	381.8	378.3	378.3	378.3
40°	3561.3	2590.7	1177.6	703.0	496.0	421.1	385.4	364.0	364.0	364.0	364.0
42.5°	3679.1	2597.9	1170.5	703.0	481.7	403.2	371.1	349.7	349.7	353.3	349.7
45°	3854.0	2633.5	1141.9	692.3	471.0	389.0	356.8	339.0	335.4	339.0	339.0
47.5°	4060.9	2697.8	1113.4	649.5	467.5	374.7	346.1	324.7	321.2	324.7	321.2
50°	4257.2	2754.9	1099.1	592.4	460.3	360.4	331.9	310.5	306.9	310.5	306.9
52.5°	4421.3	2779.8	1074.1	553.1	442.5	346.1	317.6	296.2	289.0	292.6	292.6
55°	4553.4	2772.7	1038.4	521.0	410.4	331.9	299.8	281.9	271.2	271.2	267.6
57.5°	4674.7	2776.3	1006.3	488.9	374.7	310.5	285.5	264.1	249.8	246.2	242.7
60°	4721.1	2758.4	949.2	446.1	339.0	292.6	267.6	242.7	228.4	224.8	221.2
62.5°	4656.9	2694.2	874.3	371.1	306.9	271.2	249.8	224.8	210.5	207.0	203.4
65°	4474.9	2572.9	760.1	292.6	278.3	246.2	228.4	210.5	192.7	185.6	182.0
67.5°	4164.4	2398.0	617.3	235.5	246.2	224.8	214.1	192.7	171.3	164.1	160.6
70°	3721.9	2166.1	463.9	199.8	217.7	199.8	192.7	171.3	153.4	146.3	142.7
72.5°	3101.0	1791.4	324.7	171.3	189.1	174.9	167.7	153.4	135.6	124.9	124.9
75°	2344.5	1284.7	214.1	146.3	157.0	149.9	139.2	128.5	117.8	110.6	107.1
77.5°	1009.9	499.6	132.0	110.6	128.5	124.9	110.6	103.5	99.9	92.8	92.8
80°	435.4	203.4	82.1	82.1	92.8	89.2	85.6	78.5	78.5	74.9	71.4
82.5°	160.6	82.1	50.0	60.7	67.8	60.7	60.7	60.7	60.7	57.1	57.1
85°	39.3	25.0	25.0	35.7	39.3	35.7	39.3	35.7	35.7	35.7	32.1
87.5°	10.7	10.7	14.3	14.3	14.3	14.3	14.3	10.7	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)