

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: P836238

Luminaire Tested: **ARCH3-160-722-U-T3-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836238
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-160-722-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2200K, 1245mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13429 lumens
Efficiency: N/A
Efficacy: 83.4 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 161
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

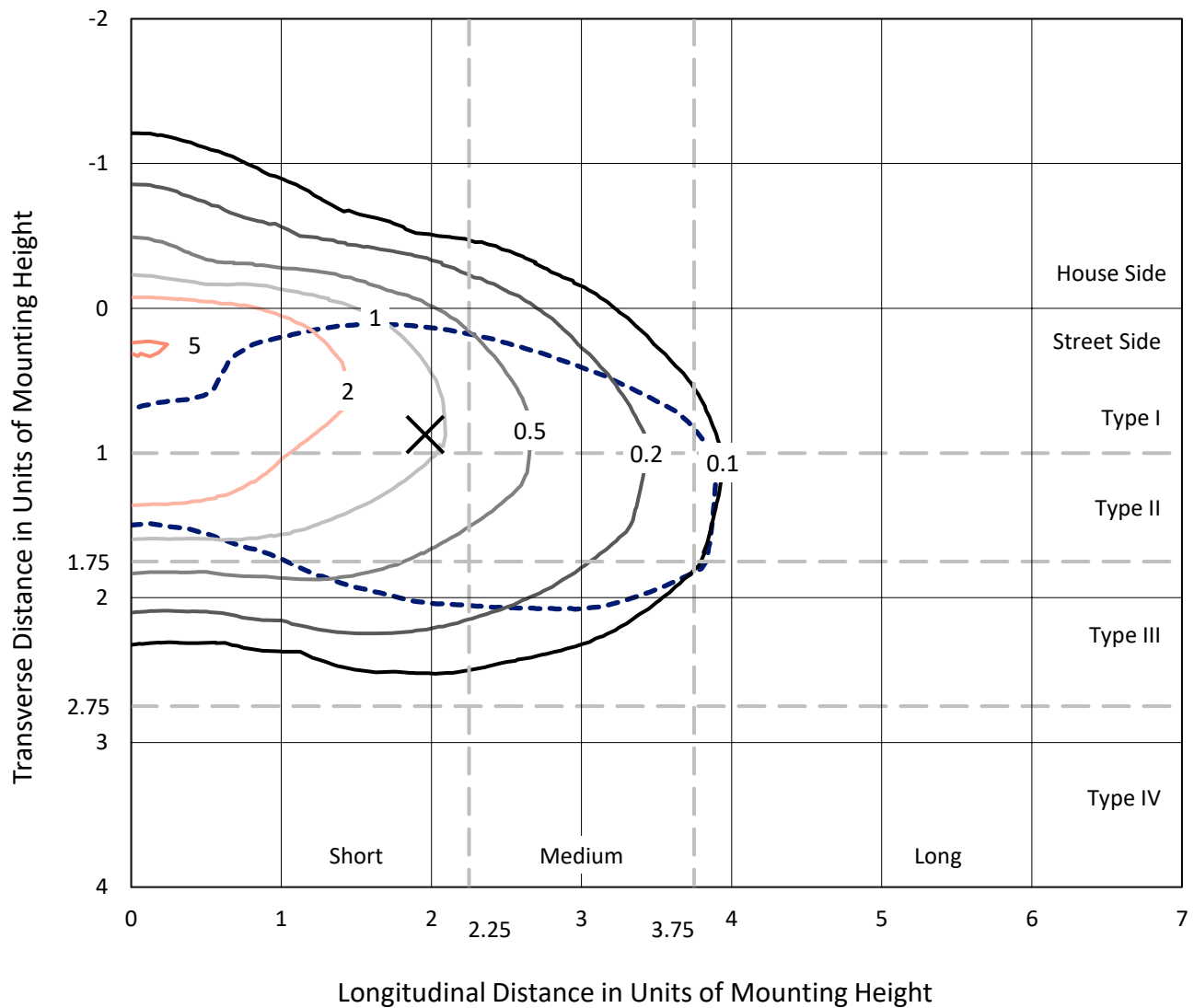


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
- - - 1/2 Max cd

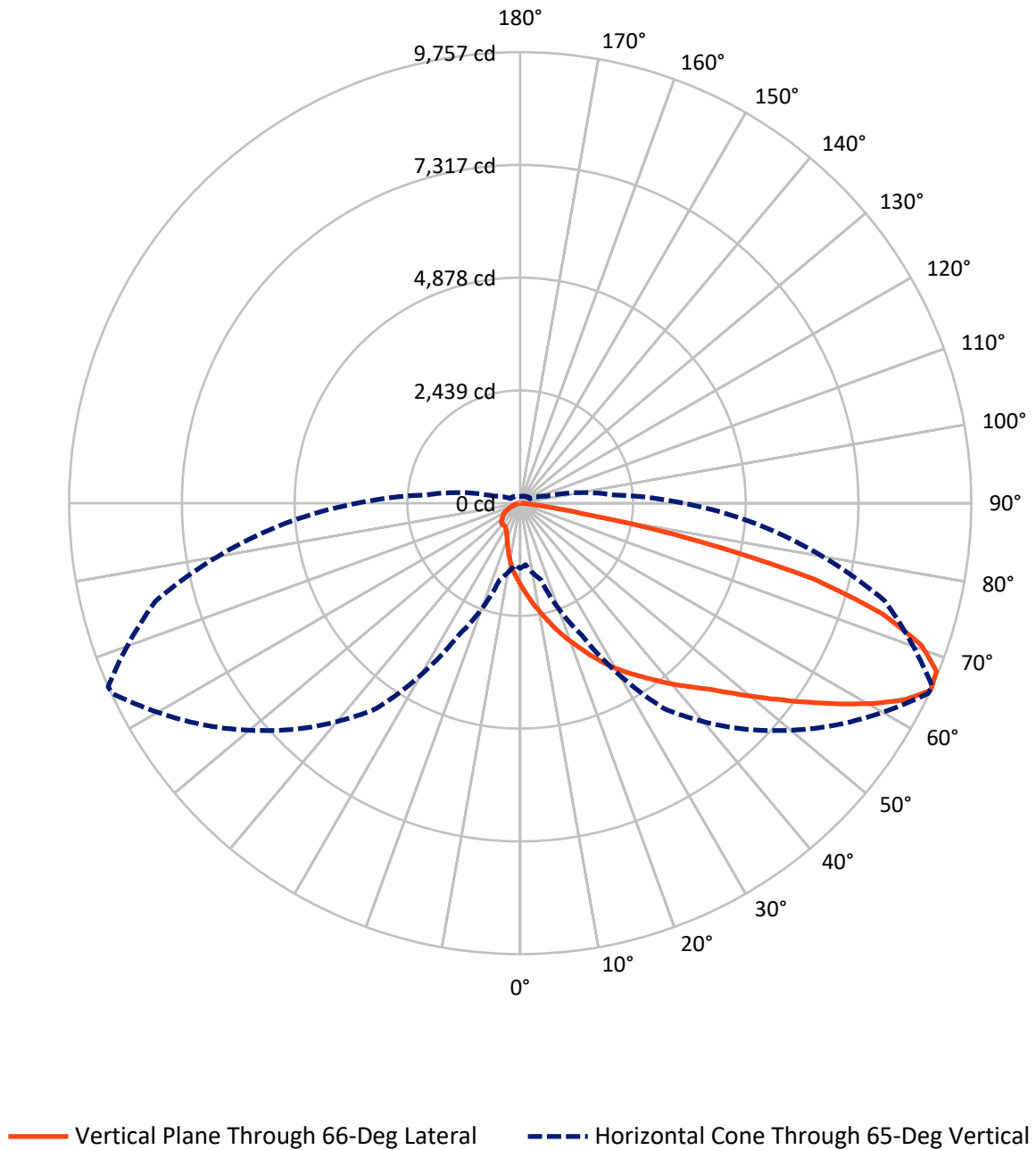


Based on 25 foot mounting height. Maximum calculated value = 5.1 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1420.4	0.0	1420.4
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	12008.6	0.0	12008.6
	% Fixture	89.4	0.0	89.4
Total	Lumens	13429.0	0.0	13429.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.4	1.3
10°-20°	571.7	4.3
20°-30°	1034.4	7.7
30°-40°	1617.6	12.0
40°-50°	2453.9	18.3
50°-60°	3117.7	23.2
60°-70°	2913.2	21.7
70°-80°	1447.8	10.8
80°-90°	97.3	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°	13429.0	100.0
0°-180°	13429.0	100.0

Coefficient of Utilization



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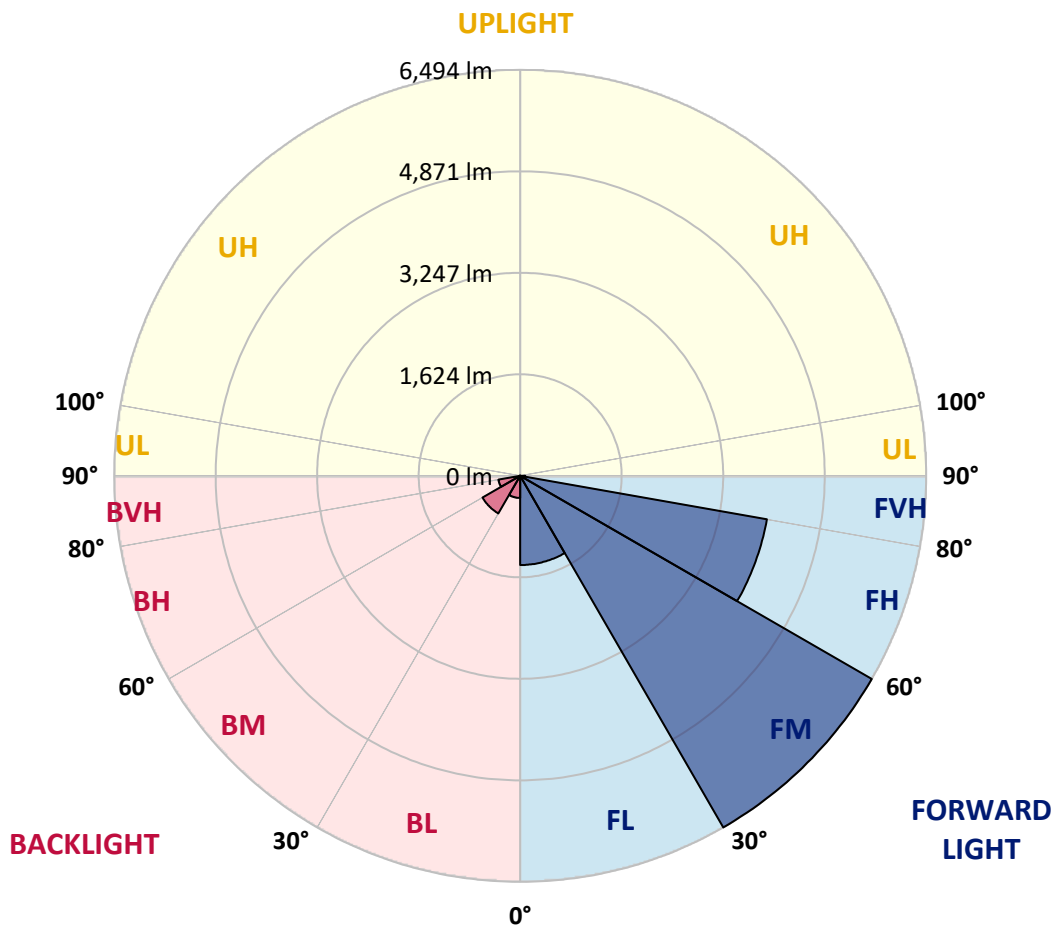
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1426.8	10.6			
FM	(30°-60°)	6494.4	48.4			
FH	(60°-80°)	4007.3	29.8			G2/5000
FVH	(80°-90°)	80.1	0.6			G1/100
BL	(0°-30°)	354.7	2.6	B1/500		
BM	(30°-60°)	694.7	5.2	B1/1000		
BH	(60°-80°)	353.7	2.6	B1/500		G1/500
BVH	(80°-90°)	17.2	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-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1777.3	1777.3	1777.3	1777.3	1777.3	1777.3	1777.3	1777.3	1777.3	1777.3	1777.3
2.5°	2075.8	2092.7	2101.2	2104.0	2039.2	2011.0	1982.9	1918.1	1904.0	1867.4	1819.5
5°	2442.0	2464.5	2458.9	2447.6	2368.7	2278.6	2205.4	2084.3	2064.5	1977.2	1870.2
7.5°	2802.5	2822.2	2816.6	2774.3	2687.0	2560.3	2439.1	2261.7	2233.5	2092.7	1920.9
10°	3103.9	3120.8	3117.9	3075.7	2971.5	2816.6	2670.1	2433.5	2399.7	2199.7	1963.1
12.5°	3351.7	3374.2	3371.4	3343.3	3250.3	3081.3	2915.1	2630.7	2588.4	2329.3	2022.3
15°	3546.1	3574.2	3574.2	3563.0	3498.2	3357.3	3168.6	2847.6	2796.9	2478.6	2095.5
17.5°	3664.4	3686.9	3706.6	3726.3	3681.3	3574.2	3402.4	3064.4	3010.9	2625.0	2171.6
20°	3726.3	3748.9	3762.9	3805.2	3813.6	3760.1	3624.9	3278.5	3222.2	2791.2	2258.9
22.5°	3827.7	3847.4	3850.2	3886.9	3903.8	3917.8	3833.3	3489.7	3444.7	2974.3	2357.5
25°	3996.7	4019.2	4010.8	4027.7	4030.5	4047.4	4039.0	3732.0	3686.9	3182.7	2475.8
27.5°	4213.6	4241.8	4236.1	4219.2	4193.9	4179.8	4216.4	3977.0	3934.7	3391.1	2596.9
30°	4447.4	4481.2	4472.7	4438.9	4371.3	4312.2	4362.9	4208.0	4168.5	3605.2	2732.1
32.5°	4684.0	4723.4	4720.6	4664.2	4548.8	4447.4	4523.4	4424.8	4396.7	3836.2	2878.5
35°	4838.9	4889.6	4883.9	4850.1	4700.9	4613.5	4706.5	4647.3	4627.6	4117.8	3089.8
37.5°	5089.5	5143.1	5095.2	5010.7	4838.9	4793.8	4906.5	4898.0	4883.9	4416.4	3312.3
40°	5697.9	5776.8	5650.0	5303.6	5021.9	4982.5	5143.1	5176.9	5162.8	4712.1	3512.3
42.5°	6334.5	6452.8	6255.6	5776.8	5354.3	5210.7	5402.2	5450.1	5433.2	4965.6	3692.5
45°	6720.3	6771.0	6573.9	6202.1	5943.0	5486.7	5678.2	5757.1	5743.0	5269.8	3923.5
47.5°	7035.8	7016.1	6790.7	6540.1	6588.0	5875.4	5990.8	6145.8	6134.5	5605.0	4177.0
50°	7103.4	7058.3	6968.2	6810.5	6937.2	6269.7	6320.4	6588.0	6576.7	5976.8	4433.3
52.5°	6627.4	6568.2	6813.3	6945.7	6903.4	6557.0	6683.7	7072.4	7066.8	6379.5	4678.3
55°	5438.8	5390.9	6050.0	6734.4	6866.8	6759.8	7086.5	7576.6	7607.6	6807.6	4900.8
57.5°	4278.4	4227.7	4875.5	6204.9	6731.6	6945.7	7556.9	8154.0	8193.4	7272.4	5112.1
60°	3410.9	3334.8	3830.5	5371.2	6478.1	7089.3	8010.3	8787.7	8793.3	7697.7	5241.6
62.5°	2318.0	2233.5	2782.8	4315.0	6052.8	7111.8	8359.6	9334.1	9356.6	8016.0	5264.2
65°	1408.3	1337.9	1709.7	3151.7	5424.7	6920.3	8365.2	9736.9	9756.6	8162.4	5129.0
67.5°	816.8	788.6	977.3	1963.1	4382.6	6404.9	8013.1	9674.9	9711.5	8100.4	4822.0
70°	476.0	473.2	543.6	971.7	3092.6	5382.5	7227.3	9153.8	9207.4	7776.5	4351.6
72.5°	349.3	354.9	383.1	521.1	1791.3	3875.6	6120.4	8106.1	8187.8	7142.8	3681.3
75°	276.0	278.8	304.2	354.9	940.7	2191.3	4585.4	6506.3	6571.1	6013.4	2875.7
77.5°	205.6	211.2	231.0	250.7	436.6	1005.5	2580.0	4008.0	3900.9	3301.0	1388.6
80°	149.3	163.4	171.8	180.3	231.0	388.7	774.6	1397.0	1385.8	1442.1	656.3
82.5°	95.8	107.0	115.5	121.1	138.0	185.9	231.0	312.6	338.0	560.5	261.9
85°	42.2	47.9	53.5	64.8	59.1	64.8	95.8	62.0	53.5	84.5	47.9
87.5°	0.0	0.0	8.4	14.1	11.3	5.6	16.9	11.3	8.4	8.4	8.4
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°	1777.3	1777.3	1777.3	1777.3	1777.3	1777.3	1777.3	1777.3	1777.3	1777.3	1777.3
2.5°	1794.2	1763.2	1698.4	1636.4	1599.8	1551.9	1509.7	1470.2	1467.4	1456.2	1436.4
5°	1816.7	1757.5	1636.4	1520.9	1433.6	1340.7	1261.8	1199.9	1177.3	1160.4	1137.9
7.5°	1839.2	1746.3	1566.0	1397.0	1259.0	1129.4	1036.5	952.0	926.7	904.1	890.0
10°	1847.7	1726.6	1484.3	1259.0	1078.7	940.7	842.2	780.2	757.7	746.4	737.9
12.5°	1873.0	1715.3	1408.3	1129.4	921.0	794.3	723.9	687.2	678.8	670.3	661.9
15°	1906.8	1715.3	1332.2	1002.7	797.1	695.7	653.4	628.1	622.5	619.6	614.0
17.5°	1943.4	1715.3	1259.0	895.7	707.0	630.9	599.9	585.8	583.0	580.2	577.4
20°	1994.1	1718.1	1180.1	802.7	642.2	583.0	557.7	540.8	538.0	535.1	535.1
22.5°	2044.8	1723.7	1104.1	732.3	599.9	546.4	515.4	498.5	492.9	492.9	492.9
25°	2109.6	1740.6	1033.7	673.2	563.3	512.6	473.2	459.1	456.3	456.3	453.5
27.5°	2185.7	1760.4	971.7	628.1	526.7	473.2	433.8	419.7	414.0	414.0	411.2
30°	2267.3	1780.1	921.0	594.3	490.1	433.8	397.1	380.2	374.6	377.4	374.6
32.5°	2357.5	1808.2	881.6	571.8	456.3	400.0	366.2	346.4	343.6	343.6	340.8
35°	2509.6	1887.1	876.0	560.5	428.1	374.6	340.8	321.1	318.3	318.3	315.5
37.5°	2672.9	1977.2	901.3	554.9	405.6	352.1	321.1	301.4	298.6	298.6	298.6
40°	2810.9	2044.8	929.5	554.9	391.5	332.4	304.2	287.3	287.3	287.3	287.3
42.5°	2903.9	2050.5	923.8	554.9	380.2	318.3	292.9	276.0	276.0	278.8	276.0
45°	3041.9	2078.6	901.3	546.4	371.8	307.0	281.7	267.6	264.8	267.6	267.6
47.5°	3205.3	2129.3	878.8	512.6	369.0	295.7	273.2	256.3	253.5	256.3	253.5
50°	3360.2	2174.4	867.5	467.6	363.3	284.5	261.9	245.0	242.2	245.0	242.2
52.5°	3489.7	2194.1	847.8	436.6	349.3	273.2	250.7	233.8	228.1	231.0	231.0
55°	3593.9	2188.5	819.6	411.2	323.9	261.9	236.6	222.5	214.1	214.1	211.2
57.5°	3689.7	2191.3	794.3	385.9	295.7	245.0	225.3	208.4	197.2	194.3	191.5
60°	3726.3	2177.2	749.2	352.1	267.6	231.0	211.2	191.5	180.3	177.4	174.6
62.5°	3675.6	2126.5	690.1	292.9	242.2	214.1	197.2	177.4	166.2	163.4	160.5
65°	3532.0	2030.7	599.9	231.0	219.7	194.3	180.3	166.2	152.1	146.5	143.6
67.5°	3286.9	1892.7	487.3	185.9	194.3	177.4	169.0	152.1	135.2	129.6	126.7
70°	2937.7	1709.7	366.2	157.7	171.8	157.7	152.1	135.2	121.1	115.5	112.7
72.5°	2447.6	1413.9	256.3	135.2	149.3	138.0	132.4	121.1	107.0	98.6	98.6
75°	1850.5	1014.0	169.0	115.5	123.9	118.3	109.8	101.4	92.9	87.3	84.5
77.5°	797.1	394.3	104.2	87.3	101.4	98.6	87.3	81.7	78.9	73.2	73.2
80°	343.6	160.5	64.8	64.8	73.2	70.4	67.6	62.0	62.0	59.1	56.3
82.5°	126.7	64.8	39.4	47.9	53.5	47.9	47.9	47.9	47.9	45.1	45.1
85°	31.0	19.7	19.7	28.2	31.0	28.2	31.0	28.2	28.2	28.2	25.3
87.5°	8.4	8.4	11.3	11.3	11.3	11.3	11.3	8.4	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)