

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: P841478

Luminaire Tested: **ARCH4-180-750-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841478
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-180-750-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1455mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20837 lumens
Efficiency: N/A
Efficacy: 115.8 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

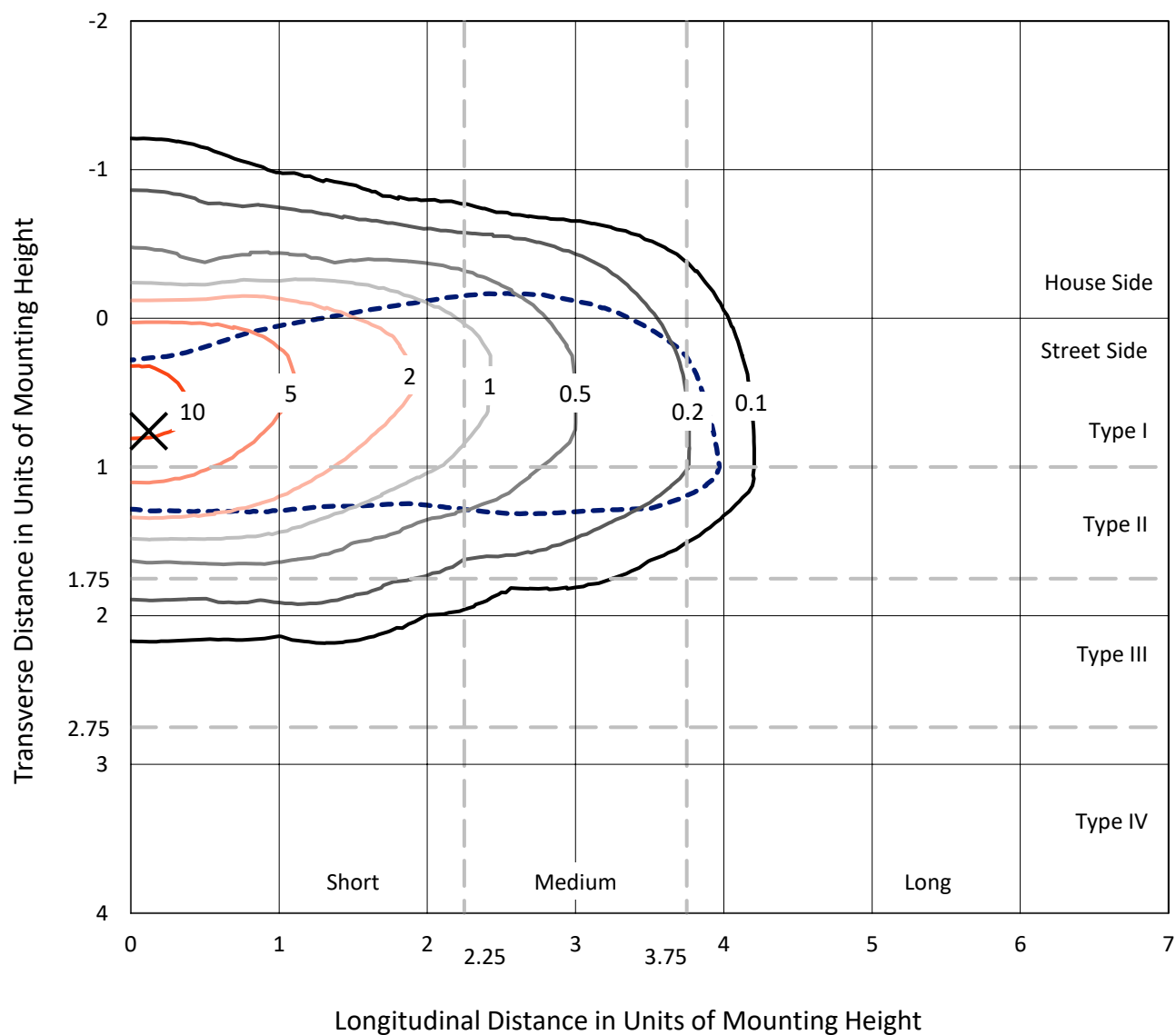
Input Watts (W): 180
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

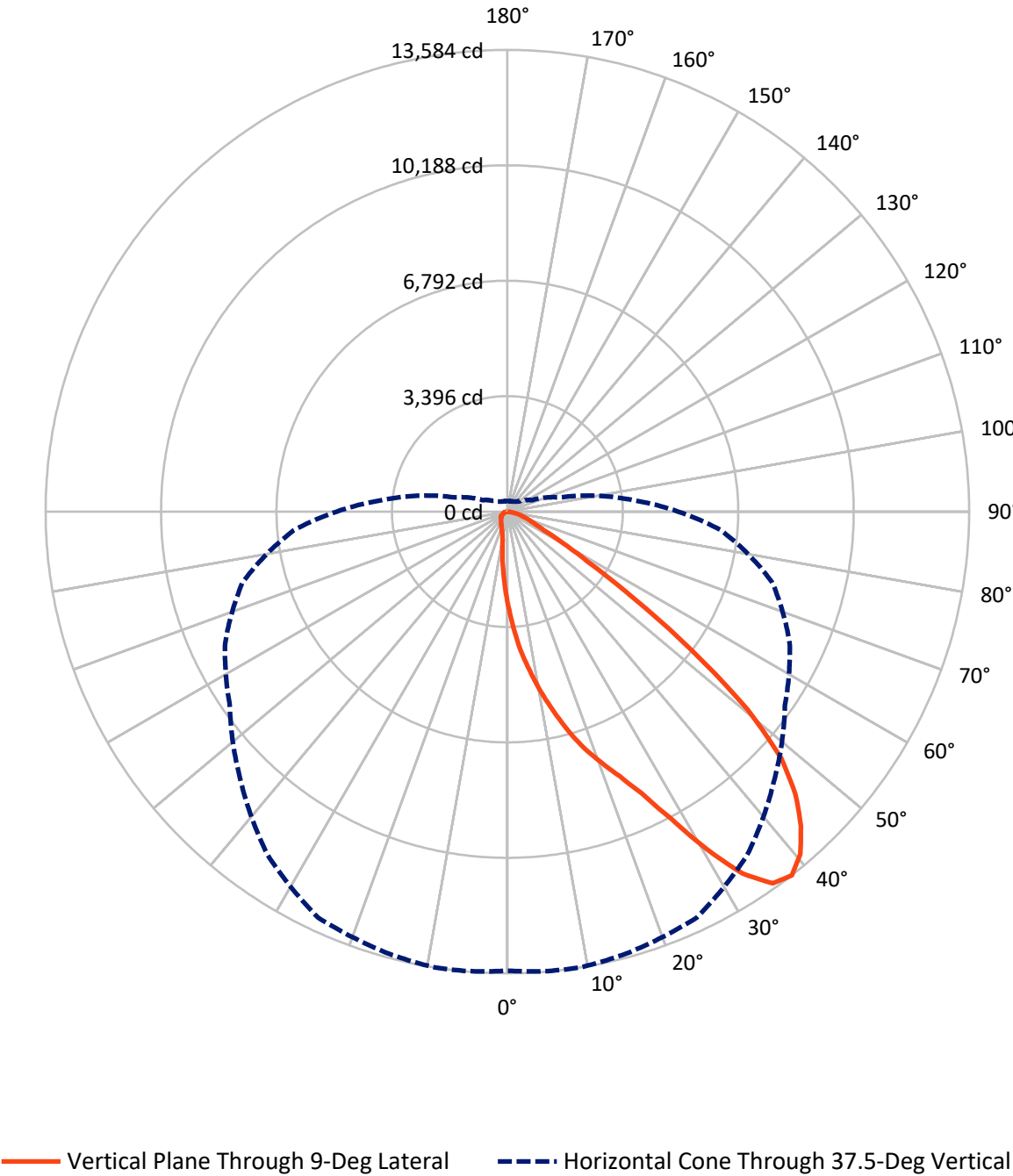
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.2 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	2534.2	0.0	2534.2
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	18302.8	0.0	18302.8
	% Fixture	87.8	0.0	87.8
Total	Lumens	20837.0	0.0	20837.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	276.9	1.3
10°-20°	962.3	4.6
20°-30°	1977.3	9.5
30°-40°	3494.9	16.8
40°-50°	4642.7	22.3
50°-60°	4403.3	21.1
60°-70°	3359.4	16.1
70°-80°	1628.6	7.8
80°-90°	91.7	0.4
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°	20837.0	100.0
0°-180°	20837.0	100.0

Coefficient of Utilization



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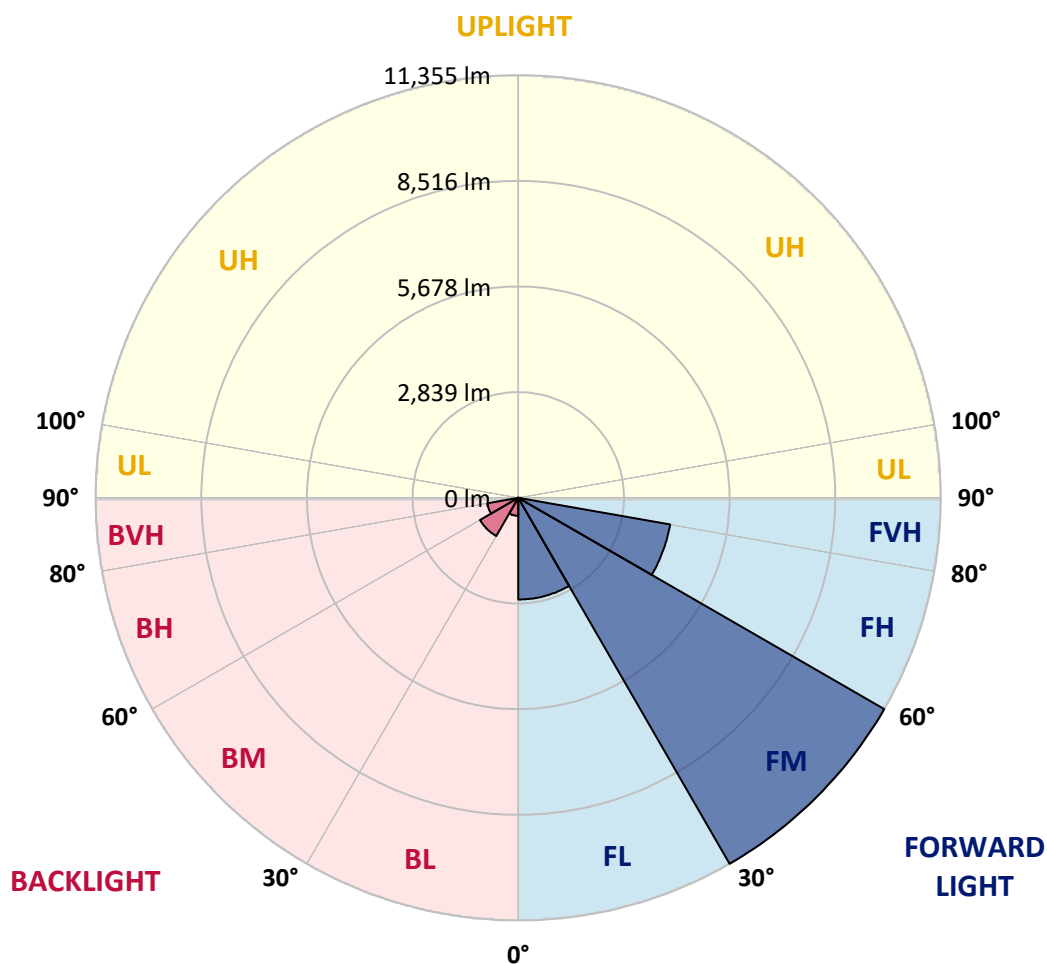
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2732.8	13.1			
FM	(30°-60°)	11355.2	54.5			
FH	(60°-80°)	4142.3	19.9			G2/5000
FVH	(80°-90°)	72.6	0.3			G1/100
BL	(0°-30°)	483.6	2.3	B1/500		
BM	(30°-60°)	1185.8	5.7	B2/2500		
BH	(60°-80°)	845.6	4.1	B2/1000		G2/1000
BVH	(80°-90°)	19.1	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-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4
2.5°	3413.1	3353.2	3421.6	3413.1	3353.2	3314.7	3194.9	3156.4	3015.3	2912.6	2822.8
5°	4114.5	4054.6	4114.5	4097.4	4011.8	3917.7	3721.0	3592.7	3340.4	3117.9	2916.9
7.5°	4696.2	4696.2	4721.8	4726.1	4623.5	4478.0	4234.2	4041.8	3686.8	3344.6	3023.9
10°	5324.9	5329.2	5384.8	5346.3	5209.4	5012.7	4704.7	4460.9	4033.2	3584.1	3126.5
12.5°	5996.4	6000.7	6017.8	6000.7	5838.1	5585.8	5213.7	4892.9	4401.1	3857.9	3267.6
15°	6667.9	6672.1	6693.5	6663.6	6484.0	6188.8	5765.4	5371.9	4790.3	4165.8	3438.7
17.5°	7296.6	7305.1	7322.3	7283.8	7095.6	6744.9	6312.9	5838.1	5205.1	4495.1	3631.2
20°	7861.2	7869.7	7882.5	7831.2	7643.0	7292.3	6826.1	6330.0	5628.6	4833.0	3840.8
22.5°	8430.0	8438.6	8459.9	8391.5	8181.9	7779.9	7322.3	6809.0	6077.6	5205.1	4084.6
25°	9157.1	9165.6	9182.8	9084.4	8797.8	8327.4	7844.1	7318.0	6565.2	5624.3	4383.9
27.5°	10222.1	10213.5	10213.5	10033.9	9542.0	8930.4	8370.1	7835.5	7091.3	6073.4	4713.3
30°	11539.4	11518.0	11505.2	11261.4	10560.0	9610.5	8909.0	8318.8	7596.0	6548.1	5068.3
32.5°	12719.9	12719.9	12694.2	12437.6	11693.4	10525.7	9482.1	8789.3	8083.6	7027.1	5436.1
35°	13417.0	13446.9	13434.1	13241.6	12698.5	11509.5	10256.3	9353.8	8596.8	7527.6	5876.6
37.5°	13511.1	13571.0	13583.8	13468.3	13181.8	12313.5	11116.0	9965.5	9161.4	8066.5	6304.3
40°	13130.4	13258.8	13258.8	13241.6	13139.0	12694.2	11838.8	10675.4	9743.0	8626.7	6736.3
42.5°	12544.5	12677.1	12660.0	12724.1	12698.5	12604.4	12245.1	11338.4	10324.7	9204.1	7129.8
45°	11778.9	11915.8	11881.6	11997.0	12048.4	12151.0	12202.3	11800.3	10897.8	9832.9	7570.3
47.5°	10551.4	10782.4	10833.7	11039.0	11252.8	11573.6	11817.4	11967.1	11432.5	10508.6	8049.3
50°	8737.9	9063.0	9165.6	9597.6	10183.6	10846.5	11240.0	11761.8	11808.8	11201.5	8566.9
52.5°	6257.3	6633.7	6791.9	7501.9	8708.0	9862.8	10572.8	11308.4	11954.3	11864.4	9127.2
55°	4046.1	4366.8	4520.8	5188.0	6791.9	8605.4	9785.8	10722.5	11873.0	12471.8	9768.7
57.5°	2493.5	2677.4	2780.1	3353.2	4828.8	6992.9	8755.1	10183.6	11624.9	12997.9	10435.9
60°	1680.9	1787.8	1839.1	2108.6	3280.5	5226.5	7339.4	9619.0	11299.9	13352.8	11043.3
62.5°	1116.3	1150.5	1201.8	1368.6	2164.2	3669.7	5637.1	8609.6	11056.1	13374.2	11492.3
65°	864.0	881.1	902.5	975.2	1334.4	2566.2	3964.8	6975.8	10692.5	12920.9	11633.5
67.5°	680.0	697.2	722.8	761.3	966.6	1740.7	2698.8	5111.0	9948.3	12210.9	11402.5
70°	534.6	547.5	564.6	598.8	752.8	1261.7	1783.5	3396.0	8447.1	11535.1	10675.4
72.5°	423.4	436.3	453.4	487.6	611.6	923.8	1223.2	2117.1	6513.9	10709.7	9276.9
75°	333.6	342.2	355.0	389.2	491.9	718.5	829.7	1266.0	4426.7	9199.9	7228.2
77.5°	166.8	205.3	235.2	269.5	359.3	496.1	551.7	701.4	1869.1	4721.8	3447.3
80°	98.4	119.8	128.3	149.7	235.2	299.4	299.4	282.3	590.2	1813.5	1407.1
82.5°	55.6	77.0	81.3	85.5	141.1	171.1	136.9	102.6	119.8	607.3	410.6
85°	17.1	25.7	29.9	34.2	47.0	51.3	47.0	42.8	34.2	59.9	38.5
87.5°	0.0	0.0	0.0	0.0	4.3	8.6	8.6	8.6	12.8	12.8	12.8
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°	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4
2.5°	2771.5	2715.9	2609.0	2510.6	2416.5	2348.1	2283.9	2224.0	2181.3	2147.1	2142.8
5°	2810.0	2698.8	2493.5	2301.0	2125.7	1980.3	1856.2	1757.9	1685.1	1633.8	1629.5
7.5°	2861.3	2690.2	2378.0	2091.5	1830.6	1621.0	1441.4	1308.8	1214.7	1176.2	1146.2
10°	2904.1	2681.7	2262.5	1881.9	1539.7	1274.6	1060.7	928.1	859.7	834.0	821.2
12.5°	2976.8	2690.2	2164.2	1689.4	1287.4	975.2	812.6	739.9	710.0	688.6	684.3
15°	3083.7	2728.7	2070.1	1501.2	1030.8	787.0	692.9	645.8	615.9	611.6	607.3
17.5°	3190.7	2763.0	1984.5	1308.8	855.4	684.3	620.2	581.7	560.3	556.0	556.0
20°	3314.7	2805.7	1890.4	1124.9	731.4	615.9	564.6	534.6	509.0	504.7	504.7
22.5°	3460.1	2865.6	1800.6	962.3	650.1	564.6	521.8	487.6	466.2	461.9	461.9
25°	3656.8	2955.4	1727.9	842.6	594.5	521.8	483.3	453.4	436.3	427.7	427.7
27.5°	3875.0	3079.5	1676.6	769.9	556.0	487.6	449.1	423.4	406.3	397.8	397.8
30°	4118.8	3216.3	1642.4	739.9	534.6	457.6	423.4	397.8	376.4	372.1	372.1
32.5°	4388.2	3374.6	1621.0	744.2	530.4	436.3	397.8	372.1	355.0	346.4	346.4
35°	4687.6	3549.9	1608.2	769.9	538.9	419.1	376.4	350.7	333.6	325.1	325.1
37.5°	5021.2	3755.2	1608.2	795.5	560.3	414.9	355.0	329.3	316.5	307.9	307.9
40°	5333.4	3973.3	1625.3	825.5	581.7	414.9	337.9	316.5	299.4	290.8	290.8
42.5°	5577.2	4097.4	1638.1	855.4	594.5	410.6	320.8	299.4	286.6	278.0	278.0
45°	5855.2	4230.0	1612.4	868.2	594.5	402.0	307.9	286.6	273.7	265.2	265.2
47.5°	6163.2	4392.5	1608.2	876.8	581.7	384.9	295.1	273.7	265.2	256.6	256.6
50°	6475.4	4572.1	1616.7	872.5	564.6	359.3	278.0	265.2	252.3	243.8	243.8
52.5°	6830.4	4760.3	1633.8	864.0	526.1	329.3	265.2	252.3	239.5	231.0	226.7
55°	7223.9	4965.6	1668.0	846.8	474.7	299.4	252.3	239.5	222.4	213.9	209.6
57.5°	7677.2	5218.0	1706.5	812.6	419.1	273.7	239.5	222.4	196.7	183.9	179.6
60°	8109.2	5504.5	1749.3	731.4	363.5	248.1	226.7	201.0	175.4	166.8	162.5
62.5°	8515.5	5786.8	1770.7	586.0	307.9	226.7	213.9	183.9	158.2	149.7	145.4
65°	8776.4	6094.7	1723.6	397.8	252.3	209.6	196.7	171.1	145.4	132.6	132.6
67.5°	8793.5	6240.2	1561.1	260.9	205.3	188.2	179.6	154.0	128.3	119.8	115.5
70°	8361.6	6022.0	1193.3	205.3	171.1	162.5	162.5	136.9	111.2	102.6	98.4
72.5°	7369.3	5333.4	761.3	166.8	145.4	136.9	136.9	115.5	98.4	85.5	81.3
75°	5816.7	4114.5	406.3	136.9	119.8	115.5	106.9	94.1	81.3	72.7	68.4
77.5°	2673.1	1813.5	188.2	98.4	89.8	89.8	81.3	68.4	64.2	55.6	55.6
80°	1056.4	615.9	94.1	64.2	59.9	59.9	59.9	47.0	47.0	38.5	34.2
82.5°	290.8	128.3	47.0	38.5	38.5	38.5	34.2	29.9	29.9	25.7	25.7
85°	29.9	21.4	21.4	21.4	21.4	17.1	17.1	12.8	8.6	8.6	8.6
87.5°	12.8	12.8	12.8	12.8	12.8	8.6	4.3	0.0	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)