

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: P399606

Luminaire Tested: **ARCH-L-PA3-160-830-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399606
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-160-830-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15805 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

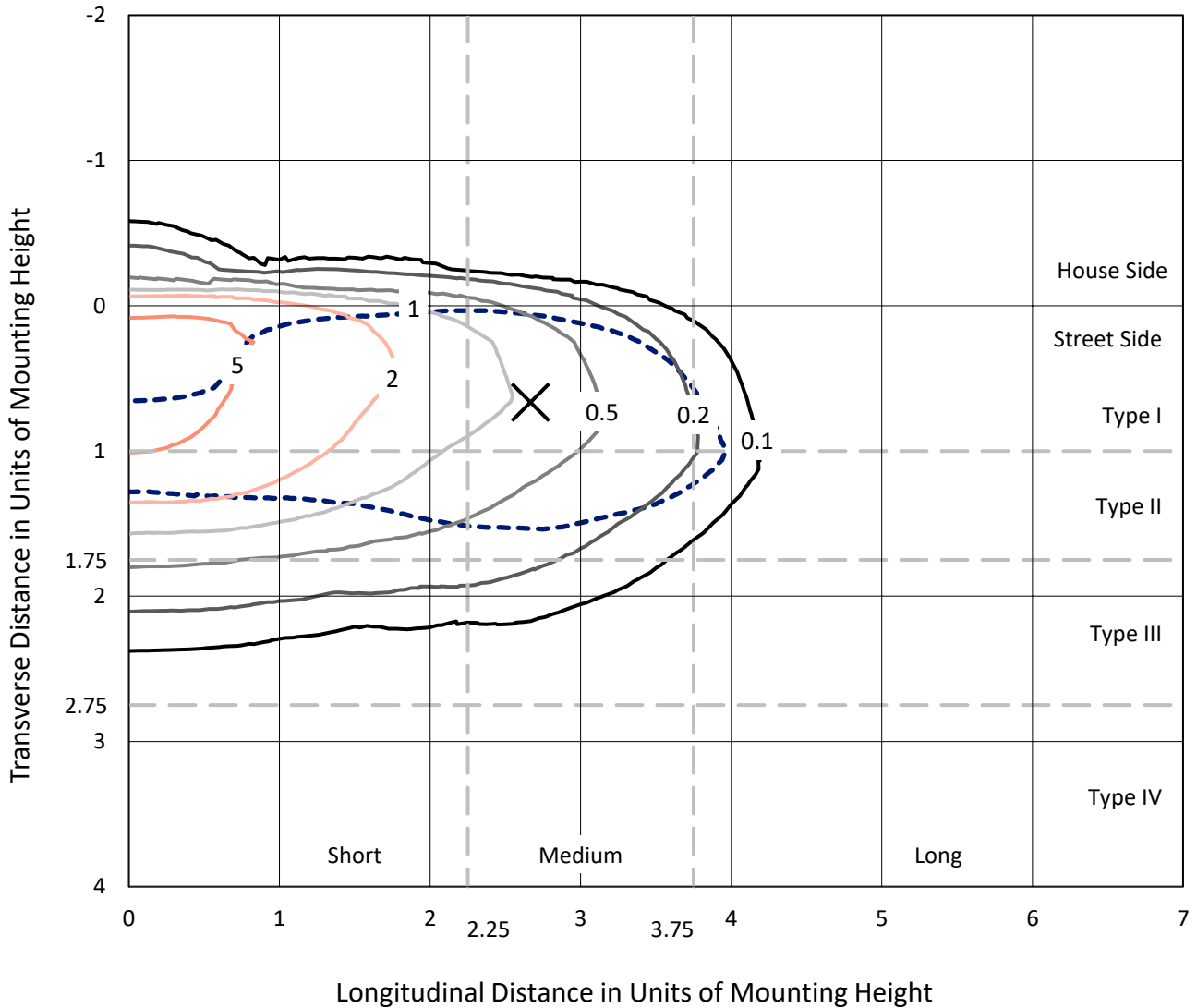
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

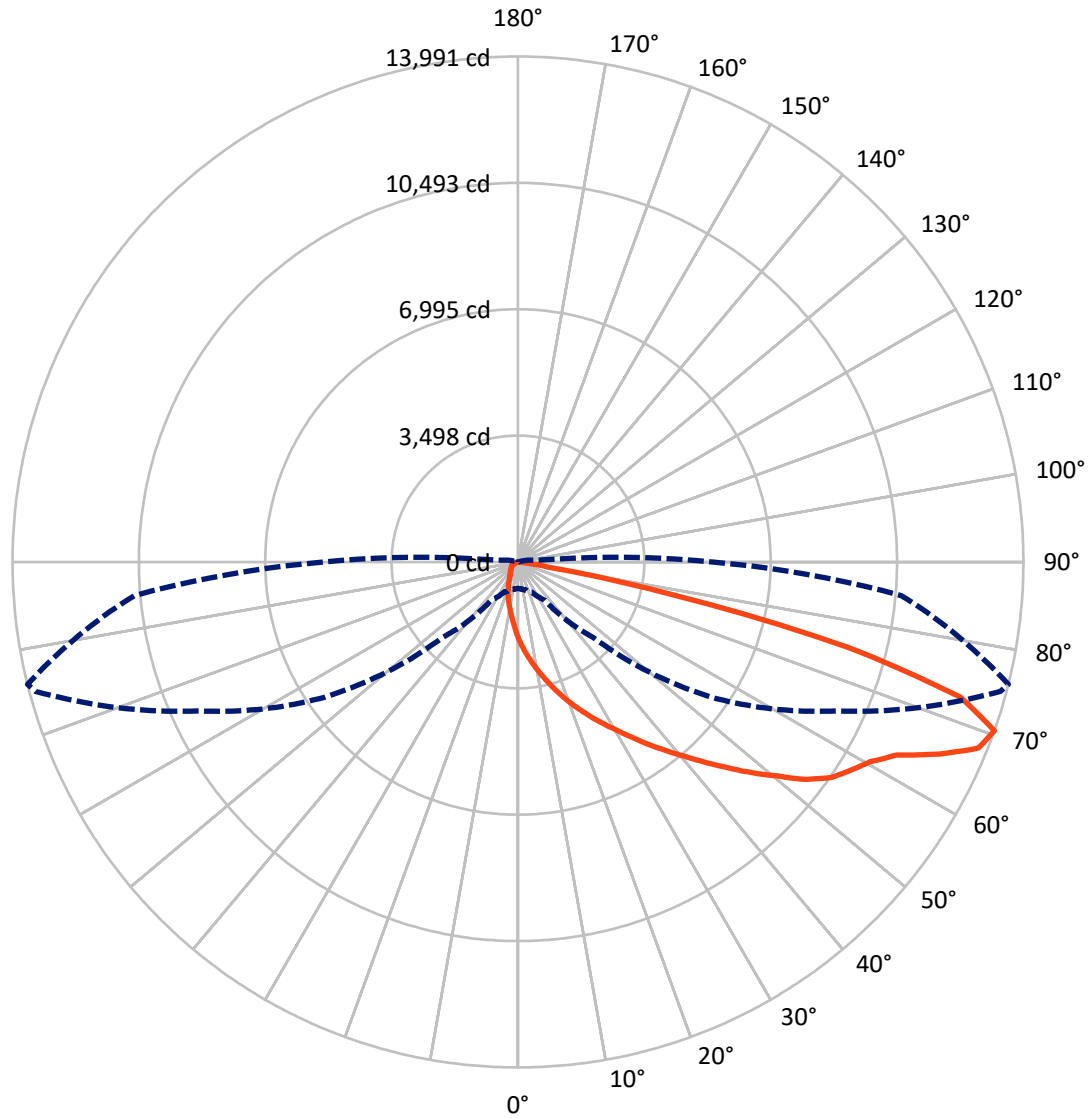
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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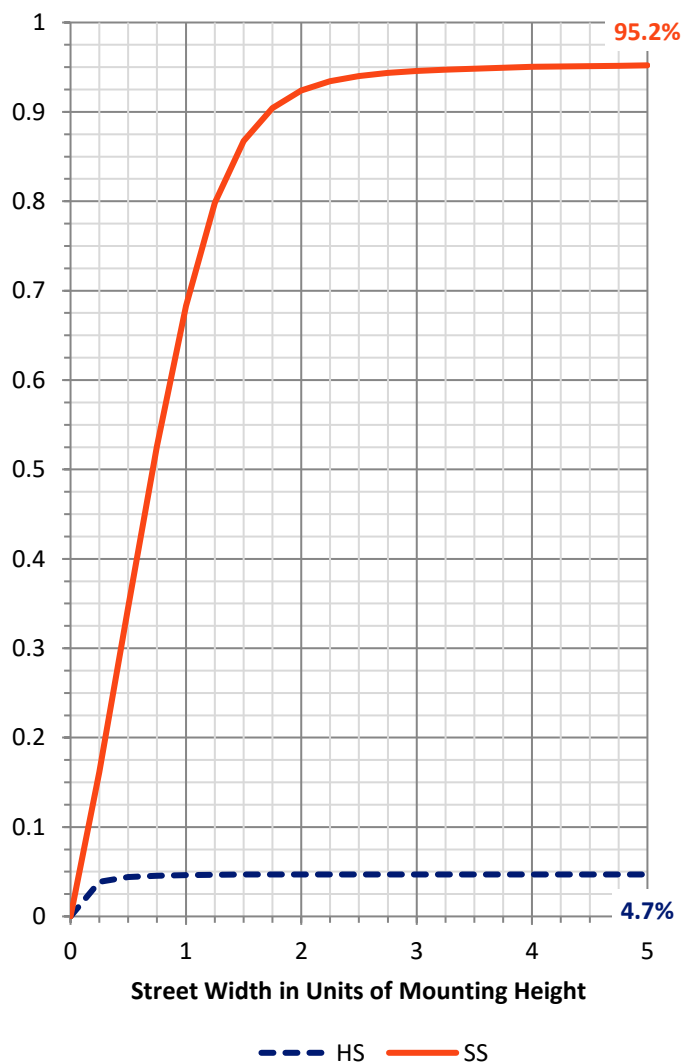
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	745.4	0.0	745.4
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	15059.6	0.0	15059.6
	% Fixture	95.3	0.0	95.3
Total	Lumens	15805.0	0.0	15805.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.3	1.3
10°-20°	643.3	4.1
20°-30°	1198.0	7.6
30°-40°	2119.0	13.4
40°-50°	3240.4	20.5
50°-60°	3673.8	23.2
60°-70°	3149.4	19.9
70°-80°	1525.4	9.7
80°-90°	56.6	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°	15805.0	100.0
0°-180°	15805.0	100.0

Coefficient of Utilization



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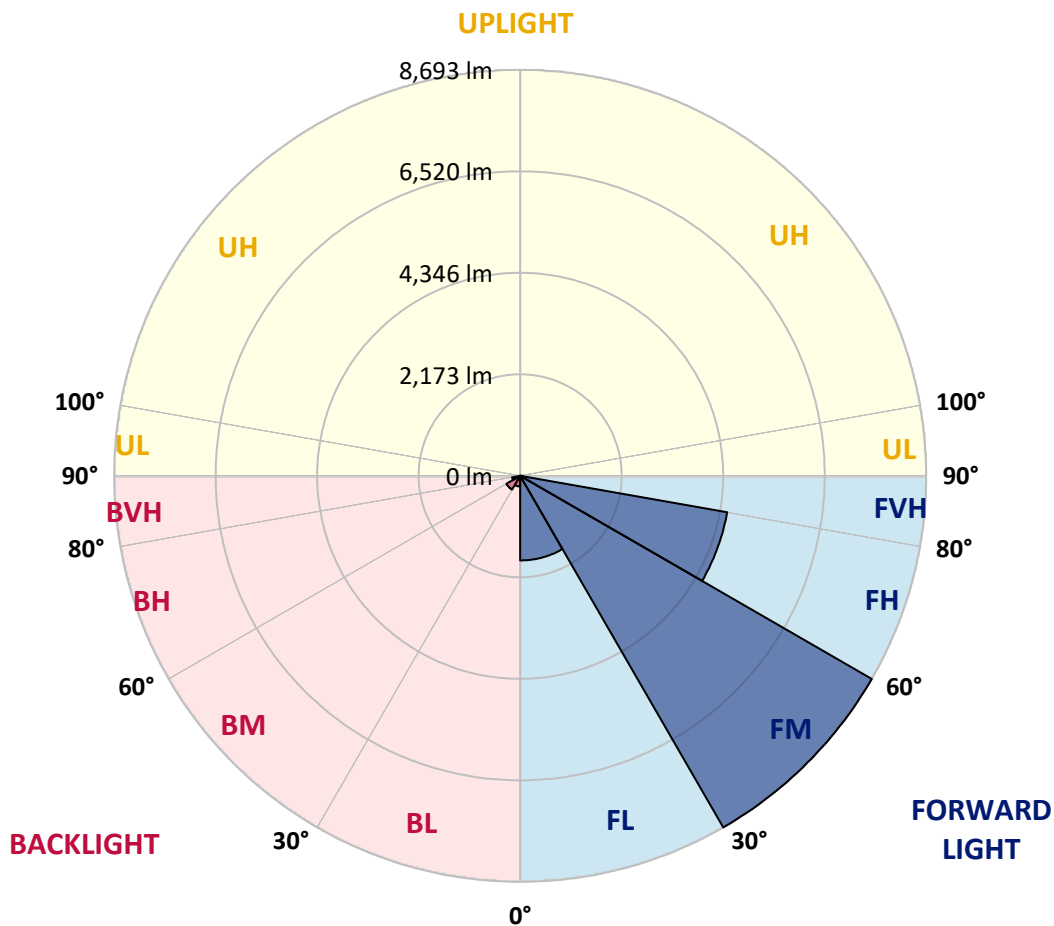
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1811.9	11.5			
FM (30°-60°)	8692.9	55.0			
FH (60°-80°)	4499.2	28.5			G2/5000
FVH (80°-90°)	55.6	0.4			G1/100
BL (0°-30°)	228.7	1.4	B1/500		
BM (30°-60°)	340.3	2.2	B1/1000		
BH (60°-80°)	175.5	1.1	B1/500		G1/500
BVH (80°-90°)	1.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6
2.5°	2891.8	2876.1	2860.3	2799.8	2744.5	2694.5	2599.8	2476.1	2365.6	2341.9	2213.0
5°	3397.1	3378.6	3355.0	3294.4	3223.4	3139.2	2999.7	2810.3	2615.6	2573.5	2334.0
7.5°	3739.1	3723.4	3689.1	3660.2	3589.2	3507.6	3352.3	3131.3	2862.9	2810.3	2473.5
10°	3973.3	3962.8	3957.5	3933.9	3881.2	3815.4	3660.2	3428.6	3112.9	3052.4	2620.8
12.5°	4057.5	4057.5	4083.8	4123.3	4131.2	4110.2	3968.1	3736.5	3376.0	3312.9	2794.5
15°	3944.4	3957.5	4015.4	4141.7	4273.3	4360.1	4270.7	4054.9	3665.5	3597.0	2999.7
17.5°	3912.8	3926.0	3965.4	4076.0	4252.3	4483.8	4528.5	4362.8	3939.1	3881.2	3210.2
20°	4002.3	4015.4	4049.6	4144.4	4278.6	4512.8	4699.6	4660.1	4228.6	4168.0	3423.4
22.5°	4215.4	4223.3	4223.3	4297.0	4415.4	4589.1	4807.5	4941.7	4525.9	4460.1	3633.9
25°	4673.3	4657.5	4594.3	4557.5	4633.8	4775.9	4944.3	5189.0	4857.5	4768.0	3860.2
27.5°	5273.2	5325.8	5173.2	4996.9	4939.0	5020.6	5136.4	5407.4	5178.5	5083.8	4065.4
30°	6086.3	6065.2	5865.3	5612.7	5362.7	5333.7	5373.2	5594.2	5499.5	5410.0	4294.4
32.5°	6754.7	6794.1	6583.6	6275.8	5902.1	5725.8	5683.7	5817.9	5841.6	5783.7	4565.4
35°	7441.4	7483.5	7278.3	6936.2	6491.5	6196.8	6075.8	6094.2	6265.2	6191.6	4849.6
37.5°	8057.2	8094.0	7891.4	7541.4	7096.7	6736.2	6562.6	6420.5	6675.7	6609.9	5149.5
40°	8525.6	8530.8	8394.0	8080.9	7659.8	7286.2	7088.8	6809.9	7109.9	7065.2	5462.7
42.5°	8857.1	8867.6	8767.6	8499.2	8109.8	7762.5	7602.0	7270.4	7609.8	7570.4	5825.8
45°	9012.4	9030.8	9020.2	8772.9	8449.2	8149.3	8096.6	7759.8	8157.2	8120.3	6244.2
47.5°	8865.0	8865.0	8999.2	8965.0	8667.6	8467.7	8528.2	8270.3	8751.9	8717.6	6670.5
50°	8251.9	8259.8	8533.4	8925.5	8751.9	8707.1	8896.6	8770.3	9291.3	9312.3	7180.9
52.5°	6641.5	6628.4	7552.0	8304.5	8694.0	8815.0	9236.0	9280.8	9938.6	10001.7	7688.8
55°	4962.7	4954.8	5839.0	7204.6	8288.7	8759.7	9425.5	9736.0	10491.2	10530.6	8067.7
57.5°	3928.6	3907.5	4394.3	5807.4	7373.0	8512.4	9433.4	9822.8	10799.0	10867.5	8436.1
60°	3020.8	3002.4	3365.5	4320.7	6075.8	7854.6	9207.1	9828.1	11096.4	11217.4	8930.8
62.5°	2160.3	2181.4	2460.3	3099.7	4673.3	6925.7	8912.4	9901.7	11625.3	11762.1	9633.4
65°	1457.8	1447.2	1678.8	2110.3	3323.4	5675.8	8459.8	10057.0	12577.8	12817.3	10475.4
67.5°	1013.1	1021.0	1126.2	1373.6	2110.3	4357.5	7707.2	10143.8	13561.9	13748.8	11064.8
70°	731.5	742.0	799.9	923.6	1289.4	2955.0	6515.2	9746.5	13827.7	13990.9	10654.3
72.5°	481.5	502.6	589.4	655.2	823.6	1849.8	4799.6	8396.6	12683.1	12804.1	8938.7
75°	260.5	265.8	378.9	489.4	586.8	1152.5	2862.9	5662.7	9488.6	9449.2	5894.2
77.5°	202.6	210.5	234.2	350.0	394.7	634.2	1131.5	2557.7	4494.3	4373.3	2010.3
80°	123.7	128.9	163.1	207.9	276.3	368.4	331.5	694.7	913.1	855.2	294.7
82.5°	73.7	78.9	97.4	173.7	218.4	173.7	115.8	168.4	171.0	168.4	73.7
85°	13.2	13.2	68.4	121.0	115.8	50.0	68.4	55.3	50.0	52.6	15.8
87.5°	0.0	0.0	26.3	36.8	52.6	18.4	26.3	13.2	13.2	13.2	7.9
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°	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6
2.5°	2134.0	2044.6	1860.4	1699.8	1539.3	1420.9	1331.5	1239.4	1207.8	1168.3	1147.3
5°	2170.9	1994.6	1628.8	1336.7	1089.4	899.9	778.9	705.2	657.8	623.6	615.7
7.5°	2226.1	1955.1	1442.0	1047.3	776.2	586.8	486.8	436.8	410.5	394.7	389.4
10°	2291.9	1920.9	1257.8	815.7	547.3	413.1	357.9	336.8	326.3	321.0	318.4
12.5°	2384.0	1907.7	1102.5	628.9	413.1	339.4	310.5	297.3	289.4	281.6	278.9
15°	2505.0	1913.0	960.4	486.8	342.1	302.6	278.9	265.8	255.2	247.3	247.3
17.5°	2631.3	1920.9	821.0	394.7	310.5	276.3	250.0	231.6	223.7	215.8	213.1
20°	2749.8	1918.2	686.8	336.8	281.6	247.3	221.0	202.6	189.5	181.6	181.6
22.5°	2862.9	1902.5	560.5	302.6	257.9	218.4	189.5	171.0	160.5	152.6	152.6
25°	2983.9	1870.9	457.9	276.3	228.9	192.1	163.1	144.7	136.8	128.9	128.9
27.5°	3078.7	1818.3	373.7	252.6	202.6	165.8	139.5	123.7	115.8	110.5	110.5
30°	3181.3	1741.9	310.5	226.3	176.3	142.1	118.4	105.3	97.4	94.7	94.7
32.5°	3294.4	1657.7	265.8	200.0	150.0	121.0	100.0	92.1	84.2	81.6	81.6
35°	3426.0	1584.1	239.5	173.7	131.6	102.6	86.8	78.9	73.7	73.7	73.7
37.5°	3576.0	1507.8	215.8	152.6	113.1	86.8	73.7	71.0	68.4	65.8	65.8
40°	3739.1	1426.2	194.7	134.2	97.4	73.7	63.2	63.2	60.5	60.5	60.5
42.5°	3923.3	1355.1	176.3	118.4	84.2	63.2	55.3	55.3	52.6	52.6	52.6
45°	4123.3	1289.4	160.5	105.3	73.7	55.3	50.0	47.4	44.7	44.7	44.7
47.5°	4360.1	1252.5	147.4	92.1	63.2	47.4	42.1	39.5	36.8	34.2	34.2
50°	4662.7	1268.3	134.2	76.3	55.3	39.5	34.2	31.6	28.9	26.3	26.3
52.5°	4902.2	1260.4	115.8	65.8	44.7	31.6	26.3	23.7	21.1	18.4	18.4
55°	5075.9	1228.8	100.0	55.3	34.2	26.3	21.1	15.8	13.2	13.2	13.2
57.5°	5246.9	1197.3	84.2	44.7	26.3	18.4	13.2	10.5	10.5	10.5	10.5
60°	5512.7	1152.5	73.7	36.8	21.1	13.2	7.9	7.9	5.3	5.3	5.3
62.5°	5836.3	1097.3	60.5	31.6	15.8	10.5	5.3	5.3	0.0	0.0	0.0
65°	6191.6	999.9	50.0	23.7	13.2	7.9	5.3	0.0	0.0	0.0	0.0
67.5°	6110.0	802.6	42.1	15.8	10.5	5.3	2.6	0.0	0.0	0.0	0.0
70°	5404.8	542.1	34.2	13.2	7.9	5.3	2.6	0.0	0.0	0.0	0.0
72.5°	4233.8	321.0	23.7	10.5	5.3	2.6	0.0	0.0	0.0	0.0	0.0
75°	2710.3	160.5	15.8	7.9	5.3	2.6	0.0	0.0	0.0	0.0	0.0
77.5°	907.8	78.9	10.5	5.3	2.6	0.0	0.0	0.0	0.0	0.0	0.0
80°	128.9	26.3	5.3	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	28.9	10.5	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.5	5.3	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.3	2.6	0.0	0.0	0.0	0.0	0.0	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)