

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: P400038

Luminaire Tested: **ARCH-L-PA3-220-830-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400038
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-PA3-220-830-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 945mA 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: 19629 lumens
Efficiency: N/A
Efficacy: 88.4 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

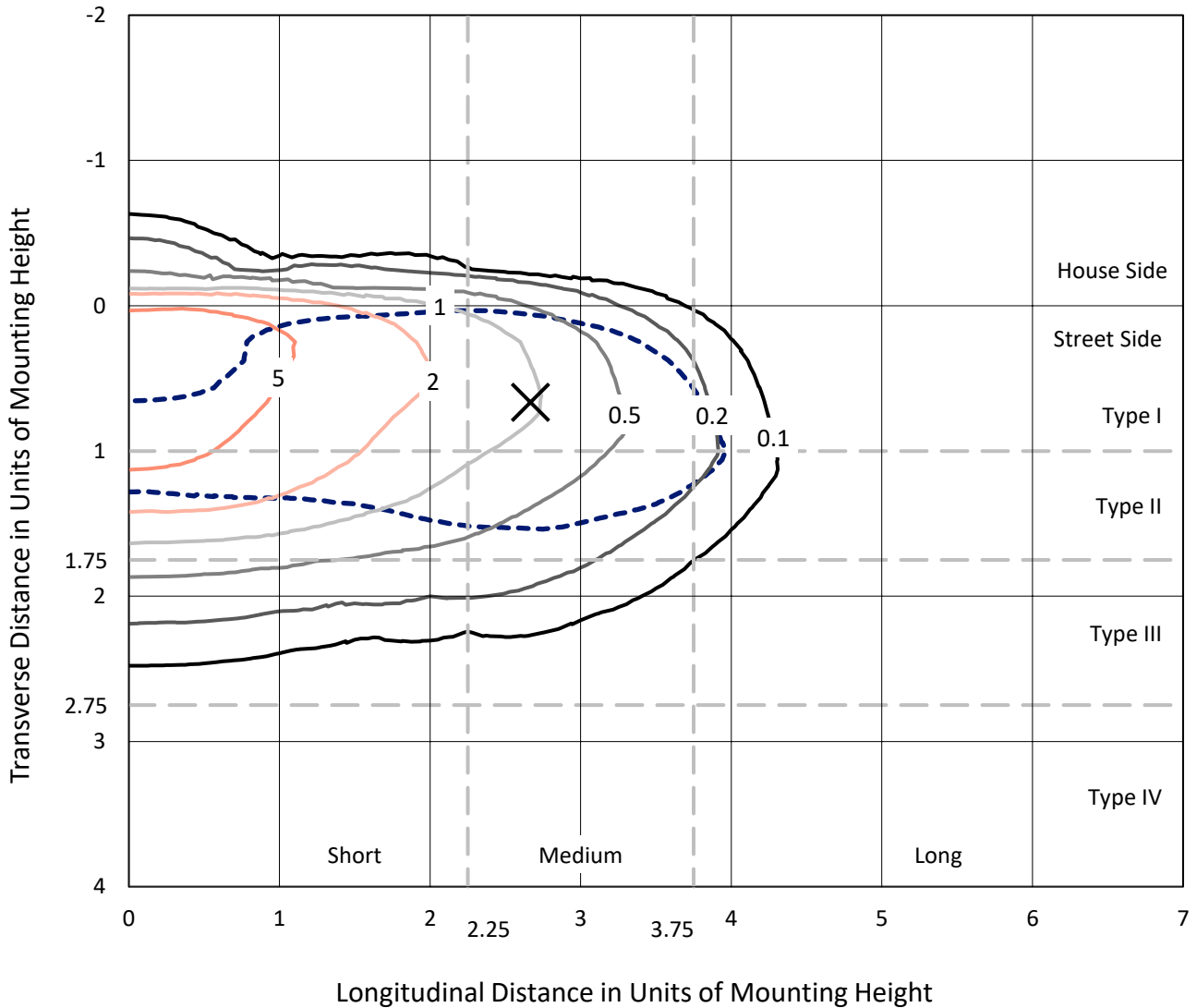
Input Watts (W): 222
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

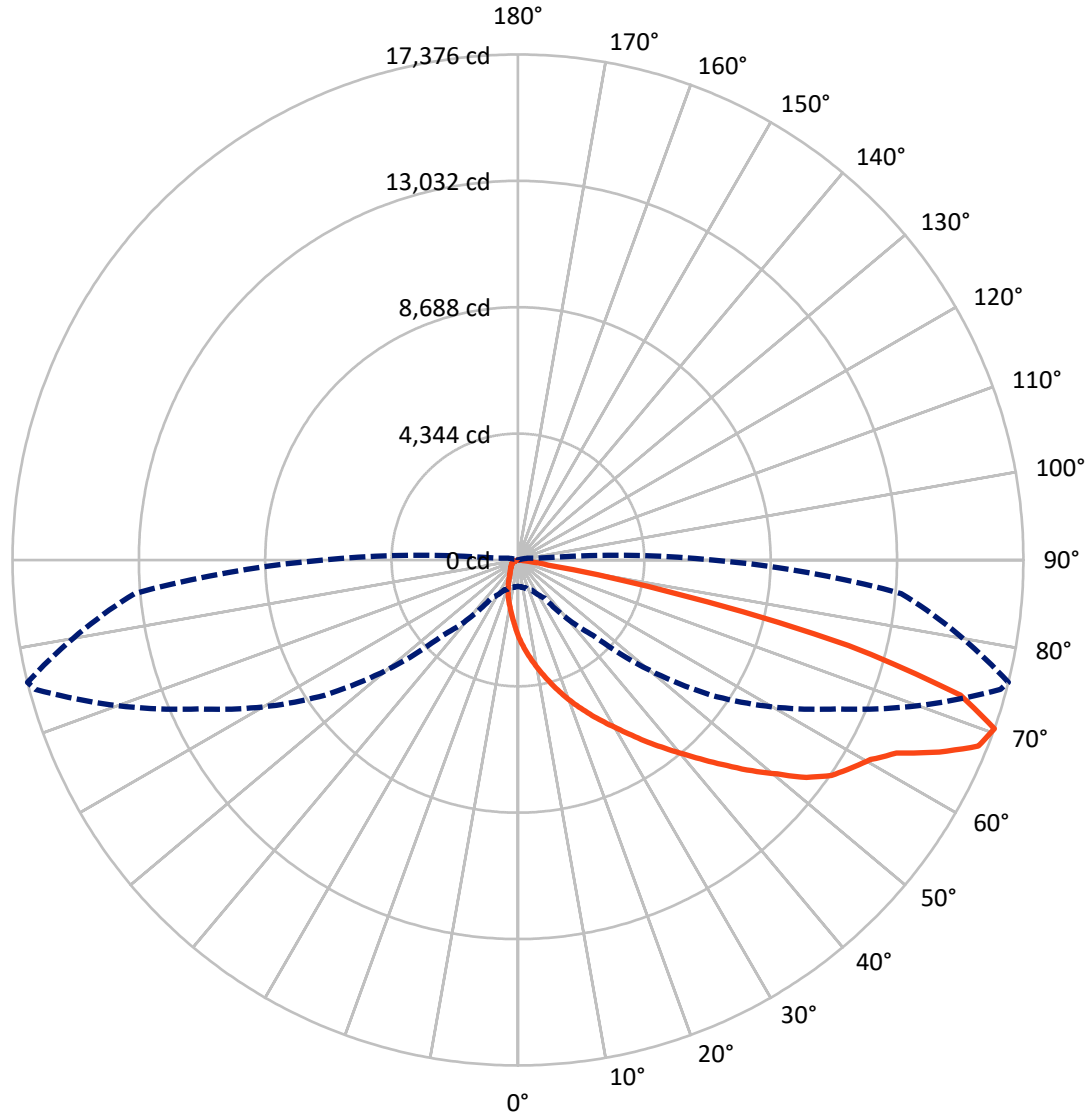
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8 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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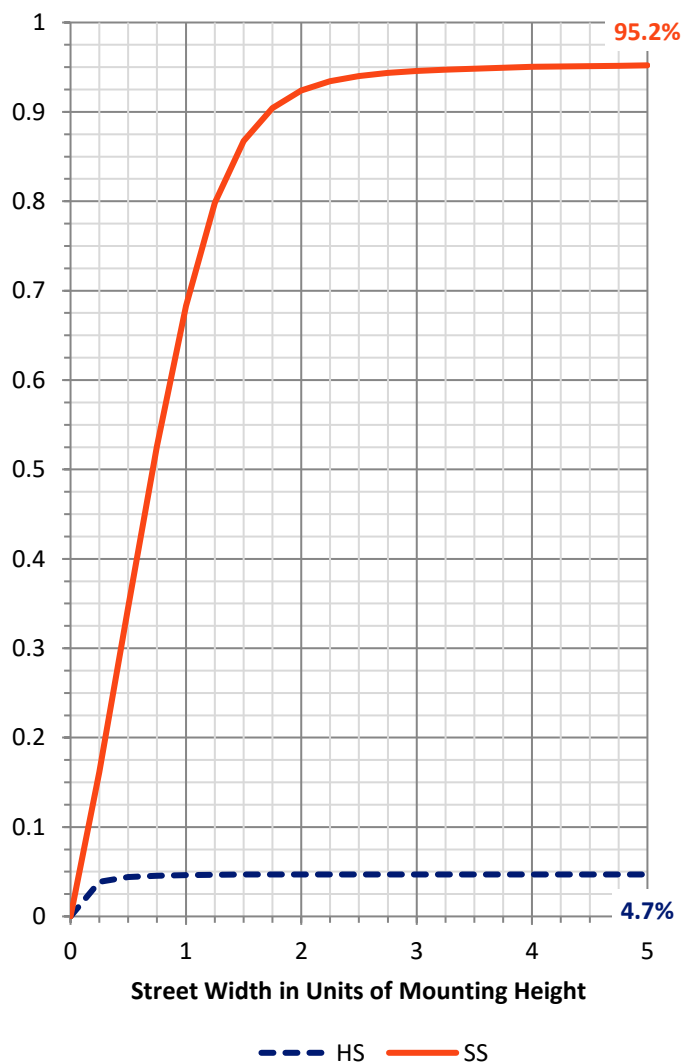
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	925.8	0.0	925.8
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	18703.2	0.0	18703.2
	% Fixture	95.3	0.0	95.3
Total	Lumens	19629.0	0.0	19629.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	247.5	1.3
10°-20°	798.9	4.1
20°-30°	1487.8	7.6
30°-40°	2631.6	13.4
40°-50°	4024.4	20.5
50°-60°	4562.7	23.2
60°-70°	3911.4	19.9
70°-80°	1894.4	9.7
80°-90°	70.3	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°	19629.0	100.0
0°-180°	19629.0	100.0

Coefficient of Utilization



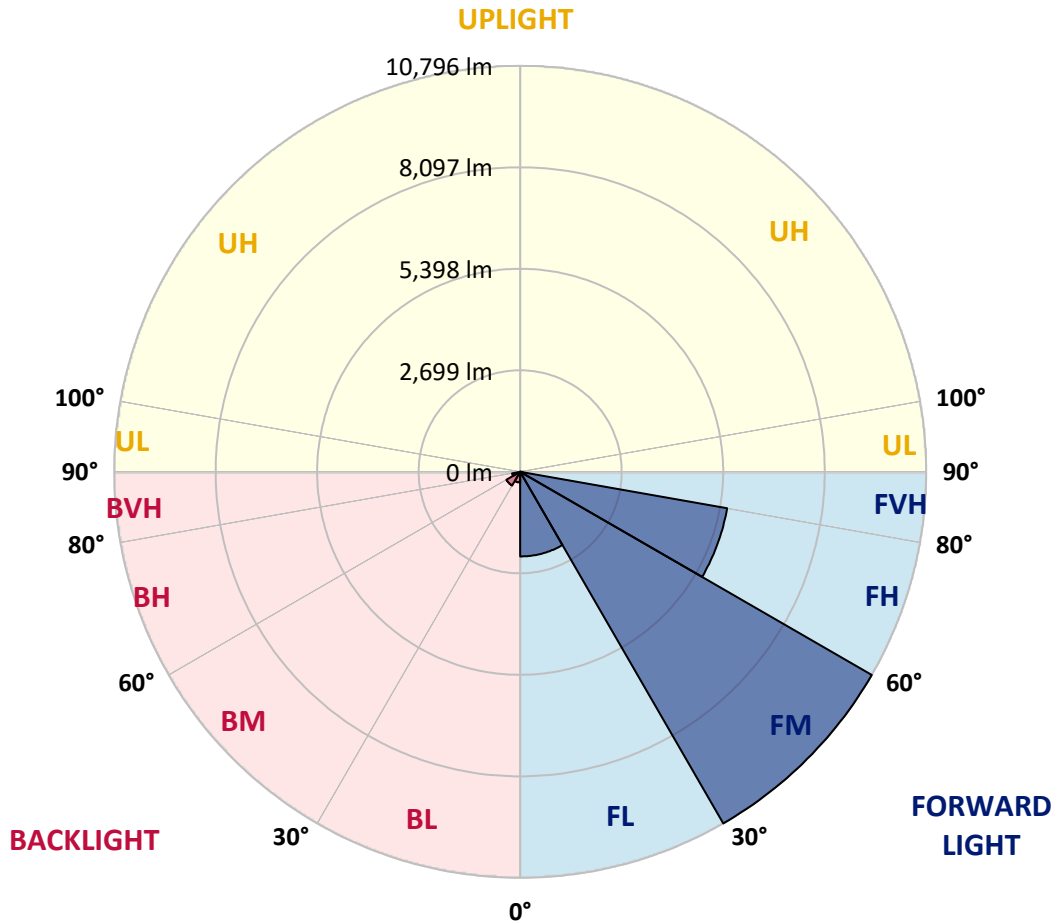
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2250.2	11.5			
FM (30°-60°)	10796.1	55.0			
FH (60°-80°)	5587.8	28.5			G3/7500
FVH (80°-90°)	69.1	0.4			G1/100
BL (0°-30°)	284.0	1.4	B1/500		
BM (30°-60°)	422.6	2.2	B1/1000		
BH (60°-80°)	218.0	1.1	B1/500		G1/500
BVH (80°-90°)	1.2	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-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5
2.5°	3591.5	3571.9	3552.3	3477.1	3408.5	3346.4	3228.8	3075.2	2937.9	2908.5	2748.4
5°	4219.0	4196.1	4166.7	4091.5	4003.3	3898.7	3725.5	3490.2	3248.4	3196.1	2898.7
7.5°	4643.8	4624.2	4581.7	4545.8	4457.5	4356.2	4163.4	3888.9	3555.6	3490.2	3071.9
10°	4934.7	4921.6	4915.1	4885.7	4820.3	4738.6	4545.8	4258.2	3866.0	3790.9	3254.9
12.5°	5039.2	5039.2	5071.9	5120.9	5130.8	5104.6	4928.1	4640.6	4192.8	4114.4	3470.6
15°	4898.7	4915.1	4987.0	5143.8	5307.2	5415.1	5304.0	5036.0	4552.3	4467.3	3725.5
17.5°	4859.5	4875.8	4924.9	5062.1	5281.1	5568.7	5624.2	5418.3	4892.2	4820.3	3987.0
20°	4970.6	4987.0	5029.4	5147.1	5313.8	5604.6	5836.6	5787.6	5251.7	5176.5	4251.7
22.5°	5235.3	5245.1	5245.1	5336.6	5483.7	5699.4	5970.6	6137.3	5621.0	5539.3	4513.1
25°	5804.0	5784.4	5705.9	5660.2	5754.9	5931.4	6140.6	6444.5	6032.7	5921.6	4794.1
27.5°	6549.1	6614.4	6424.9	6205.9	6134.0	6235.3	6379.1	6715.7	6431.4	6313.8	5049.1
30°	7558.9	7532.7	7284.4	6970.6	6660.2	6624.2	6673.2	6947.8	6830.1	6719.0	5333.4
32.5°	8388.9	8438.0	8176.5	7794.2	7330.1	7111.2	7058.9	7225.5	7254.9	7183.1	5670.0
35°	9241.9	9294.2	9039.3	8614.4	8062.1	7696.1	7545.8	7568.7	7781.1	7689.6	6022.9
37.5°	10006.6	10052.4	9800.7	9366.1	8813.8	8366.1	8150.4	7973.9	8290.9	8209.2	6395.5
40°	10588.3	10594.8	10424.9	10036.0	9513.1	9049.1	8804.0	8457.6	8830.1	8774.6	6784.4
42.5°	11000.1	11013.1	10889.0	10555.6	10072.0	9640.6	9441.2	9029.5	9451.0	9402.0	7235.3
45°	11192.9	11215.8	11202.7	10895.5	10493.5	10121.0	10055.6	9637.3	10130.8	10085.0	7755.0
47.5°	11009.9	11009.9	11176.5	11134.1	10764.8	10516.4	10591.6	10271.3	10869.4	10826.9	8284.4
50°	10248.4	10258.2	10598.1	11085.0	10869.4	10813.8	11049.1	10892.2	11539.3	11565.4	8918.4
52.5°	8248.4	8232.1	9379.1	10313.8	10797.5	10947.8	11470.7	11526.2	12343.2	12421.6	9549.1
55°	6163.4	6153.6	7251.7	8947.8	10294.2	10879.2	11706.0	12091.6	13029.5	13078.5	10019.7
57.5°	4879.1	4853.0	5457.6	7212.5	9156.9	10572.0	11715.8	12199.4	13411.9	13496.8	10477.2
60°	3751.7	3728.8	4179.8	5366.0	7545.8	9755.0	11434.7	12206.0	13781.1	13931.5	11091.6
62.5°	2683.0	2709.2	3055.6	3849.7	5804.0	8601.4	11068.7	12297.5	14438.0	14607.9	11964.1
65°	1810.5	1797.4	2085.0	2620.9	4127.5	7049.1	10506.6	12490.3	15621.0	15918.4	13009.9
67.5°	1258.2	1268.0	1398.7	1705.9	2620.9	5411.8	9572.0	12598.1	16843.2	17075.3	13741.9
70°	908.5	921.6	993.5	1147.1	1601.3	3670.0	8091.6	12104.7	17173.3	17375.9	13232.1
72.5°	598.0	624.2	732.0	813.7	1022.9	2297.4	5960.8	10428.2	15751.7	15902.1	11101.4
75°	323.5	330.1	470.6	607.8	728.8	1431.4	3555.6	7032.7	11784.4	11735.4	7320.3
77.5°	251.6	261.4	290.9	434.6	490.2	787.6	1405.2	3176.5	5581.7	5431.4	2496.7
80°	153.6	160.1	202.6	258.2	343.1	457.5	411.8	862.8	1134.0	1062.1	366.0
82.5°	91.5	98.0	120.9	215.7	271.2	215.7	143.8	209.2	212.4	209.2	91.5
85°	16.3	16.3	85.0	150.3	143.8	62.1	85.0	68.6	62.1	65.4	19.6
87.5°	0.0	0.0	32.7	45.8	65.4	22.9	32.7	16.3	16.3	16.3	9.8
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°	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5	2627.5
2.5°	2650.3	2539.2	2310.5	2111.1	1911.8	1764.7	1653.6	1539.2	1500.0	1451.0	1424.8
5°	2696.1	2477.1	2022.9	1660.1	1352.9	1117.7	967.3	875.8	817.0	774.5	764.7
7.5°	2764.7	2428.1	1790.9	1300.7	964.1	728.8	604.6	542.5	509.8	490.2	483.7
10°	2846.4	2385.6	1562.1	1013.1	679.7	513.1	444.4	418.3	405.2	398.7	395.4
12.5°	2960.8	2369.3	1369.3	781.1	513.1	421.6	385.6	369.3	359.5	349.7	346.4
15°	3111.1	2375.8	1192.8	604.6	424.8	375.8	346.4	330.1	317.0	307.2	307.2
17.5°	3268.0	2385.6	1019.6	490.2	385.6	343.1	310.5	287.6	277.8	268.0	264.7
20°	3415.1	2382.4	852.9	418.3	349.7	307.2	274.5	251.6	235.3	225.5	225.5
22.5°	3555.6	2362.8	696.1	375.8	320.3	271.2	235.3	212.4	199.3	189.5	189.5
25°	3705.9	2323.5	568.6	343.1	284.3	238.6	202.6	179.7	169.9	160.1	160.1
27.5°	3823.6	2258.2	464.1	313.7	251.6	205.9	173.2	153.6	143.8	137.3	137.3
30°	3951.0	2163.4	385.6	281.0	219.0	176.5	147.1	130.7	120.9	117.6	117.6
32.5°	4091.5	2058.8	330.1	248.4	186.3	150.3	124.2	114.4	104.6	101.3	101.3
35°	4254.9	1967.3	297.4	215.7	163.4	127.5	107.8	98.0	91.5	91.5	91.5
37.5°	4441.2	1872.6	268.0	189.5	140.5	107.8	91.5	88.2	85.0	81.7	81.7
40°	4643.8	1771.3	241.8	166.7	120.9	91.5	78.4	78.4	75.2	75.2	75.2
42.5°	4872.6	1683.0	219.0	147.1	104.6	78.4	68.6	68.6	65.4	65.4	65.4
45°	5120.9	1601.3	199.3	130.7	91.5	68.6	62.1	58.8	55.6	55.6	55.6
47.5°	5415.1	1555.6	183.0	114.4	78.4	58.8	52.3	49.0	45.8	42.5	42.5
50°	5790.9	1575.2	166.7	94.8	68.6	49.0	42.5	39.2	35.9	32.7	32.7
52.5°	6088.3	1565.4	143.8	81.7	55.6	39.2	32.7	29.4	26.1	22.9	22.9
55°	6304.0	1526.2	124.2	68.6	42.5	32.7	26.1	19.6	16.3	16.3	16.3
57.5°	6516.4	1486.9	104.6	55.6	32.7	22.9	16.3	13.1	13.1	13.1	13.1
60°	6846.4	1431.4	91.5	45.8	26.1	16.3	9.8	9.8	6.5	6.5	6.5
62.5°	7248.4	1362.8	75.2	39.2	19.6	13.1	6.5	6.5	0.0	0.0	0.0
65°	7689.6	1241.8	62.1	29.4	16.3	9.8	6.5	0.0	0.0	0.0	0.0
67.5°	7588.3	996.7	52.3	19.6	13.1	6.5	3.3	0.0	0.0	0.0	0.0
70°	6712.5	673.2	42.5	16.3	9.8	6.5	3.3	0.0	0.0	0.0	0.0
72.5°	5258.2	398.7	29.4	13.1	6.5	3.3	0.0	0.0	0.0	0.0	0.0
75°	3366.0	199.3	19.6	9.8	6.5	3.3	0.0	0.0	0.0	0.0	0.0
77.5°	1127.5	98.0	13.1	6.5	3.3	0.0	0.0	0.0	0.0	0.0	0.0
80°	160.1	32.7	6.5	3.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	35.9	13.1	3.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.1	6.5	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.5	3.3	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)