

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: P236993

Luminaire Tested: **ARCH-L-AF72-200-D-U-T2R-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P236993
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-200-D-U-T2R-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 860mA 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: 19488 lumens
Efficiency: N/A
Efficacy: 97.0 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

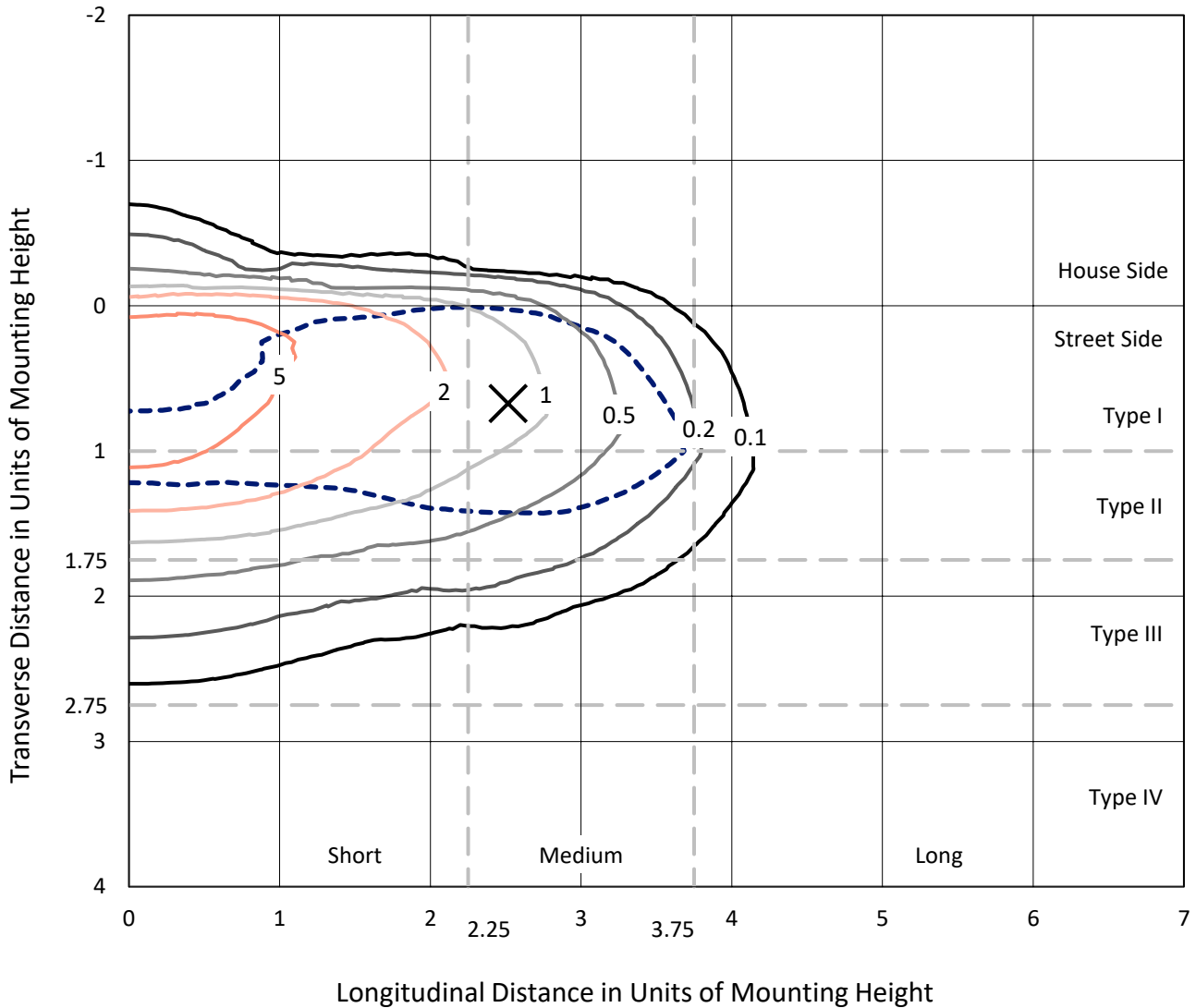
Input Watts (W): 201
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

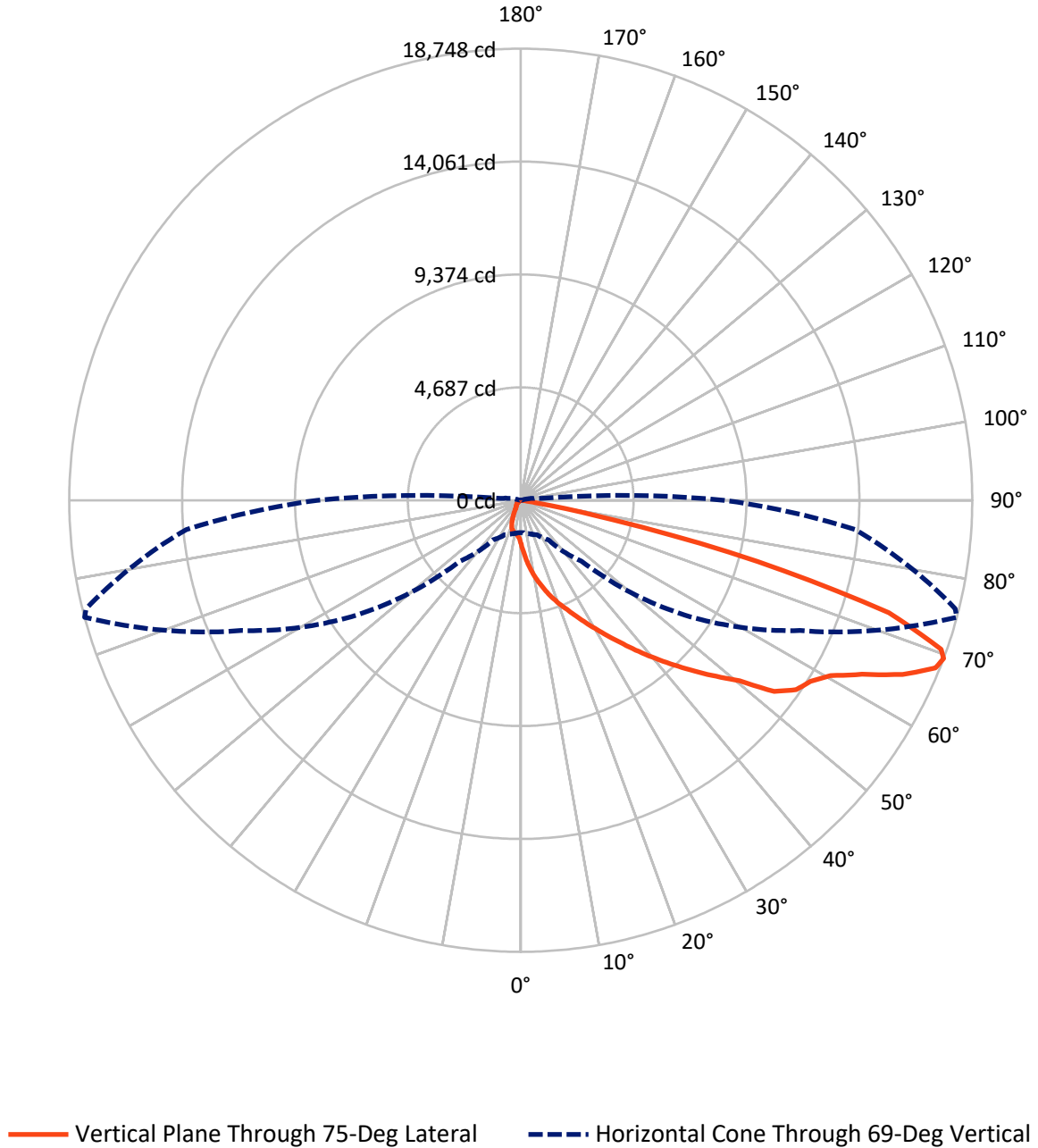
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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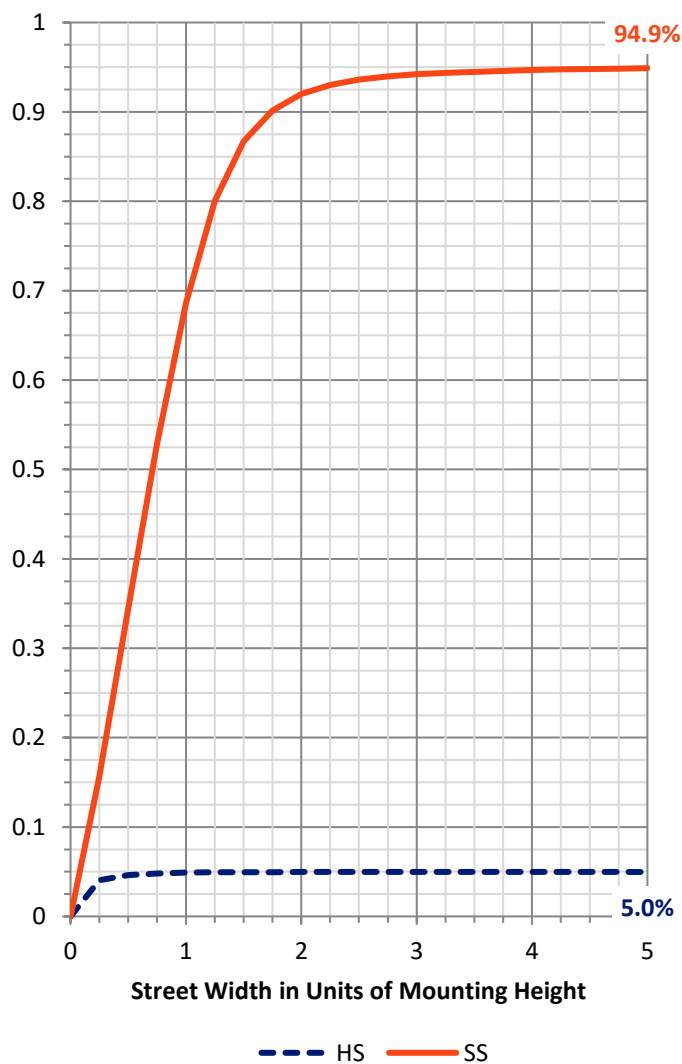
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	972.3	0.0	972.3
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	18515.7	0.0	18515.7
	% Fixture	95.0	0.0	95.0
Total	Lumens	19488.0	0.0	19488.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.4	1.1
10°-20°	755.9	3.9
20°-30°	1443.1	7.4
30°-40°	2588.7	13.3
40°-50°	3966.1	20.4
50°-60°	4609.6	23.7
60°-70°	4081.9	20.9
70°-80°	1760.7	9.0
80°-90°	70.5	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°	19488.0	100.0
0°-180°	19488.0	100.0

Coefficient of Utilization



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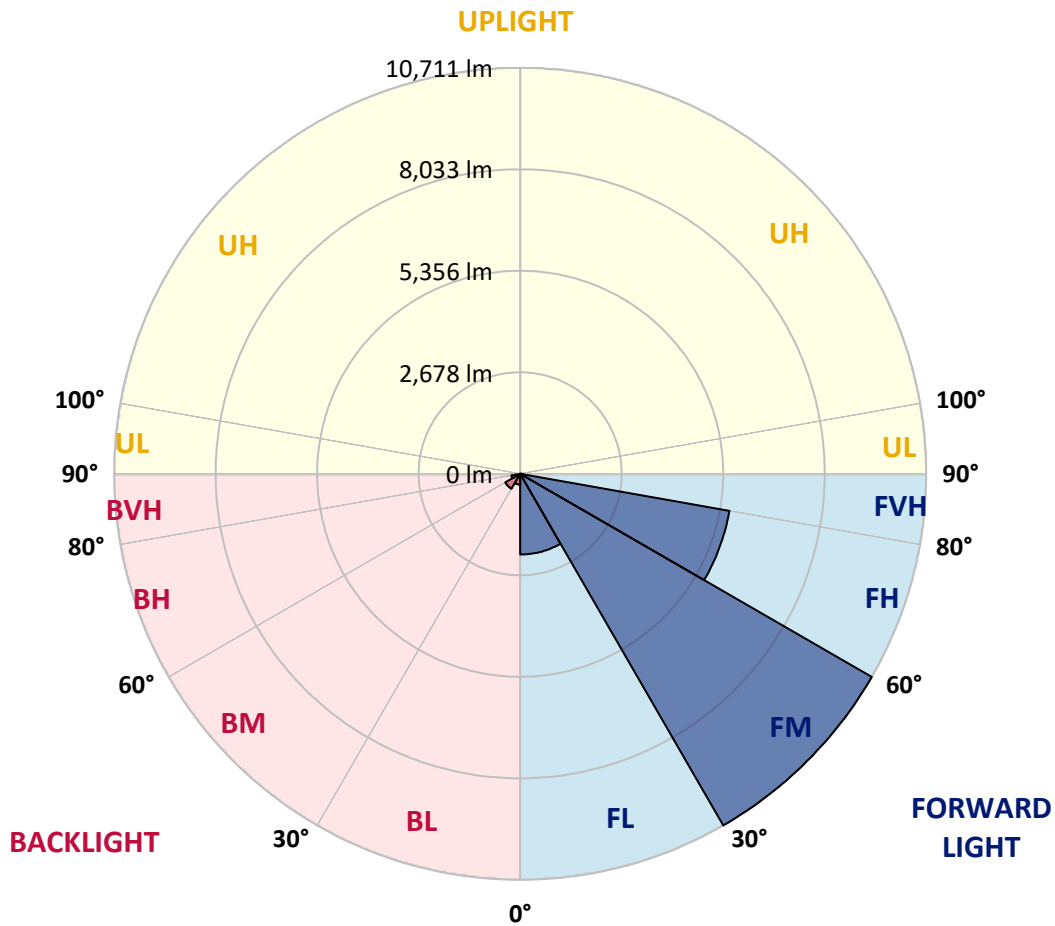
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2128.1	10.9			
FM (30°-60°)	10711.1	55.0			
FH (60°-80°)	5607.0	28.8			G3/7500
FVH (80°-90°)	69.5	0.4			G1/100
BL (0°-30°)	282.4	1.4	B1/500		
BM (30°-60°)	453.3	2.3	B1/1000		
BH (60°-80°)	235.6	1.2	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-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1813.4	1813.4	1813.4	1813.4	1813.4	1813.4	1813.4	1813.4	1813.4	1813.4	1813.4
2.5°	2987.2	2957.7	2928.3	2894.6	2818.9	2688.5	2524.4	2347.7	2128.9	2091.0	1914.3
5°	3626.7	3614.1	3584.6	3538.3	3454.2	3311.2	3126.0	2865.2	2499.1	2436.0	2061.6
7.5°	4076.9	4068.5	4043.2	3988.5	3912.8	3769.8	3576.2	3294.3	2869.4	2797.9	2246.7
10°	4480.8	4476.6	4455.5	4405.1	4329.3	4173.7	3967.5	3673.0	3222.8	3142.9	2461.3
12.5°	4846.8	4851.0	4842.6	4817.4	4762.7	4615.4	4379.8	4060.1	3563.6	3475.2	2717.9
15°	5061.4	5074.0	5107.7	5158.2	5175.0	5057.2	4813.2	4459.7	3912.8	3837.1	3012.4
17.5°	4989.9	5002.5	5107.7	5280.2	5444.3	5461.1	5242.3	4838.4	4257.8	4182.1	3302.7
20°	4817.4	4834.2	4943.6	5179.2	5499.0	5721.9	5633.6	5250.7	4586.0	4493.4	3580.4
22.5°	5010.9	5010.9	5044.6	5187.6	5477.9	5827.1	5944.9	5663.0	4922.6	4809.0	3858.1
25°	5675.7	5663.0	5591.5	5532.6	5625.2	5936.5	6180.5	6083.8	5318.0	5187.6	4152.6
27.5°	6517.1	6576.0	6441.4	6226.8	6016.5	6151.1	6390.9	6500.3	5755.6	5621.0	4455.5
30°	7459.6	7484.8	7324.9	7038.8	6668.6	6538.2	6639.1	6857.9	6231.0	6083.8	4771.1
32.5°	8309.4	8288.4	8153.8	7855.1	7396.5	7114.6	6958.9	7144.0	6748.5	6580.2	5095.1
35°	9062.5	9079.4	8915.3	8570.3	8120.1	7821.4	7451.1	7468.0	7329.1	7135.6	5469.5
37.5°	9739.9	9710.5	9554.8	9209.8	8801.7	8477.7	8086.5	7804.6	7964.4	7762.5	5890.2
40°	10291.1	10261.6	10097.5	9761.0	9378.1	9113.0	8805.9	8254.7	8633.4	8402.0	6340.4
42.5°	10728.6	10695.0	10556.1	10232.2	9861.9	9626.3	9479.1	8810.1	9348.6	9117.2	6845.3
45°	10943.2	10913.8	10829.6	10585.6	10261.6	10055.5	10127.0	9449.6	10114.4	9920.8	7400.7
47.5°	10690.8	10678.2	10774.9	10732.9	10547.7	10438.3	10686.6	10148.0	10918.0	10728.6	8040.2
50°	9925.0	9946.1	10228.0	10577.2	10665.5	10796.0	11145.2	10884.3	11780.5	11578.5	8776.5
52.5°	8036.0	8179.0	9028.9	9870.4	10522.5	11014.7	11683.7	11936.1	13185.7	12988.0	9925.0
55°	5999.6	6058.5	6984.1	8423.0	9946.1	10997.9	12083.4	12554.6	13879.9	13678.0	10228.0
57.5°	4758.5	4779.5	5238.1	6706.5	8759.6	10619.3	12293.8	12777.6	14182.8	14014.6	10678.2
60°	3736.1	3761.3	4093.7	5103.5	7089.3	9596.9	11990.8	12971.1	14776.1	14641.4	11464.9
62.5°	2907.3	2932.5	3134.4	3727.7	5318.0	8023.3	11380.8	13282.5	15903.6	15840.5	12752.4
65°	2250.9	2259.3	2398.2	2675.8	3757.1	6319.4	10636.1	13572.8	17426.7	17372.0	13795.8
67.5°	1661.9	1674.5	1771.3	1943.8	2537.0	4539.7	9416.0	13349.8	18575.3	18415.4	14174.4
69°	1342.1	1354.8	1438.9	1577.7	2002.7	3576.2	8301.0	12798.6	18747.8	18596.3	13934.6
70°	1148.6	1157.0	1241.2	1359.0	1708.2	3037.7	7417.5	12323.2	18520.6	18373.3	13387.7
72.5°	736.3	778.4	862.5	938.2	1131.8	2011.1	5006.7	10219.6	15979.4	15726.9	10484.6
75°	408.1	420.7	572.2	664.8	753.1	1308.5	2785.2	6374.1	10164.9	9988.2	5608.3
77.5°	336.6	345.0	403.9	504.9	504.9	732.1	1051.8	2511.8	3866.5	3487.9	1518.8
80°	235.6	244.0	307.1	332.4	361.8	412.3	340.8	551.2	597.4	530.1	227.2
82.5°	164.1	172.5	210.4	273.5	290.3	193.5	126.2	164.1	172.5	172.5	88.4
85°	29.5	42.1	155.7	227.2	172.5	58.9	71.5	58.9	54.7	58.9	21.0
87.5°	0.0	0.0	96.8	109.4	92.6	25.2	29.5	21.0	12.6	16.8	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°	1813.4	1813.4	1813.4	1813.4	1813.4	1813.4	1813.4	1813.4	1813.4	1813.4	1813.4
2.5°	1826.0	1737.6	1586.2	1476.8	1384.2	1312.7	1283.2	1236.9	1203.3	1220.1	1199.1
5°	1876.5	1720.8	1476.8	1321.1	1211.7	1119.1	1043.4	984.5	938.2	929.8	921.4
7.5°	1956.4	1733.4	1413.7	1220.1	1056.0	913.0	795.2	706.8	639.5	639.5	614.3
10°	2065.8	1767.1	1375.8	1119.1	875.1	681.6	563.8	479.6	446.0	441.8	433.4
12.5°	2217.3	1830.2	1346.3	988.7	681.6	496.5	424.9	395.5	382.9	378.7	374.5
15°	2423.4	1922.7	1312.7	828.8	517.5	408.1	378.7	353.4	340.8	336.6	332.4
17.5°	2621.2	2006.9	1241.2	664.8	420.7	370.2	336.6	315.5	298.7	294.5	294.5
20°	2806.3	2078.4	1119.1	517.5	378.7	332.4	298.7	273.5	256.6	252.4	252.4
22.5°	2999.8	2137.3	967.7	420.7	345.0	294.5	260.9	235.6	218.8	214.6	210.4
25°	3206.0	2179.4	795.2	374.5	311.3	260.9	223.0	202.0	189.3	185.1	180.9
27.5°	3429.0	2196.2	631.1	340.8	273.5	227.2	193.5	172.5	164.1	159.9	159.9
30°	3630.9	2179.4	488.0	302.9	239.8	197.7	168.3	151.5	143.0	138.8	138.8
32.5°	3841.3	2137.3	391.3	269.3	210.4	168.3	143.0	130.4	126.2	122.0	122.0
35°	4064.3	2082.6	336.6	239.8	180.9	147.3	126.2	117.8	113.6	109.4	109.4
37.5°	4325.1	2015.3	307.1	214.6	159.9	130.4	109.4	105.2	101.0	101.0	101.0
40°	4619.6	1931.2	286.1	193.5	143.0	113.6	96.8	92.6	88.4	88.4	88.4
42.5°	4931.0	1834.4	265.1	172.5	126.2	96.8	84.1	84.1	79.9	79.9	75.7
45°	5280.2	1737.6	244.0	151.5	109.4	84.1	71.5	67.3	67.3	63.1	63.1
47.5°	5692.5	1649.3	223.0	134.6	96.8	71.5	63.1	58.9	54.7	50.5	50.5
50°	6273.1	1640.9	197.7	117.8	88.4	58.9	50.5	46.3	42.1	37.9	37.9
52.5°	6849.5	1565.1	168.3	96.8	71.5	50.5	37.9	33.7	29.5	29.5	25.2
55°	6979.9	1438.9	147.3	84.1	54.7	37.9	29.5	21.0	21.0	16.8	16.8
57.5°	7266.0	1380.0	126.2	67.3	42.1	29.5	16.8	12.6	12.6	12.6	12.6
60°	7829.8	1363.2	109.4	58.9	29.5	21.0	12.6	8.4	8.4	4.2	4.2
62.5°	8608.2	1346.3	92.6	50.5	21.0	12.6	8.4	4.2	0.0	0.0	0.0
65°	9037.3	1232.7	75.7	37.9	16.8	12.6	4.2	0.0	0.0	0.0	0.0
67.5°	8923.7	1018.2	67.3	25.2	12.6	8.4	4.2	0.0	0.0	0.0	0.0
69°	8448.3	858.3	54.7	21.0	12.6	8.4	4.2	0.0	0.0	0.0	0.0
70°	7876.1	740.5	50.5	16.8	8.4	4.2	4.2	0.0	0.0	0.0	0.0
72.5°	5591.5	387.1	33.7	12.6	8.4	4.2	0.0	0.0	0.0	0.0	0.0
75°	2612.7	172.5	21.0	8.4	4.2	4.2	0.0	0.0	0.0	0.0	0.0
77.5°	576.4	79.9	12.6	8.4	4.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	109.4	29.5	8.4	4.2	4.2	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	37.9	12.6	4.2	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.6	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.2	0.0	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)