

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: P236943

Luminaire Tested: **ARCH-L-AF72-100-D-U-T2R-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P236943
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-100-D-U-T2R-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 440mA 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: 10866.9 lumens
Efficiency: N/A
Efficacy: 106.5 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

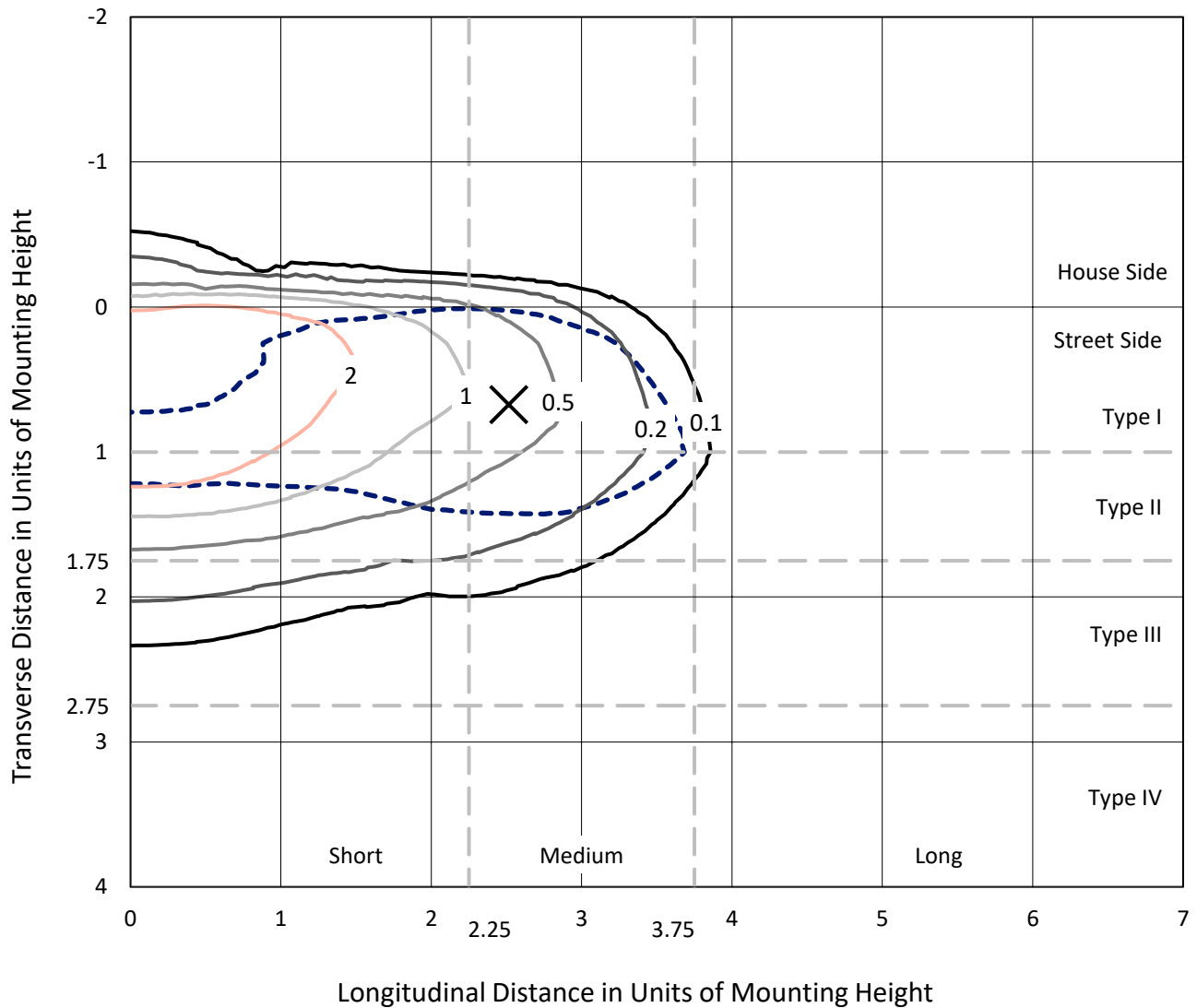
Input Watts (W): 102
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

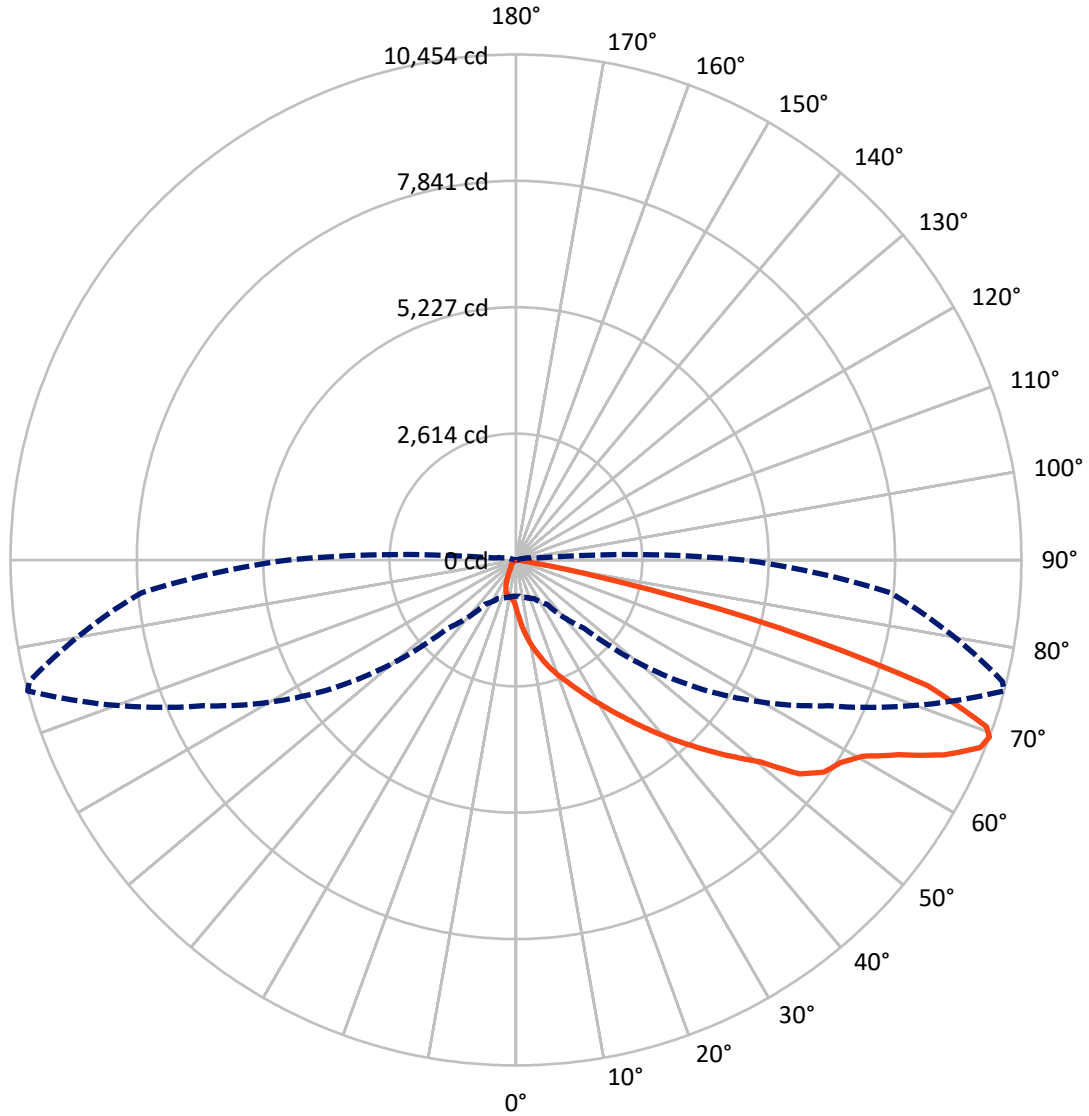
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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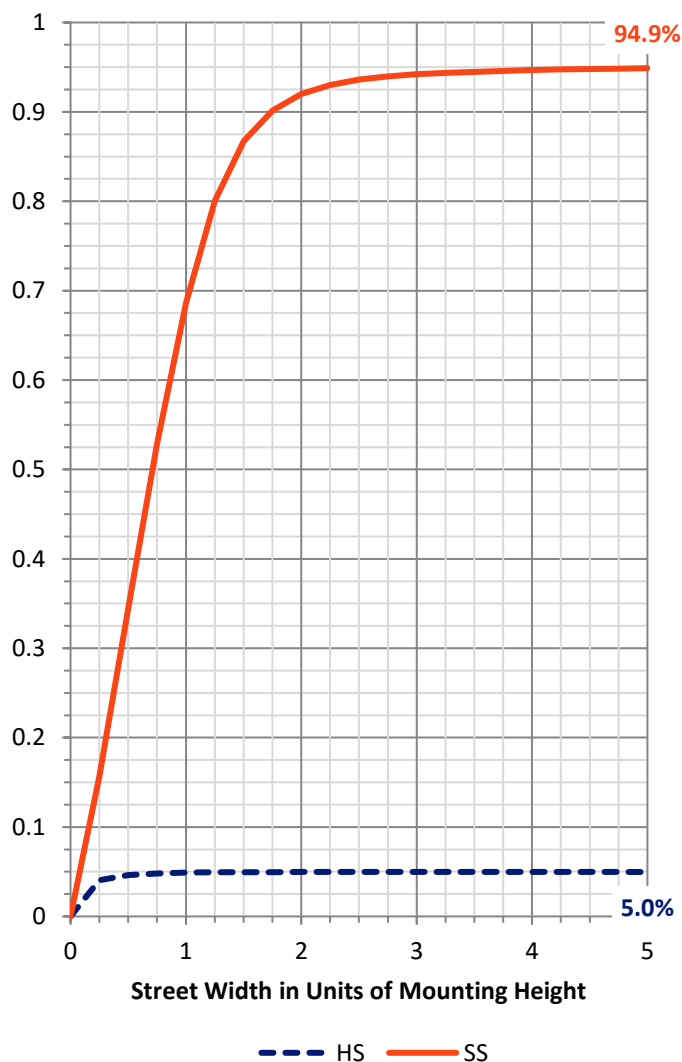
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	542.2	0.0	542.2
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	10324.7	0.0	10324.7
	% Fixture	95.0	0.0	95.0
Total	Lumens	10866.9	0.0	10866.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.9	1.1
10°-20°	421.5	3.9
20°-30°	804.7	7.4
30°-40°	1443.5	13.3
40°-50°	2211.6	20.4
50°-60°	2570.4	23.7
60°-70°	2276.1	20.9
70°-80°	981.8	9.0
80°-90°	39.3	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°	10866.9	100.0
0°-180°	10866.9	100.0

Coefficient of Utilization



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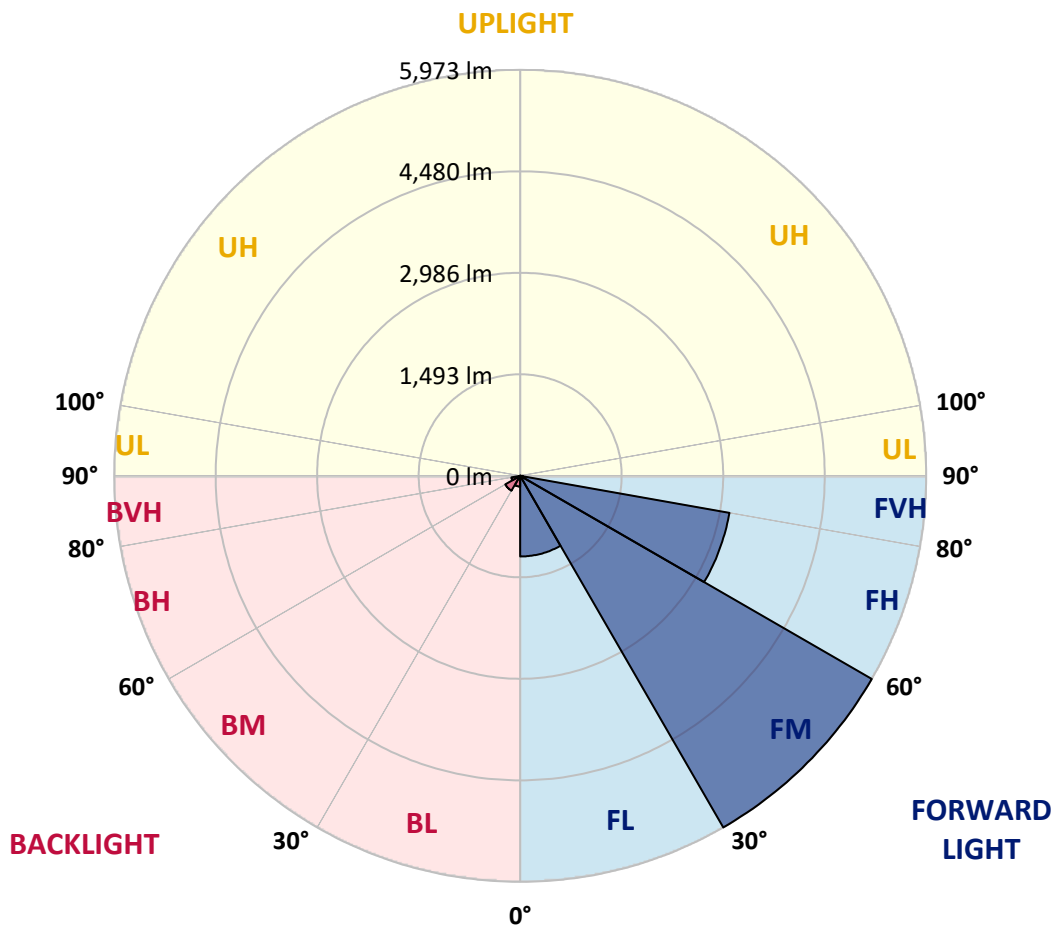
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1186.7	10.9			
FM (30°-60°)	5972.7	55.0			
FH (60°-80°)	3126.6	28.8			G2/5000
FVH (80°-90°)	38.8	0.4			G1/100
BL (0°-30°)	157.5	1.4	B1/500		
BM (30°-60°)	252.8	2.3	B1/1000		
BH (60°-80°)	131.3	1.2	B1/500		G1/500
BVH (80°-90°)	0.6	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°	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2
2.5°	1665.7	1649.3	1632.9	1614.1	1571.9	1499.1	1407.7	1309.2	1187.1	1166.1	1067.5
5°	2022.3	2015.3	1998.9	1973.1	1926.1	1846.4	1743.1	1597.7	1393.6	1358.4	1149.6
7.5°	2273.3	2268.7	2254.6	2224.1	2181.9	2102.1	1994.2	1836.9	1600.0	1560.1	1252.7
10°	2498.5	2496.2	2484.5	2456.3	2414.1	2327.3	2212.4	2048.2	1797.1	1752.5	1372.6
12.5°	2702.7	2705.0	2700.4	2686.2	2655.8	2573.7	2442.3	2264.0	1987.1	1937.8	1515.5
15°	2822.3	2829.4	2848.2	2876.2	2885.6	2820.0	2684.0	2486.8	2181.9	2139.7	1679.8
17.5°	2782.5	2789.5	2848.2	2944.3	3035.9	3045.3	2923.2	2698.0	2374.2	2332.0	1841.7
20°	2686.2	2695.7	2756.6	2888.0	3066.4	3190.7	3141.4	2927.9	2557.2	2505.7	1996.5
22.5°	2794.2	2794.2	2813.0	2892.7	3054.6	3249.4	3315.0	3157.8	2744.9	2681.5	2151.4
25°	3164.9	3157.8	3117.9	3085.2	3136.8	3310.3	3446.4	3392.4	2965.4	2892.7	2315.6
27.5°	3634.1	3667.0	3591.9	3472.3	3355.0	3429.9	3563.7	3624.6	3209.5	3134.3	2484.5
30°	4159.6	4173.7	4084.5	3925.0	3718.5	3645.9	3702.1	3824.1	3474.6	3392.4	2660.5
32.5°	4633.5	4621.7	4546.8	4380.1	4124.4	3967.2	3880.5	3983.7	3763.1	3669.3	2841.1
35°	5053.5	5062.8	4971.4	4779.0	4527.9	4361.4	4154.9	4164.3	4086.9	3979.0	3049.9
37.5°	5431.2	5414.8	5327.9	5135.6	4908.0	4727.3	4509.1	4352.1	4441.2	4328.6	3284.6
40°	5738.6	5722.1	5630.5	5443.0	5229.4	5081.6	4910.3	4603.0	4814.2	4685.1	3535.5
42.5°	5982.5	5963.7	5886.4	5705.7	5499.2	5367.8	5285.8	4912.8	5213.0	5084.0	3817.1
45°	6102.1	6085.7	6038.9	5902.7	5722.1	5607.1	5647.1	5269.3	5640.0	5532.2	4126.7
47.5°	5961.4	5954.4	6008.2	5984.9	5881.7	5820.7	5959.1	5658.7	6088.2	5982.5	4483.4
50°	5534.4	5546.1	5703.4	5898.1	5947.3	6020.0	6214.7	6069.4	6569.0	6456.4	4893.9
52.5°	4481.0	4560.8	5034.6	5503.9	5867.6	6142.0	6515.1	6655.8	7352.6	7242.4	5534.4
55°	3345.5	3378.4	3894.5	4696.8	5546.1	6132.7	6737.9	7000.7	7739.7	7627.2	5703.4
57.5°	2653.5	2665.2	2920.8	3739.6	4884.6	5921.6	6855.3	7125.1	7908.6	7814.8	5954.4
60°	2083.3	2097.4	2282.8	2845.7	3953.1	5351.4	6686.3	7233.0	8239.5	8164.4	6393.1
62.5°	1621.2	1635.2	1747.8	2078.6	2965.4	4473.9	6346.3	7406.5	8868.2	8833.1	7111.0
65°	1255.2	1259.9	1337.3	1492.2	2095.0	3523.8	5930.9	7568.5	9717.5	9687.0	7692.8
67.5°	926.7	933.7	987.7	1083.9	1414.7	2531.4	5250.6	7444.2	10358.0	10268.8	7904.0
69°	748.4	755.4	802.4	879.7	1116.7	1994.2	4628.9	7136.9	10454.2	10369.7	7770.2
70°	640.5	645.1	692.0	757.8	952.5	1693.8	4136.1	6871.7	10327.5	10245.4	7465.2
72.5°	410.6	434.0	481.0	523.2	631.1	1121.4	2791.8	5698.6	8910.4	8769.7	5846.5
75°	227.6	234.6	319.0	370.7	420.0	729.7	1553.1	3554.3	5668.2	5569.6	3127.3
77.5°	187.7	192.4	225.2	281.6	281.6	408.2	586.5	1400.6	2156.0	1945.0	847.0
80°	131.3	136.0	171.3	185.3	201.8	229.9	190.0	307.3	333.1	295.6	126.7
82.5°	91.4	96.1	117.4	152.5	161.9	107.9	70.4	91.4	96.1	96.1	49.2
85°	16.4	23.5	86.8	126.7	96.1	32.9	39.9	32.9	30.5	32.9	11.7
87.5°	0.0	0.0	54.0	60.9	51.6	14.1	16.4	11.7	7.0	9.4	4.7
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°	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2	1011.2
2.5°	1018.2	968.9	884.5	823.5	771.9	731.9	715.5	689.8	671.0	680.3	668.6
5°	1046.3	959.6	823.5	736.6	675.7	624.1	581.8	549.0	523.2	518.4	513.8
7.5°	1091.0	966.6	788.3	680.3	588.9	509.1	443.4	394.1	356.6	356.6	342.5
10°	1151.9	985.4	767.2	624.1	488.0	380.1	314.3	267.4	248.7	246.4	241.7
12.5°	1236.4	1020.6	750.7	551.3	380.1	276.9	237.0	220.4	213.5	211.2	208.8
15°	1351.3	1072.2	731.9	462.1	288.6	227.6	211.2	197.1	190.0	187.7	185.3
17.5°	1461.6	1119.1	692.0	370.7	234.6	206.5	187.7	175.9	166.6	164.2	164.2
20°	1564.8	1158.9	624.1	288.6	211.2	185.3	166.6	152.5	143.1	140.7	140.7
22.5°	1672.8	1191.8	539.6	234.6	192.4	164.2	145.5	131.3	122.1	119.6	117.4
25°	1787.7	1215.3	443.4	208.8	173.6	145.5	124.3	112.6	105.6	103.2	100.8
27.5°	1912.0	1224.7	352.0	190.0	152.5	126.7	107.9	96.1	91.4	89.1	89.1
30°	2024.7	1215.3	272.2	169.0	133.8	110.3	93.9	84.4	79.8	77.5	77.5
32.5°	2142.0	1191.8	218.2	150.1	117.4	93.9	79.8	72.7	70.4	68.1	68.1
35°	2266.4	1161.3	187.7	133.8	100.8	82.2	70.4	65.7	63.4	60.9	60.9
37.5°	2411.8	1123.7	171.3	119.6	89.1	72.7	60.9	58.7	56.3	56.3	56.3
40°	2576.0	1076.9	159.5	107.9	79.8	63.4	54.0	51.6	49.2	49.2	49.2
42.5°	2749.6	1022.8	147.8	96.1	70.4	54.0	46.9	46.9	44.6	44.6	42.3
45°	2944.3	968.9	136.0	84.4	60.9	46.9	39.9	37.5	37.5	35.2	35.2
47.5°	3174.3	919.6	124.3	75.1	54.0	39.9	35.2	32.9	30.5	28.2	28.2
50°	3498.1	914.9	110.3	65.7	49.2	32.9	28.2	25.7	23.5	21.1	21.1
52.5°	3819.3	872.8	93.9	54.0	39.9	28.2	21.1	18.8	16.4	16.4	14.1
55°	3892.2	802.4	82.2	46.9	30.5	21.1	16.4	11.7	11.7	9.4	9.4
57.5°	4051.7	769.5	70.4	37.5	23.5	16.4	9.4	7.0	7.0	7.0	7.0
60°	4366.1	760.1	60.9	32.9	16.4	11.7	7.0	4.7	4.7	2.3	2.3
62.5°	4800.1	750.7	51.6	28.2	11.7	7.0	4.7	2.3	0.0	0.0	0.0
65°	5039.4	687.4	42.3	21.1	9.4	7.0	2.3	0.0	0.0	0.0	0.0
67.5°	4976.1	567.7	37.5	14.1	7.0	4.7	2.3	0.0	0.0	0.0	0.0
69°	4710.9	478.5	30.5	11.7	7.0	4.7	2.3	0.0	0.0	0.0	0.0
70°	4391.9	412.9	28.2	9.4	4.7	2.3	2.3	0.0	0.0	0.0	0.0
72.5°	3117.9	215.8	18.8	7.0	4.7	2.3	0.0	0.0	0.0	0.0	0.0
75°	1457.0	96.1	11.7	4.7	2.3	2.3	0.0	0.0	0.0	0.0	0.0
77.5°	321.4	44.6	7.0	4.7	2.3	0.0	0.0	0.0	0.0	0.0	0.0
80°	60.9	16.4	4.7	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	21.1	7.0	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.3	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)