

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: P399403

Luminaire Tested: **ARCH-L-PA3-140-722-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399403  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-140-722-U-T3-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2200K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12065 lumens  
Efficiency: N/A  
Efficacy: 84.4 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G3

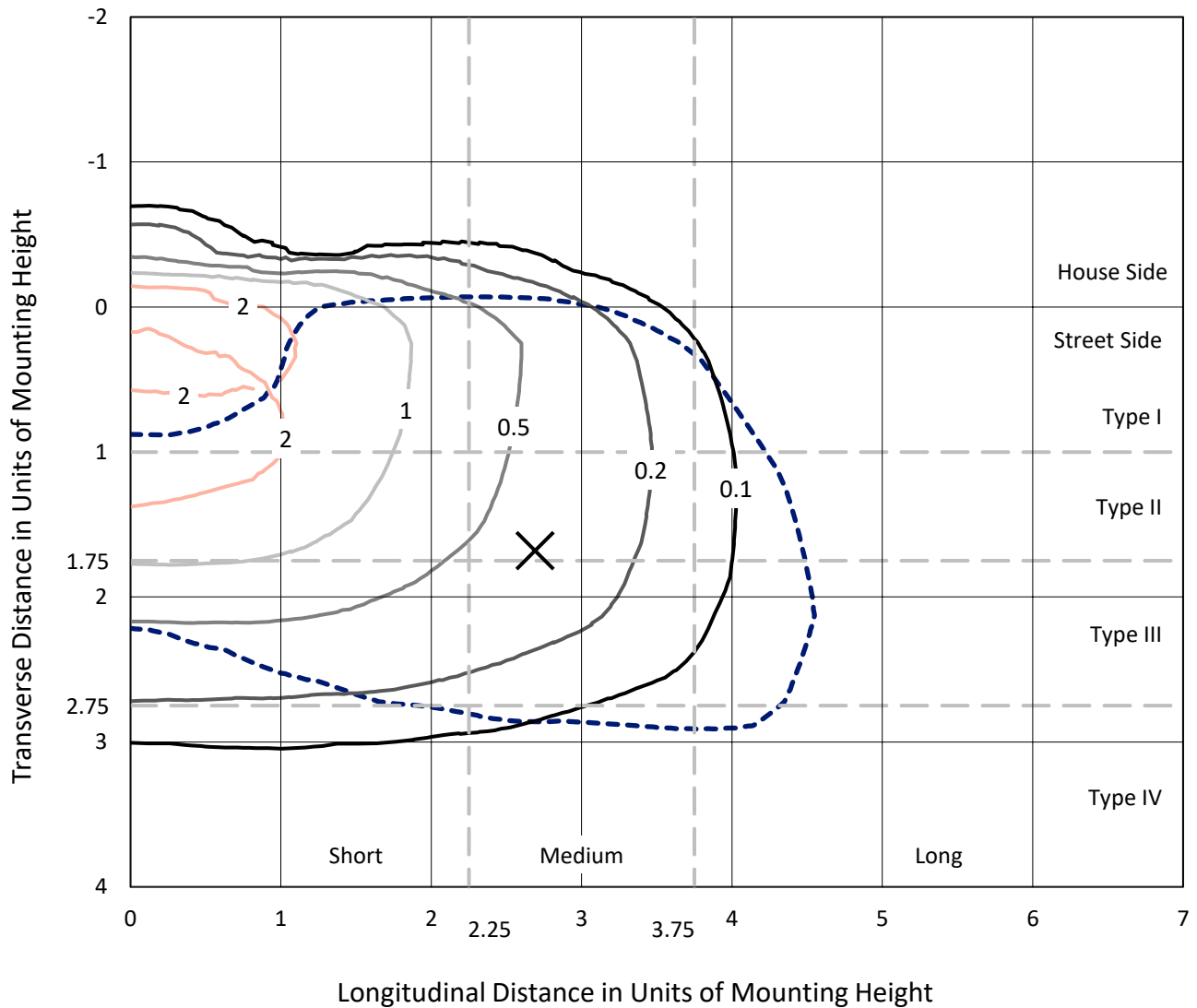
Input Watts (W): 143  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

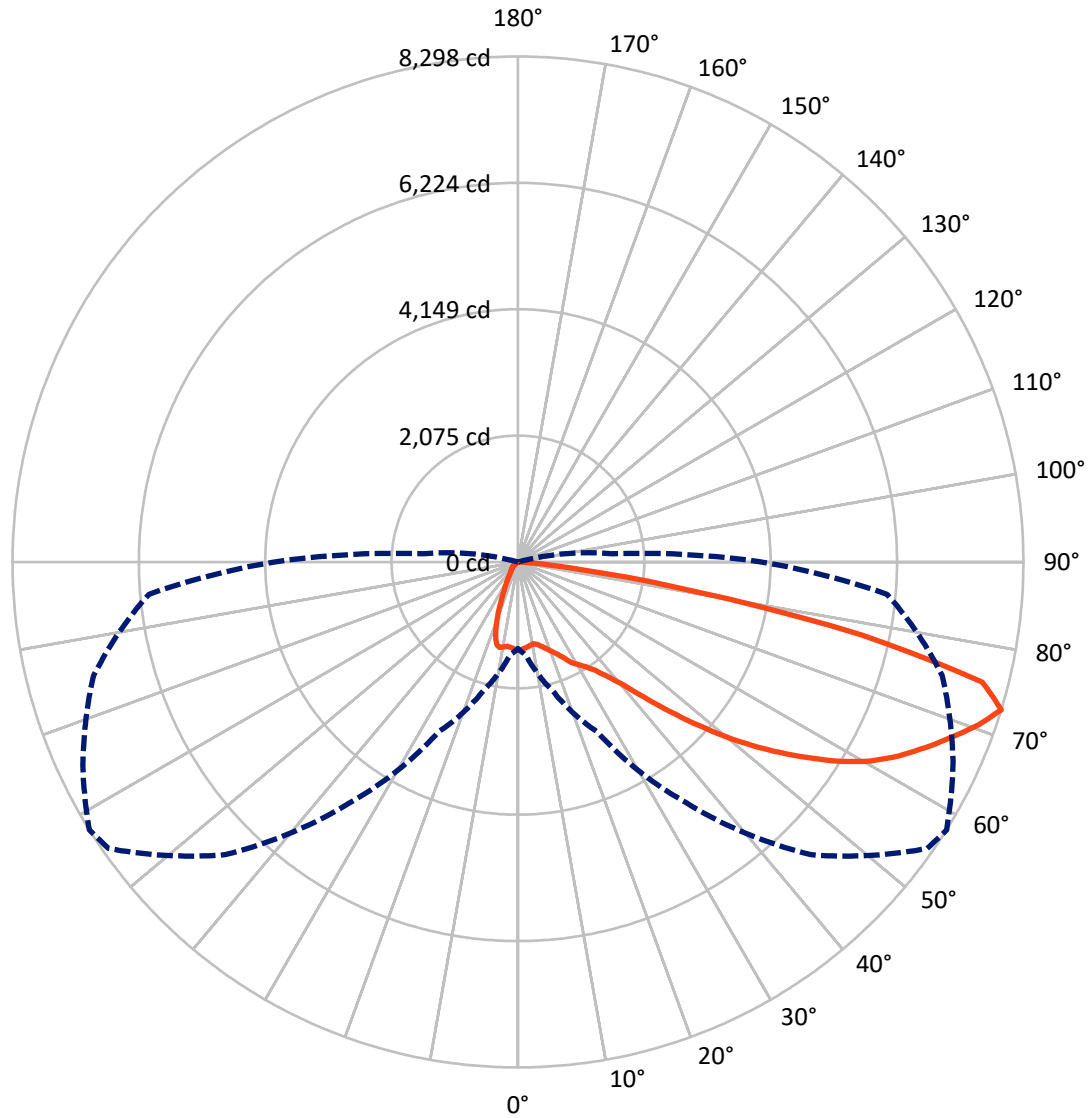
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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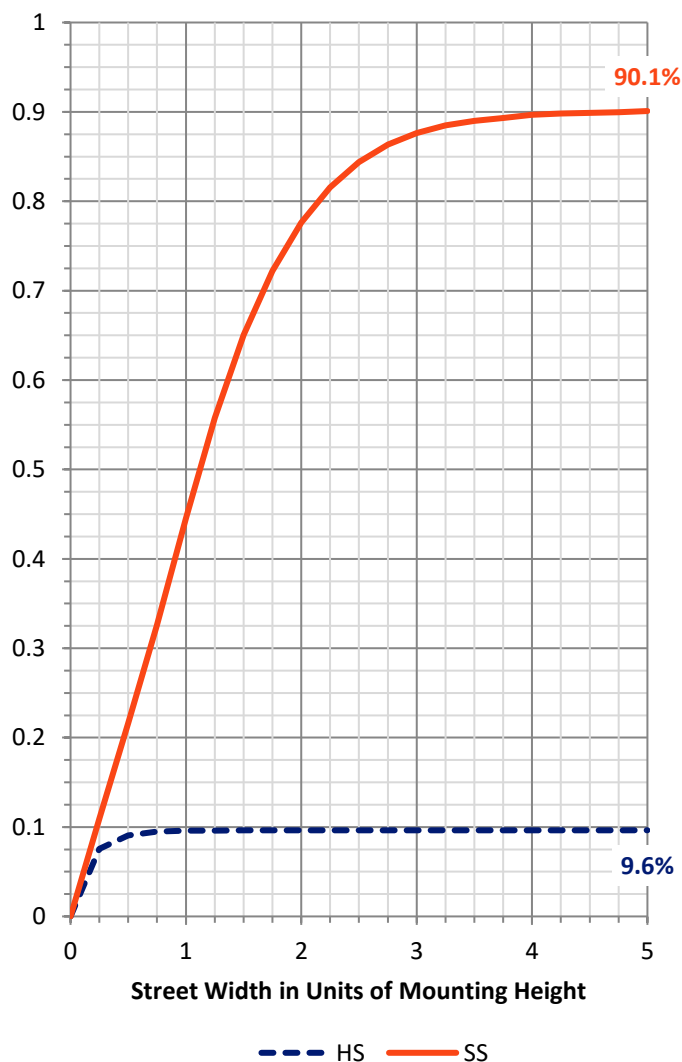
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1173.2	0.0	1173.2
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	10891.8	0.0	10891.8
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	12065.0	0.0	12065.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	132.9	1.1
10°-20°	346.1	2.9
20°-30°	543.6	4.5
30°-40°	937.5	7.8
40°-50°	1783.7	14.8
50°-60°	2824.9	23.4
60°-70°	3296.3	27.3
70°-80°	2064.5	17.1
80°-90°	135.5	1.1
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°	12065.0	100.0
0°-180°	12065.0	100.0

**Coefficient of Utilization**



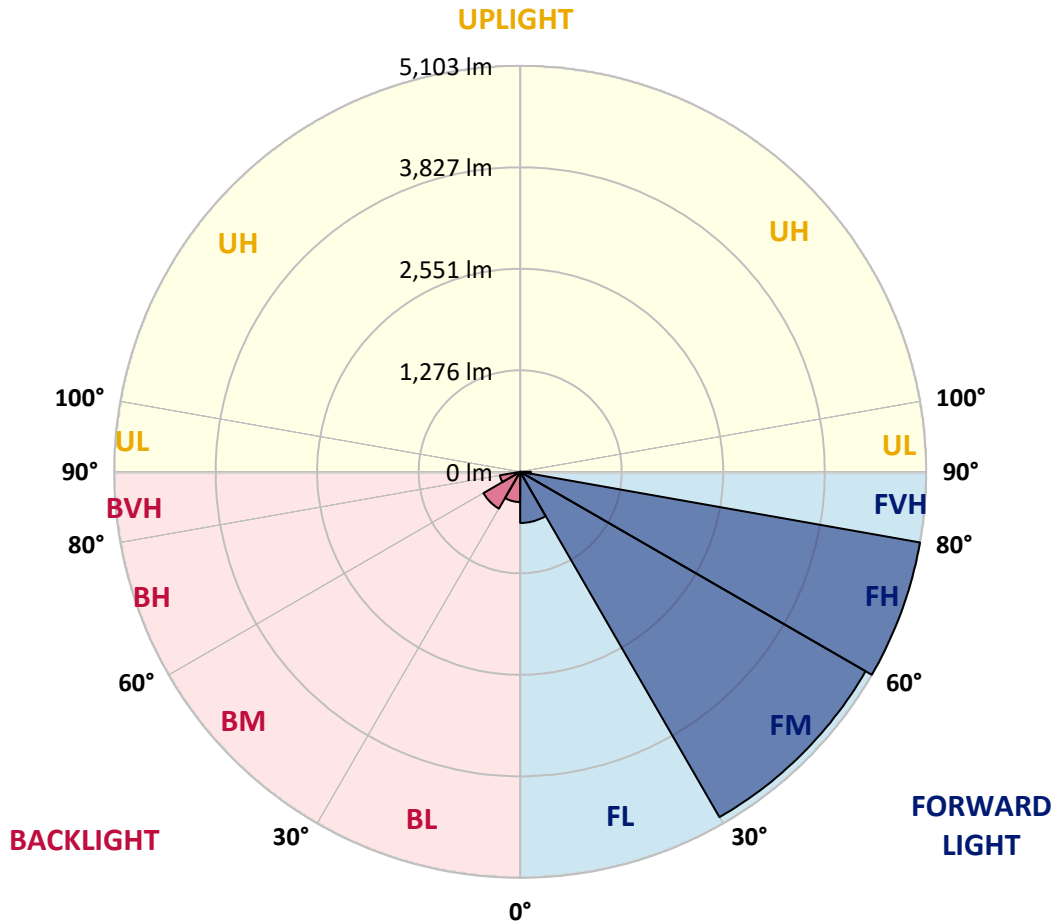
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	642.6	5.3			
FM (30°-60°)	5012.3	41.5			
FH (60°-80°)	5102.6	42.3			G3/7500
FVH (80°-90°)	134.2	1.1			G2/225
BL (0°-30°)	379.9	3.1	B1/500		
BM (30°-60°)	533.8	4.4	B1/1000		
BH (60°-80°)	258.2	2.1	B1/500		G1/500
BVH (80°-90°)	1.3	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 IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1447.7	1447.7	1447.7	1447.7	1447.7	1447.7	1447.7	1447.7	1447.7	1447.7	1447.7
2.5°	1441.3	1434.8	1432.6	1430.5	1432.6	1434.8	1428.3	1434.8	1430.5	1432.6	1436.9
5°	1389.5	1383.0	1380.8	1383.0	1389.5	1400.3	1404.6	1411.0	1411.0	1417.5	1419.7
7.5°	1331.2	1326.9	1324.7	1329.1	1342.0	1365.7	1378.7	1387.3	1395.9	1408.9	1421.8
10°	1298.9	1296.7	1294.5	1301.0	1314.0	1335.5	1352.8	1365.7	1398.1	1434.8	1458.5
12.5°	1277.3	1277.3	1281.6	1294.5	1311.8	1329.1	1370.1	1387.3	1436.9	1493.0	1525.4
15°	1260.0	1260.0	1266.5	1290.2	1314.0	1355.0	1415.4	1434.8	1493.0	1562.1	1605.2
17.5°	1247.1	1251.4	1255.7	1279.4	1324.7	1393.8	1465.0	1493.0	1564.2	1639.7	1687.2
20°	1249.2	1253.5	1255.7	1279.4	1344.2	1439.1	1529.7	1562.1	1644.1	1723.9	1771.4
22.5°	1262.2	1268.6	1270.8	1303.2	1378.7	1486.6	1603.1	1639.7	1728.2	1812.4	1849.0
25°	1316.1	1320.4	1307.5	1335.5	1428.3	1559.9	1698.0	1736.8	1825.3	1903.0	1933.2
27.5°	1499.5	1503.8	1432.6	1400.3	1467.1	1620.3	1814.5	1868.5	1978.5	2030.3	2034.6
30°	1896.5	1900.8	1760.6	1607.4	1559.9	1672.1	1879.2	1954.8	2097.2	2155.4	2129.5
32.5°	2407.8	2403.5	2211.5	1985.0	1780.0	1762.7	1972.0	2051.8	2207.2	2263.3	2243.9
35°	2921.3	2927.8	2763.8	2422.9	2129.5	1933.2	2090.7	2183.5	2371.2	2451.0	2416.5
37.5°	3273.0	3316.2	3245.0	2876.0	2558.9	2248.2	2282.7	2382.0	2617.1	2725.0	2651.6
40°	3769.3	3758.5	3585.9	3314.0	3033.5	2714.2	2593.4	2640.9	2910.6	3055.1	2940.8
42.5°	4436.0	4414.4	4121.0	3855.6	3542.7	3281.7	3035.7	3027.1	3247.1	3415.4	3249.3
45°	5040.1	5007.7	4807.1	4550.3	4207.3	3907.4	3575.1	3499.6	3652.8	3795.2	3601.0
47.5°	5521.2	5467.3	5324.9	5188.9	5104.8	4638.8	4140.4	4026.0	4103.7	4209.4	3935.4
50°	6090.8	5941.9	5734.8	5652.8	5827.6	5467.3	4684.1	4574.0	4569.7	4630.1	4280.6
52.5°	6349.7	6080.0	5963.5	6032.6	6341.1	6237.5	5270.9	5113.4	5050.9	5057.3	4602.1
55°	6036.9	6006.7	6069.2	6285.0	6688.5	6628.0	5834.1	5639.9	5547.1	5430.6	4910.6
57.5°	5680.9	5773.6	6021.8	6433.9	7128.6	7035.8	6388.6	6168.5	5998.0	5730.5	5253.7
60°	5352.9	5447.9	5857.8	6468.4	7370.2	7428.5	6850.3	6641.0	6388.6	6036.9	5631.2
62.5°	4854.5	4927.9	5503.9	6418.8	7264.5	7657.2	7171.7	7014.2	6779.1	6328.1	6064.9
65°	4293.6	4341.0	4910.6	6021.8	7057.4	7631.3	7437.1	7348.7	7120.0	6632.4	6494.3
67.5°	3678.6	3734.7	4209.4	5307.6	6651.8	7510.5	7687.4	7678.8	7417.7	6968.9	6805.0
70°	2971.0	2975.3	3368.0	4401.4	5944.1	7268.8	7998.1	8017.5	7702.5	7221.4	6817.9
72.5°	1421.8	1538.3	2183.5	3072.4	4830.8	6794.2	8200.9	8298.0	7881.6	7212.7	6082.2
75°	325.8	336.6	636.5	1460.7	2832.9	5214.8	7693.9	7875.1	7445.8	6237.5	4284.9
77.5°	118.7	125.1	179.1	427.2	1089.6	2694.8	5506.1	5771.5	5503.9	4032.5	2026.0
80°	79.8	77.7	92.8	189.9	500.6	763.8	2815.6	2973.1	2714.2	1376.5	485.5
82.5°	41.0	43.2	64.7	105.7	336.6	265.4	940.7	1022.7	841.5	276.2	90.6
85°	19.4	19.4	36.7	66.9	142.4	92.8	209.3	252.4	226.5	120.8	30.2
87.5°	19.4	19.4	34.5	43.2	73.4	38.8	51.8	64.7	60.4	64.7	10.8
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°	1447.7	1447.7	1447.7	1447.7	1447.7	1447.7	1447.7	1447.7	1447.7	1447.7	1447.7
2.5°	1436.9	1434.8	1432.6	1436.9	1434.8	1439.1	1439.1	1443.4	1443.4	1439.1	1436.9
5°	1417.5	1413.2	1408.9	1408.9	1406.7	1411.0	1424.0	1434.8	1436.9	1430.5	1428.3
7.5°	1419.7	1419.7	1415.4	1406.7	1391.6	1391.6	1391.6	1404.6	1411.0	1406.7	1404.6
10°	1458.5	1460.7	1449.9	1430.5	1404.6	1380.8	1335.5	1268.6	1206.1	1188.8	1182.3
12.5°	1525.4	1527.6	1506.0	1471.5	1417.5	1277.3	1104.7	945.0	822.0	787.5	781.0
15°	1605.2	1607.4	1568.6	1512.5	1348.5	1022.7	765.9	584.7	476.8	450.9	448.8
17.5°	1687.2	1682.9	1624.6	1516.8	1143.5	724.9	466.0	373.3	345.2	338.7	340.9
20°	1767.0	1754.1	1674.3	1436.9	880.3	474.7	340.9	319.3	312.8	308.5	308.5
22.5°	1840.4	1814.5	1715.3	1279.4	617.1	340.9	304.2	299.9	291.3	284.8	282.6
25°	1913.8	1877.1	1741.2	1074.5	414.3	297.7	287.0	278.3	267.5	258.9	256.8
27.5°	2002.2	1950.4	1728.2	815.6	310.7	276.2	267.5	254.6	239.5	226.5	222.2
30°	2086.4	2028.1	1654.9	563.1	265.4	254.6	241.6	222.2	202.8	187.7	183.4
32.5°	2192.1	2125.2	1523.2	368.9	230.9	222.2	209.3	185.6	159.7	142.4	138.1
35°	2343.1	2267.6	1355.0	258.9	202.8	187.7	170.4	144.6	116.5	103.6	101.4
37.5°	2554.6	2453.2	1143.5	209.3	179.1	157.5	131.6	105.7	86.3	75.5	73.4
40°	2813.5	2658.1	908.3	185.6	159.7	131.6	99.2	75.5	62.6	53.9	53.9
42.5°	3093.9	2850.1	668.8	170.4	140.2	107.9	73.4	53.9	45.3	41.0	38.8
45°	3383.1	3020.6	450.9	157.5	123.0	82.0	51.8	36.7	30.2	30.2	28.0
47.5°	3683.0	3134.9	291.3	142.4	103.6	60.4	34.5	25.9	21.6	21.6	21.6
50°	3980.7	3195.4	207.1	129.5	84.1	41.0	25.9	19.4	17.3	17.3	17.3
52.5°	4196.5	3156.5	166.1	112.2	64.7	30.2	19.4	15.1	12.9	12.9	12.9
55°	4384.2	3089.6	144.6	97.1	47.5	21.6	15.1	12.9	10.8	10.8	10.8
57.5°	4576.2	3003.3	129.5	82.0	34.5	15.1	10.8	8.6	8.6	8.6	8.6
60°	4751.0	2856.6	112.2	64.7	23.7	10.8	8.6	6.5	6.5	6.5	6.5
62.5°	4921.4	2731.5	97.1	49.6	17.3	8.6	4.3	4.3	2.2	2.2	2.2
65°	5018.5	2563.2	77.7	32.4	10.8	6.5	2.2	2.2	0.0	0.0	0.0
67.5°	4988.3	2362.5	53.9	19.4	6.5	4.3	2.2	0.0	0.0	0.0	0.0
70°	4779.0	2092.8	32.4	10.8	6.5	4.3	2.2	0.0	0.0	0.0	0.0
72.5°	4002.3	1549.1	19.4	8.6	4.3	2.2	0.0	0.0	0.0	0.0	0.0
75°	2673.2	712.0	10.8	6.5	2.2	2.2	0.0	0.0	0.0	0.0	0.0
77.5°	1223.3	213.6	6.5	4.3	2.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	246.0	56.1	4.3	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	51.8	10.8	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.8	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.3	2.2	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)