

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: P399673

Luminaire Tested: **ARCH-L-PA3-170-827-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399673  
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-PA3-170-827-U-T3-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 750mA 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: 14021 lumens  
Efficiency: N/A  
Efficacy: 81.0 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

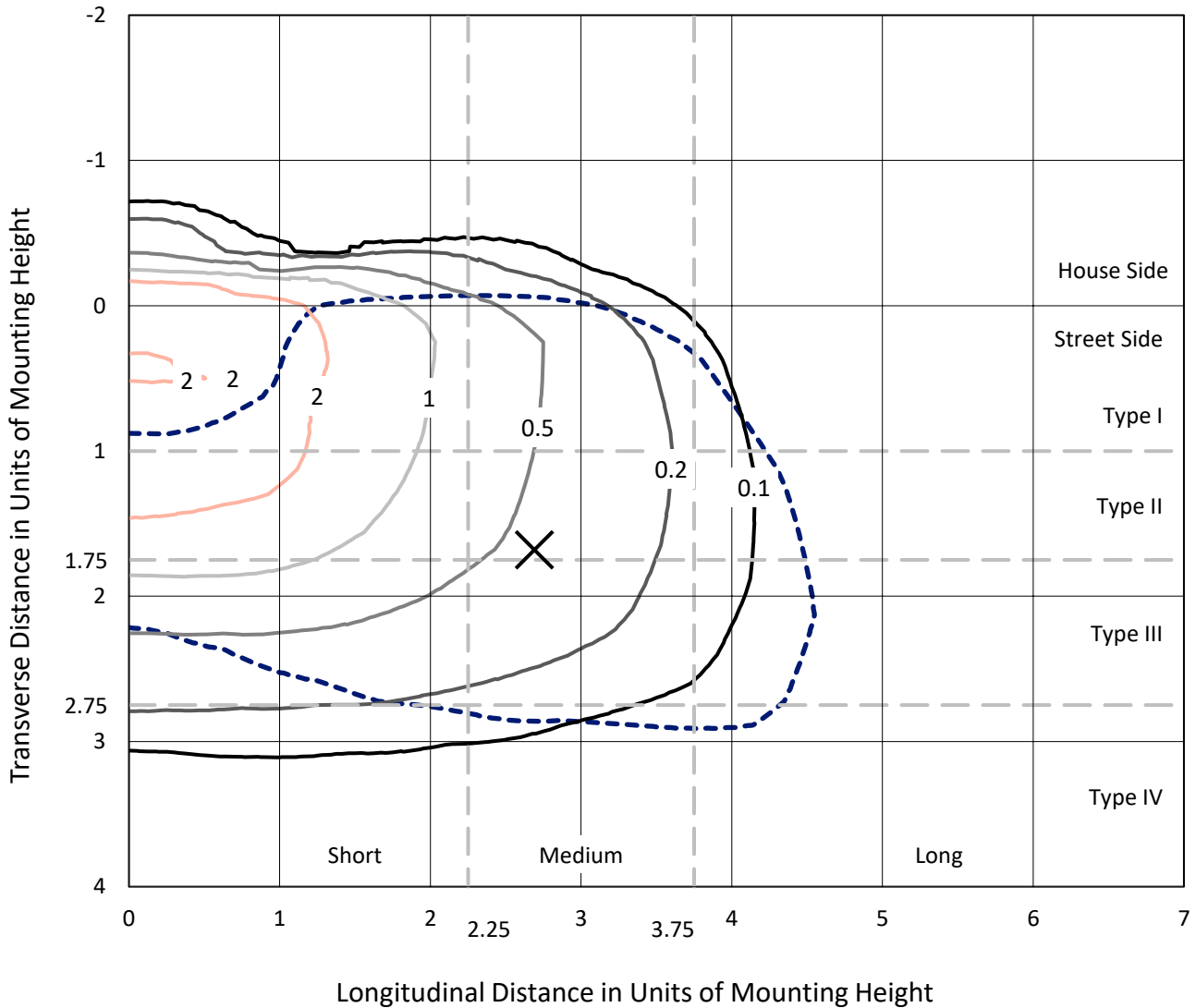
Input Watts (W): 173  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

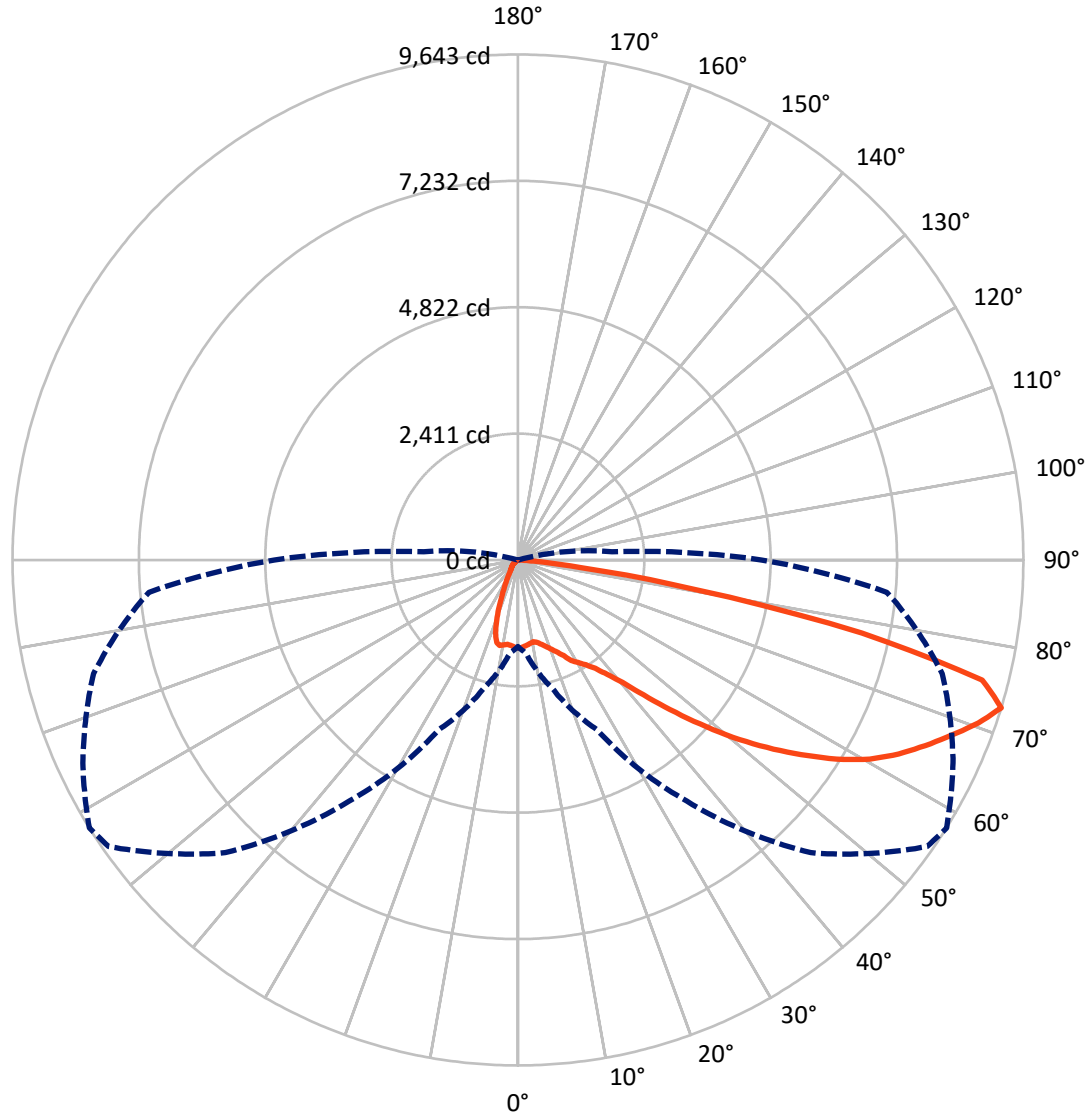
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 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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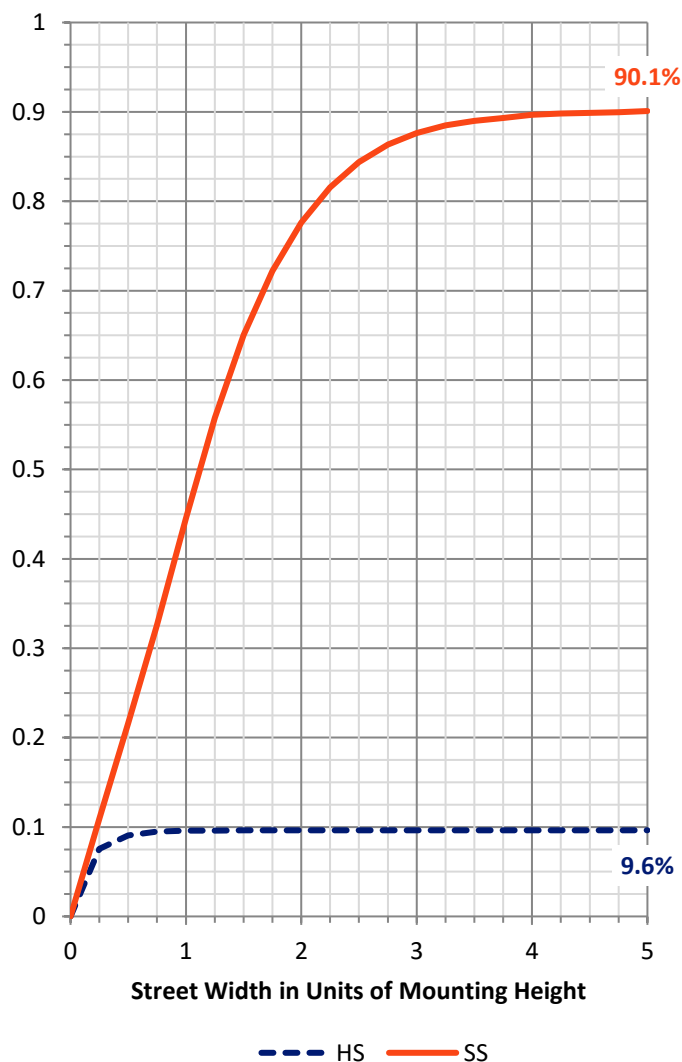
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1363.4	0.0	1363.4
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	12657.6	0.0	12657.6
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	14021.0	0.0	14021.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	154.4	1.1
10°-20°	402.2	2.9
20°-30°	631.8	4.5
30°-40°	1089.5	7.8
40°-50°	2072.9	14.8
50°-60°	3282.8	23.4
60°-70°	3830.7	27.3
70°-80°	2399.2	17.1
80°-90°	157.5	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°	14021.0	100.0
0°-180°	14021.0	100.0

**Coefficient of Utilization**



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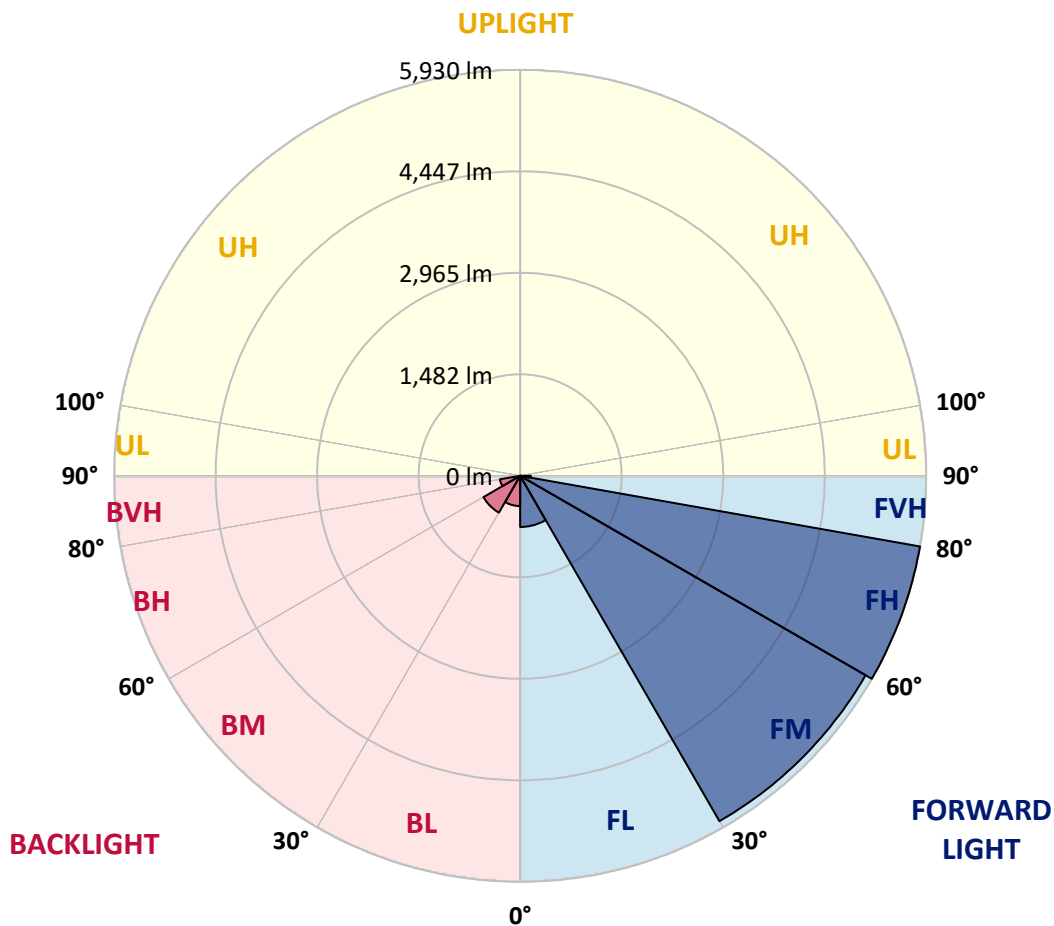
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	746.8	5.3			
FM (30°-60°)	5824.9	41.5			
FH (60°-80°)	5929.9	42.3			G3/7500
FVH (80°-90°)	156.0	1.1			G2/225
BL (0°-30°)	441.5	3.1	B1/500		
BM (30°-60°)	620.4	4.4	B1/1000		
BH (60°-80°)	300.0	2.1	B1/500		G1/500
BVH (80°-90°)	1.5	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°	1682.4	1682.4	1682.4	1682.4	1682.4	1682.4	1682.4	1682.4	1682.4	1682.4	1682.4
2.5°	1674.9	1667.4	1664.9	1662.4	1664.9	1667.4	1659.9	1667.4	1662.4	1664.9	1669.9
5°	1614.7	1607.2	1604.7	1607.2	1614.7	1627.3	1632.3	1639.8	1639.8	1647.3	1649.8
7.5°	1547.0	1542.0	1539.5	1544.5	1559.6	1587.2	1602.2	1612.2	1622.3	1637.3	1652.3
10°	1509.4	1506.9	1504.4	1511.9	1527.0	1552.1	1572.1	1587.2	1624.8	1667.4	1695.0
12.5°	1484.4	1484.4	1489.4	1504.4	1524.5	1544.5	1592.2	1612.2	1669.9	1735.1	1772.7
15°	1464.3	1464.3	1471.8	1499.4	1527.0	1574.6	1644.8	1667.4	1735.1	1815.3	1865.5
17.5°	1449.3	1454.3	1459.3	1486.9	1539.5	1619.8	1702.5	1735.1	1817.8	1905.6	1960.8
20°	1451.8	1456.8	1459.3	1486.9	1562.1	1672.4	1777.7	1815.3	1910.6	2003.4	2058.5
22.5°	1466.8	1474.3	1476.8	1514.4	1602.2	1727.6	1863.0	1905.6	2008.4	2106.2	2148.8
25°	1529.5	1534.5	1519.5	1552.1	1659.9	1812.8	1973.3	2018.4	2121.2	2211.5	2246.6
27.5°	1742.6	1747.6	1664.9	1627.3	1705.0	1883.0	2108.7	2171.4	2299.2	2359.4	2364.4
30°	2204.0	2209.0	2046.0	1868.0	1812.8	1943.2	2183.9	2271.7	2437.1	2504.8	2474.8
32.5°	2798.2	2793.2	2570.0	2306.8	2068.6	2048.5	2291.7	2384.5	2565.0	2630.2	2607.6
35°	3395.0	3402.5	3211.9	2815.8	2474.8	2246.6	2429.6	2537.4	2755.6	2848.4	2808.2
37.5°	3803.7	3853.8	3771.1	3342.3	2973.7	2612.7	2652.8	2768.1	3041.4	3166.8	3081.5
40°	4380.3	4367.8	4167.2	3851.3	3525.3	3154.3	3013.8	3069.0	3382.4	3550.4	3417.5
42.5°	5155.1	5130.0	4789.0	4480.6	4117.1	3813.7	3527.8	3517.8	3773.6	3969.1	3776.1
45°	5857.2	5819.6	5586.4	5288.0	4889.3	4540.8	4154.7	4066.9	4245.0	4410.4	4184.8
47.5°	6416.3	6353.6	6188.1	6030.2	5932.4	5390.8	4811.6	4678.7	4769.0	4891.8	4573.4
50°	7078.3	6905.3	6664.5	6569.3	6772.4	6353.6	5443.5	5315.6	5310.6	5380.8	4974.6
52.5°	7379.1	7065.7	6930.3	7010.6	7369.1	7248.8	6125.5	5942.4	5869.7	5877.2	5348.2
55°	7015.6	6980.5	7053.2	7303.9	7772.8	7702.6	6779.9	6554.2	6446.4	6311.0	5706.7
57.5°	6601.9	6709.7	6998.0	7476.9	8284.3	8176.5	7424.3	7168.5	6970.4	6659.5	6105.4
60°	6220.7	6331.1	6807.5	7517.0	8565.1	8632.8	7960.8	7717.6	7424.3	7015.6	6544.2
62.5°	5641.5	5726.8	6396.3	7459.4	8442.3	8898.6	8334.4	8151.4	7878.1	7354.1	7048.2
65°	4989.6	5044.8	5706.7	6998.0	8201.6	8868.5	8642.8	8540.0	8274.3	7707.6	7547.1
67.5°	4275.0	4340.2	4891.8	6168.1	7730.2	8728.1	8933.7	8923.7	8620.3	8098.8	7908.2
70°	3452.6	3457.6	3914.0	5115.0	6907.8	8447.3	9294.8	9317.3	8951.3	8392.1	7923.2
72.5°	1652.3	1787.7	2537.4	3570.5	5614.0	7895.7	9530.5	9643.3	9159.4	8382.1	7068.2
75°	378.6	391.1	739.7	1697.5	3292.2	6060.3	8941.2	9151.8	8652.9	7248.8	4979.6
77.5°	137.9	145.4	208.1	496.5	1266.2	3131.7	6398.8	6707.2	6396.3	4686.2	2354.4
80°	92.8	90.3	107.8	220.6	581.7	887.6	3272.1	3455.1	3154.3	1599.7	564.2
82.5°	47.6	50.1	75.2	122.9	391.1	308.4	1093.2	1188.5	977.9	320.9	105.3
85°	22.6	22.6	42.6	77.7	165.5	107.8	243.2	293.4	263.3	140.4	35.1
87.5°	22.6	22.6	40.1	50.1	85.3	45.1	60.2	75.2	70.2	75.2	12.5
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°	1682.4	1682.4	1682.4	1682.4	1682.4	1682.4	1682.4	1682.4	1682.4	1682.4	1682.4
2.5°	1669.9	1667.4	1664.9	1669.9	1667.4	1672.4	1672.4	1677.4	1677.4	1672.4	1669.9
5°	1647.3	1642.3	1637.3	1637.3	1634.8	1639.8	1654.9	1667.4	1669.9	1662.4	1659.9
7.5°	1649.8	1649.8	1644.8	1634.8	1617.2	1617.2	1617.2	1632.3	1639.8	1634.8	1632.3
10°	1695.0	1697.5	1684.9	1662.4	1632.3	1604.7	1552.1	1474.3	1401.6	1381.6	1374.0
12.5°	1772.7	1775.2	1750.1	1710.0	1647.3	1484.4	1283.8	1098.2	955.3	915.2	907.7
15°	1865.5	1868.0	1822.8	1757.7	1567.1	1188.5	890.1	679.5	554.1	524.0	521.5
17.5°	1960.8	1955.7	1888.0	1762.7	1328.9	842.5	541.6	433.8	401.2	393.7	396.2
20°	2053.5	2038.5	1945.7	1669.9	1023.0	551.6	396.2	371.1	363.6	358.6	358.6
22.5°	2138.8	2108.7	1993.3	1486.9	717.1	396.2	353.5	348.5	338.5	331.0	328.5
25°	2224.0	2181.4	2023.4	1248.7	481.4	346.0	333.5	323.4	310.9	300.9	298.4
27.5°	2326.8	2266.6	2008.4	947.8	361.1	320.9	310.9	295.9	278.3	263.3	258.3
30°	2424.6	2356.9	1923.1	654.4	308.4	295.9	280.8	258.3	235.7	218.1	213.1
32.5°	2547.5	2469.7	1770.2	428.8	268.3	258.3	243.2	215.6	185.5	165.5	160.5
35°	2723.0	2635.2	1574.6	300.9	235.7	218.1	198.1	168.0	135.4	120.4	117.8
37.5°	2968.7	2850.9	1328.9	243.2	208.1	183.0	152.9	122.9	100.3	87.8	85.3
40°	3269.6	3089.1	1055.6	215.6	185.5	152.9	115.3	87.8	72.7	62.7	62.7
42.5°	3595.5	3312.2	777.3	198.1	163.0	125.4	85.3	62.7	52.7	47.6	45.1
45°	3931.5	3510.3	524.0	183.0	142.9	95.3	60.2	42.6	35.1	35.1	32.6
47.5°	4280.1	3643.2	338.5	165.5	120.4	70.2	40.1	30.1	25.1	25.1	25.1
50°	4626.1	3713.4	240.7	150.4	97.8	47.6	30.1	22.6	20.1	20.1	20.1
52.5°	4876.8	3668.3	193.1	130.4	75.2	35.1	22.6	17.6	15.0	15.0	15.0
55°	5094.9	3590.5	168.0	112.8	55.2	25.1	17.6	15.0	12.5	12.5	12.5
57.5°	5318.1	3490.2	150.4	95.3	40.1	17.6	12.5	10.0	10.0	10.0	10.0
60°	5521.2	3319.7	130.4	75.2	27.6	12.5	10.0	7.5	7.5	7.5	7.5
62.5°	5719.3	3174.3	112.8	57.7	20.1	10.0	5.0	5.0	2.5	2.5	2.5
65°	5832.1	2978.7	90.3	37.6	12.5	7.5	2.5	2.5	0.0	0.0	0.0
67.5°	5797.0	2745.6	62.7	22.6	7.5	5.0	2.5	0.0	0.0	0.0	0.0
70°	5553.8	2432.1	37.6	12.5	7.5	5.0	2.5	0.0	0.0	0.0	0.0
72.5°	4651.1	1800.3	22.6	10.0	5.0	2.5	0.0	0.0	0.0	0.0	0.0
75°	3106.6	827.4	12.5	7.5	2.5	2.5	0.0	0.0	0.0	0.0	0.0
77.5°	1421.7	248.2	7.5	5.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	285.8	65.2	5.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	60.2	12.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.0	2.5	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)