

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: P400521

Luminaire Tested: **ARCH-L-PA3-90-750-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400521  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-90-750-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 400mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11200 lumens  
Efficiency: N/A  
Efficacy: 120.4 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

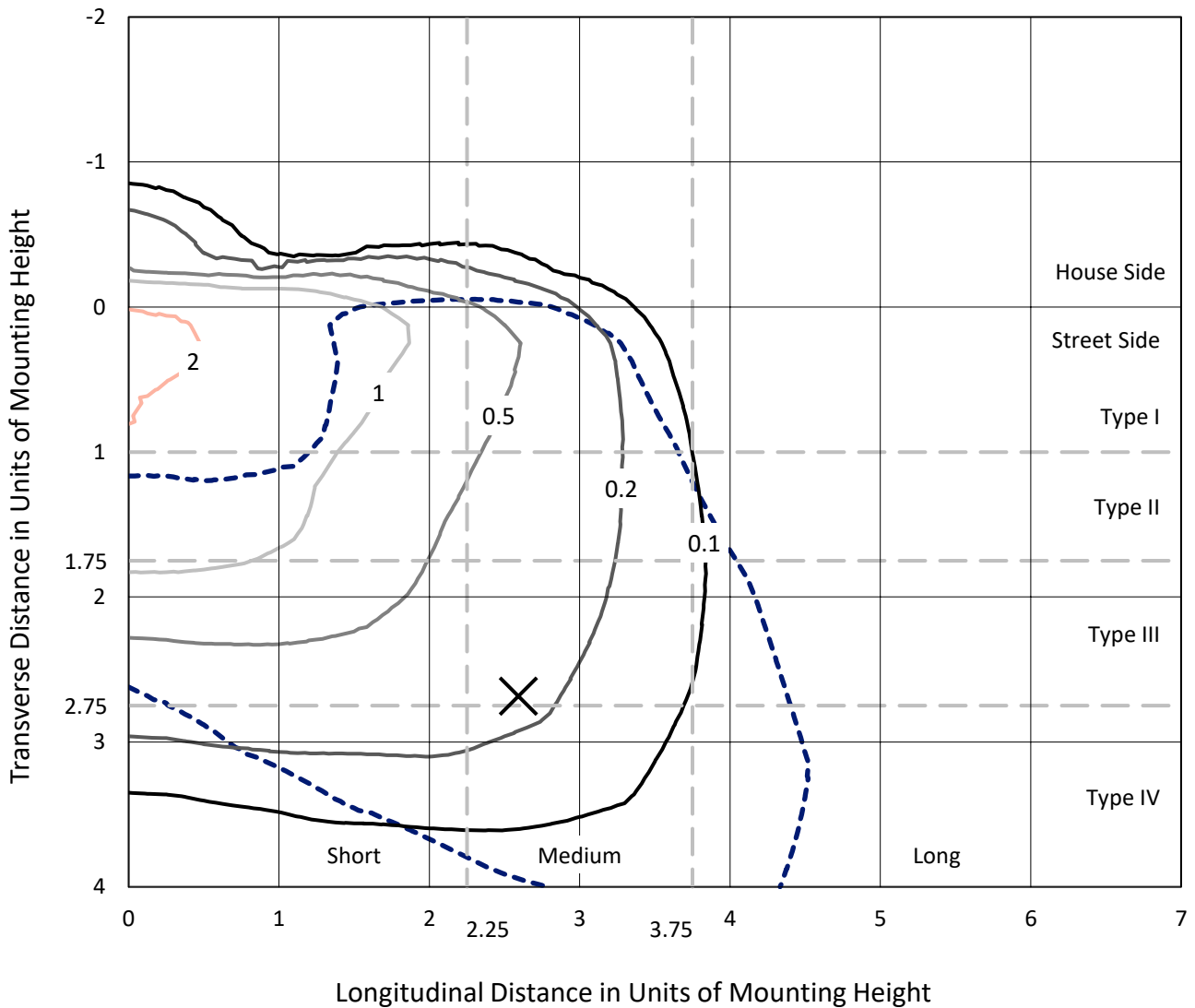
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

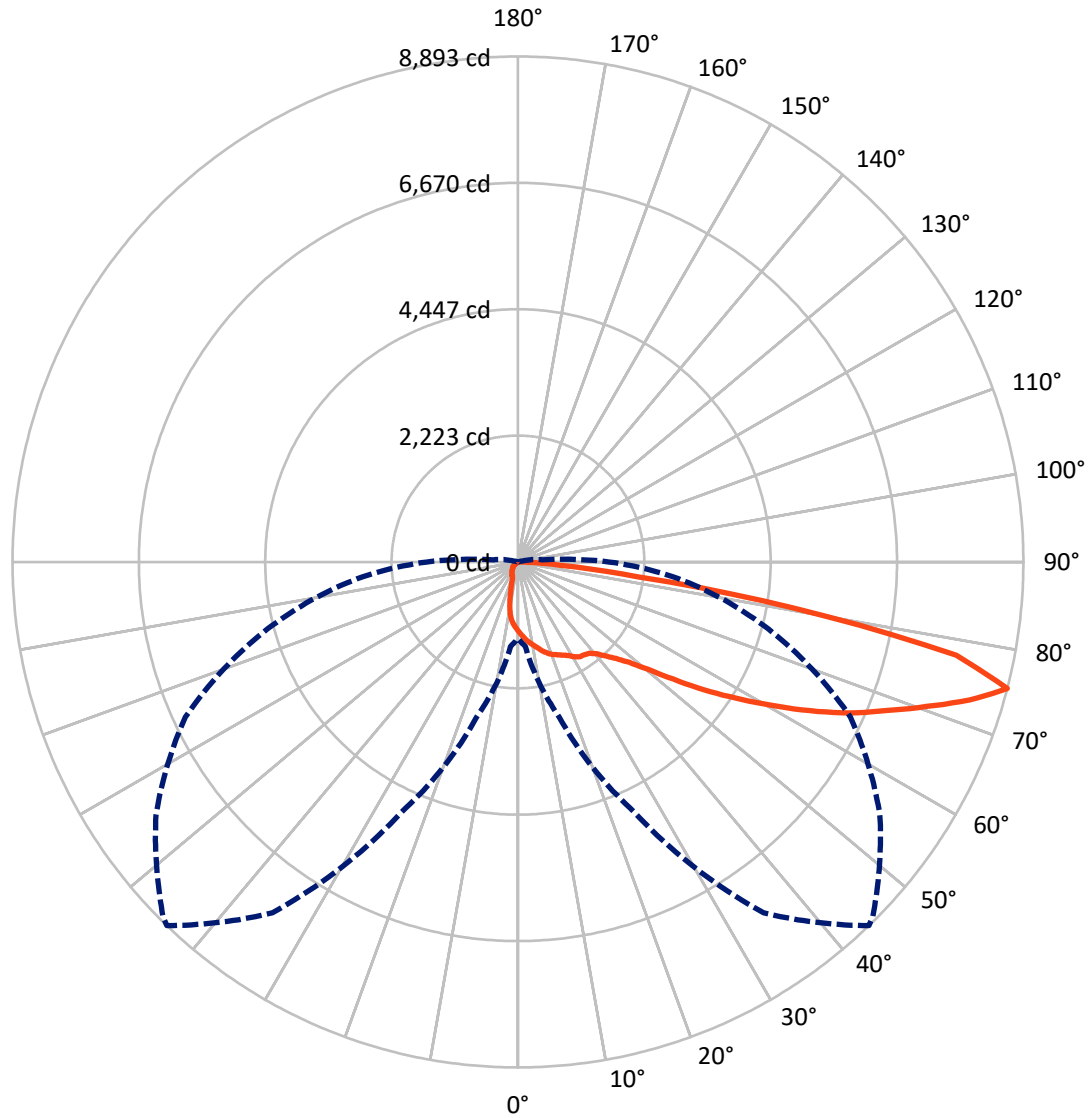
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc  
 Type IV - Medium - N/A

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CATALOG NUMBER: ARCH-L-PA3-90-750-U-T4W-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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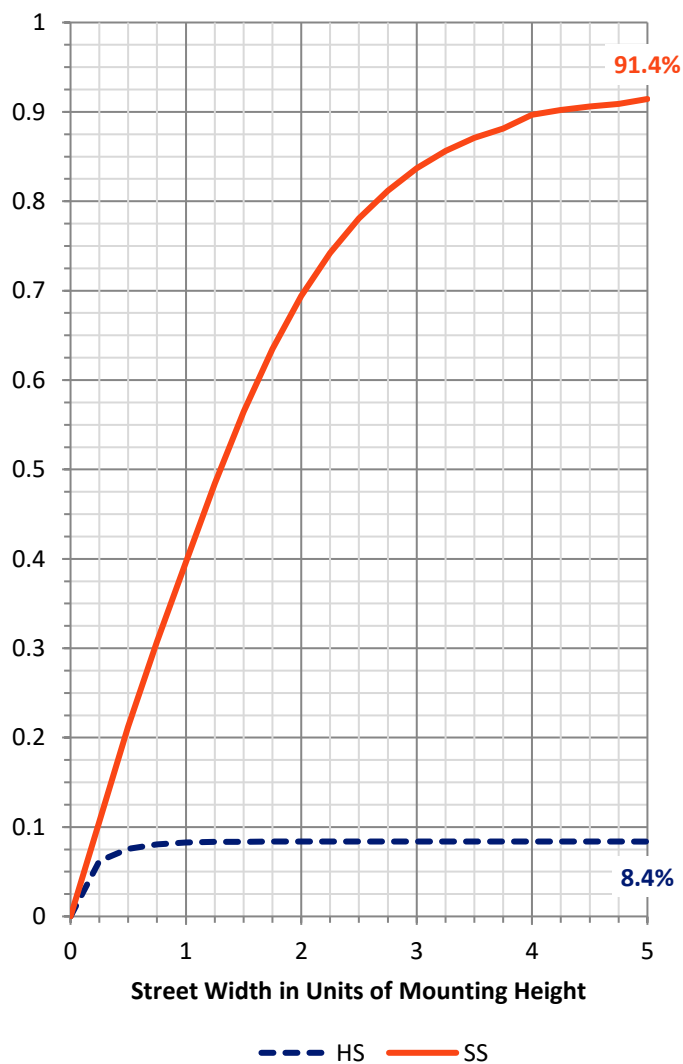
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	944.5	0.0	944.5
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	10255.5	0.0	10255.5
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	11200.0	0.0	11200.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	115.0	1.0
10°-20°	322.2	2.9
20°-30°	531.7	4.7
30°-40°	771.6	6.9
40°-50°	1254.3	11.2
50°-60°	2211.2	19.7
60°-70°	3178.0	28.4
70°-80°	2544.9	22.7
80°-90°	271.1	2.4
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°	11200.0	100.0
0°-180°	11200.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P400521

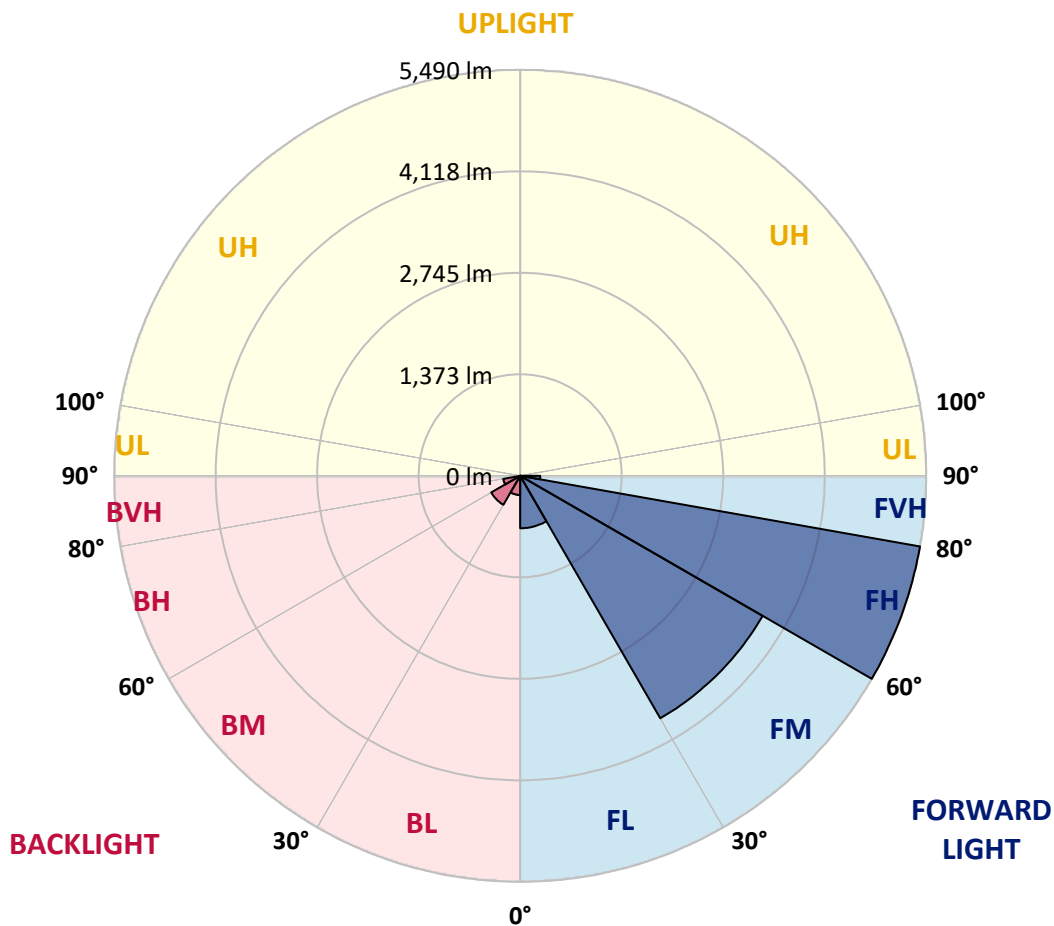
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	709.3	6.3			
FM (30°-60°)	3785.7	33.8			
FH (60°-80°)	5490.0	49.0			G3/7500
FVH (80°-90°)	270.5	2.4			G3/500
BL (0°-30°)	259.5	2.3	B1/500		
BM (30°-60°)	451.5	4.0	B1/1000		
BH (60°-80°)	232.8	2.1	B1/500		G1/500
BVH (80°-90°)	0.7	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





REPORT NUMBER: P400521

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1219.1	1219.1	1219.1	1219.1	1219.1	1219.1	1219.1	1219.1	1219.1	1219.1	1219.1
2.5°	1328.6	1326.5	1320.3	1310.0	1299.7	1289.3	1287.3	1270.7	1252.1	1237.7	1225.3
5°	1446.4	1444.3	1434.0	1411.2	1388.5	1361.6	1359.6	1320.3	1285.2	1245.9	1212.9
7.5°	1568.3	1564.1	1545.5	1510.4	1471.2	1429.8	1425.7	1367.8	1316.2	1264.5	1217.0
10°	1663.3	1659.2	1632.3	1591.0	1537.3	1485.6	1479.4	1419.5	1367.8	1301.7	1237.7
12.5°	1756.3	1748.0	1712.9	1667.5	1601.3	1551.7	1545.5	1483.6	1421.6	1353.4	1274.9
15°	1843.1	1832.7	1799.7	1741.8	1671.6	1624.1	1619.9	1553.8	1489.8	1411.2	1324.5
17.5°	1903.0	1898.9	1859.6	1795.6	1727.4	1688.1	1684.0	1615.8	1551.7	1469.1	1376.1
20°	1934.0	1934.0	1896.8	1826.6	1764.6	1737.7	1731.5	1667.5	1605.5	1526.9	1429.8
22.5°	1940.2	1946.4	1917.5	1841.0	1795.6	1772.8	1768.7	1712.9	1653.0	1580.7	1489.8
25°	1952.6	1952.6	1938.1	1855.5	1822.4	1816.2	1814.2	1764.6	1710.8	1638.5	1549.7
27.5°	1967.1	1967.1	1956.7	1876.1	1863.7	1861.7	1859.6	1836.9	1793.5	1708.8	1619.9
30°	2004.2	2006.3	1998.0	1917.5	1909.2	1931.9	1936.1	1923.7	1869.9	1764.6	1692.2
32.5°	2097.2	2078.6	2055.9	1946.4	1960.9	1989.8	1991.8	1967.1	1909.2	1824.5	1779.0
35°	2330.7	2221.2	2117.9	1971.2	1977.4	2006.3	2010.4	2008.4	1973.3	1900.9	1878.2
37.5°	2547.7	2392.7	2246.0	2029.0	2008.4	2039.4	2047.6	2082.8	2055.9	2006.3	2012.5
40°	2673.7	2613.8	2510.5	2188.1	2070.4	2117.9	2126.2	2179.9	2169.5	2148.9	2188.1
42.5°	3062.2	3066.3	2954.7	2425.8	2184.0	2260.5	2270.8	2314.2	2328.6	2339.0	2434.0
45°	3512.6	3527.1	3500.2	2853.5	2398.9	2423.7	2438.2	2496.0	2549.7	2615.9	2789.4
47.5°	4053.9	4041.6	3942.4	3376.2	2772.9	2634.4	2644.8	2756.4	2849.3	2994.0	3241.9
50°	4533.3	4564.3	4376.3	3863.9	3299.8	2967.1	2956.8	3066.3	3233.7	3436.1	3748.1
52.5°	5016.8	4971.4	4717.2	4347.4	3923.8	3419.6	3388.6	3448.5	3684.1	3923.8	4244.0
55°	5144.9	5149.1	5062.3	4876.3	4444.5	3969.2	3917.6	3913.4	4206.9	4370.1	4764.7
57.5°	5397.0	5407.3	5428.0	5465.2	5260.6	4518.9	4465.1	4407.3	4692.4	4787.5	5287.5
60°	5653.2	5665.6	5791.7	5992.1	5855.7	5111.9	5054.0	4917.6	5076.7	5204.8	5837.1
62.5°	5620.2	5706.9	6072.7	6471.4	6454.9	5762.7	5690.4	5361.9	5463.1	5574.7	6341.3
65°	5074.7	5167.6	5990.0	6603.7	7056.2	6405.3	6287.5	5820.6	5826.8	5961.1	6826.8
67.5°	4587.0	4688.3	5473.5	6547.9	7452.9	6981.8	6859.9	6281.3	6184.2	6407.4	7087.2
70°	4306.0	4407.3	5062.3	6374.3	7564.5	7620.3	7514.9	6808.2	6609.9	6814.4	6795.8
72.5°	3370.0	3529.1	4537.4	6043.7	7684.3	8304.2	8221.5	7475.6	6971.5	6388.8	5173.8
75°	1343.1	1489.8	2832.8	4863.9	7533.5	8893.1	8829.0	7775.2	6452.8	4562.2	2648.9
77.5°	405.0	433.9	787.2	2405.1	5523.0	7884.7	7864.1	6537.6	4566.4	2117.9	723.2
80°	134.3	148.8	241.7	663.3	2520.8	4925.9	5018.9	4165.5	2074.5	485.6	146.7
82.5°	55.8	62.0	121.9	266.5	892.6	2122.0	2091.0	1865.8	723.2	301.7	53.7
85°	14.5	18.6	55.8	152.9	326.5	731.4	768.6	626.1	409.1	250.0	16.5
87.5°	0.0	0.0	26.9	62.0	146.7	221.1	231.4	190.1	231.4	188.0	8.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P400521

CATALOG NUMBER: ARCH-L-PA3-90-750-U-T4W-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1219.1	1219.1	1219.1	1219.1	1219.1	1219.1	1219.1	1219.1	1219.1	1219.1	1219.1
2.5°	1214.9	1204.6	1186.0	1173.6	1157.1	1153.0	1144.7	1134.4	1132.3	1122.0	1124.0
5°	1194.3	1177.8	1144.7	1122.0	1095.1	1086.8	1072.4	1062.0	1053.8	1039.3	1041.4
7.5°	1190.2	1165.4	1119.9	1076.5	1033.1	1002.1	958.7	923.6	894.7	863.7	869.9
10°	1204.6	1173.6	1109.6	1049.6	971.1	872.0	758.3	683.9	646.7	609.5	613.7
12.5°	1233.5	1196.3	1113.7	1022.8	863.7	694.3	537.2	436.0	409.1	392.6	394.7
15°	1276.9	1231.5	1126.1	971.1	719.0	502.1	357.5	314.1	324.4	330.6	330.6
17.5°	1322.4	1270.7	1136.4	878.1	555.8	351.3	291.3	287.2	301.7	316.1	316.1
20°	1378.2	1312.1	1138.5	760.4	400.8	285.1	274.8	274.8	285.1	301.7	301.7
22.5°	1431.9	1357.5	1119.9	626.1	305.8	264.5	264.5	264.5	270.7	287.2	289.3
25°	1496.0	1413.3	1080.6	483.5	262.4	252.1	252.1	254.1	258.3	272.7	274.8
27.5°	1564.1	1471.2	1014.5	353.3	239.7	237.6	239.7	241.7	243.8	258.3	262.4
30°	1642.7	1535.2	929.8	264.5	219.0	219.0	225.2	229.4	229.4	241.7	245.9
32.5°	1733.6	1619.9	828.6	219.0	198.4	196.3	206.6	212.8	212.8	223.2	227.3
35°	1847.2	1706.7	706.7	194.2	181.8	177.7	181.8	192.2	196.3	204.6	206.6
37.5°	1998.0	1810.0	576.5	179.8	169.4	161.2	161.2	163.2	171.5	179.8	181.8
40°	2190.2	1923.7	448.4	169.4	157.0	148.8	142.6	140.5	138.4	144.6	148.8
42.5°	2432.0	2051.8	334.7	159.1	146.7	134.3	126.0	117.8	107.4	105.4	107.4
45°	2741.9	2208.8	247.9	150.8	140.5	121.9	107.4	93.0	74.4	68.2	70.3
47.5°	3107.6	2372.0	194.2	142.6	136.4	107.4	88.8	64.1	45.5	41.3	43.4
50°	3496.1	2529.1	165.3	132.2	128.1	93.0	64.1	39.3	26.9	26.9	28.9
52.5°	3826.7	2617.9	150.8	124.0	115.7	76.5	41.3	22.7	16.5	16.5	18.6
55°	4146.9	2665.4	140.5	115.7	99.2	53.7	22.7	14.5	10.3	10.3	10.3
57.5°	4477.5	2686.1	128.1	105.4	78.5	33.1	12.4	8.3	6.2	6.2	6.2
60°	4770.9	2646.8	109.5	86.8	51.7	16.5	6.2	6.2	4.1	2.1	2.1
62.5°	5016.8	2572.5	76.5	62.0	31.0	8.3	4.1	2.1	0.0	0.0	0.0
65°	5167.6	2452.6	49.6	41.3	18.6	6.2	2.1	0.0	0.0	0.0	0.0
67.5°	5124.3	2227.4	31.0	26.9	8.3	4.1	2.1	0.0	0.0	0.0	0.0
70°	4624.2	1826.6	22.7	16.5	6.2	2.1	0.0	0.0	0.0	0.0	0.0
72.5°	3332.8	1235.6	16.5	10.3	4.1	0.0	0.0	0.0	0.0	0.0	0.0
75°	1603.4	440.1	10.3	8.3	2.1	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	392.6	97.1	6.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	86.8	18.6	4.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	28.9	8.3	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.3	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.2	2.1	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)