

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: P265855

Luminaire Tested: **ARCH-M-AF48-150-D-U-T3-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265855  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-M-AF48-150-D-U-T3-7027  
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 970mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15492.7 lumens  
Efficiency: N/A  
Efficacy: 102.6 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G3

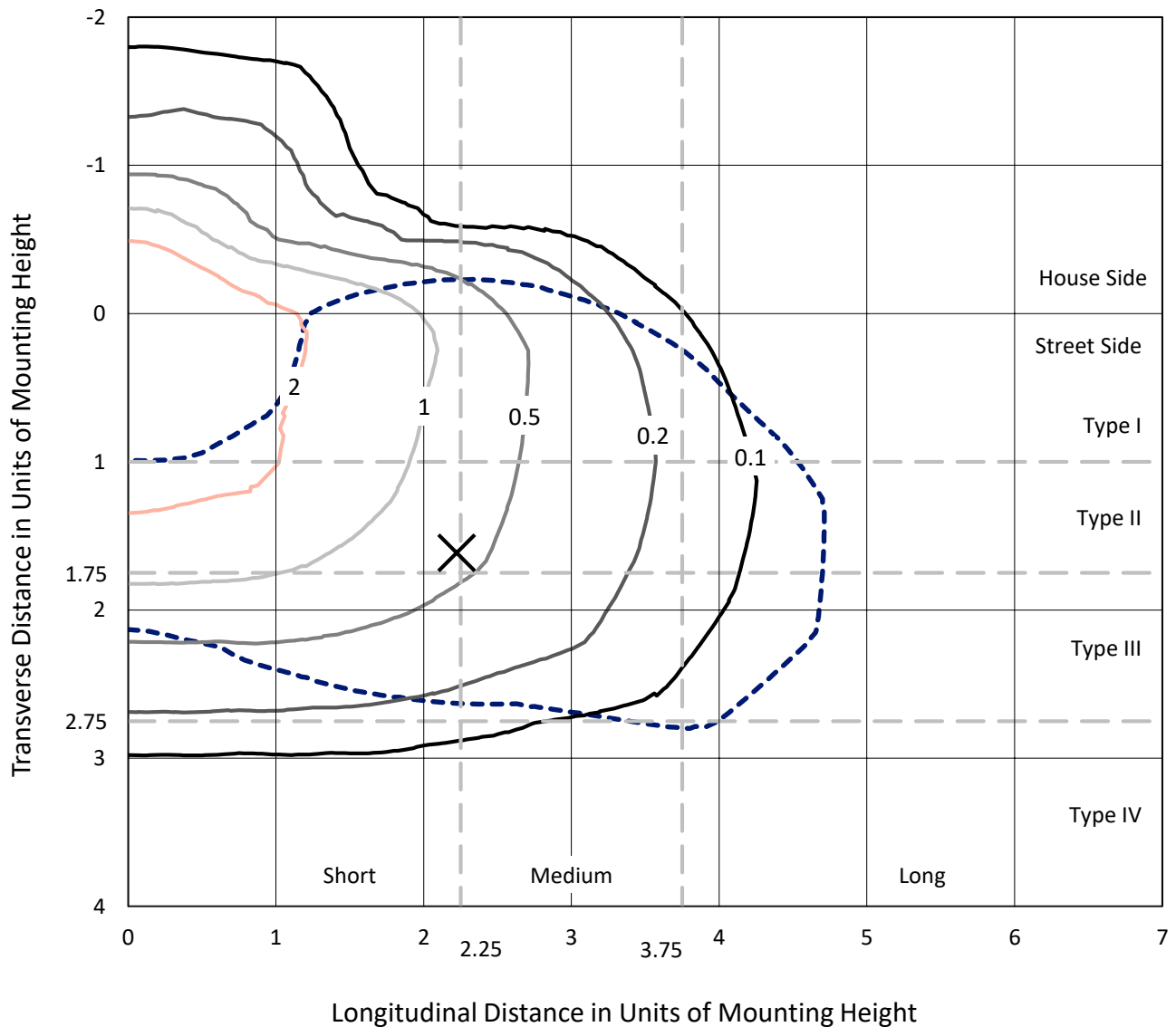
Input Watts (W): 151  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P265855  
 CATALOG NUMBER: ARCH-M-AF48-150-D-U-T3-7027

### Iso-Footcandle Lines of Horizontal Illumination

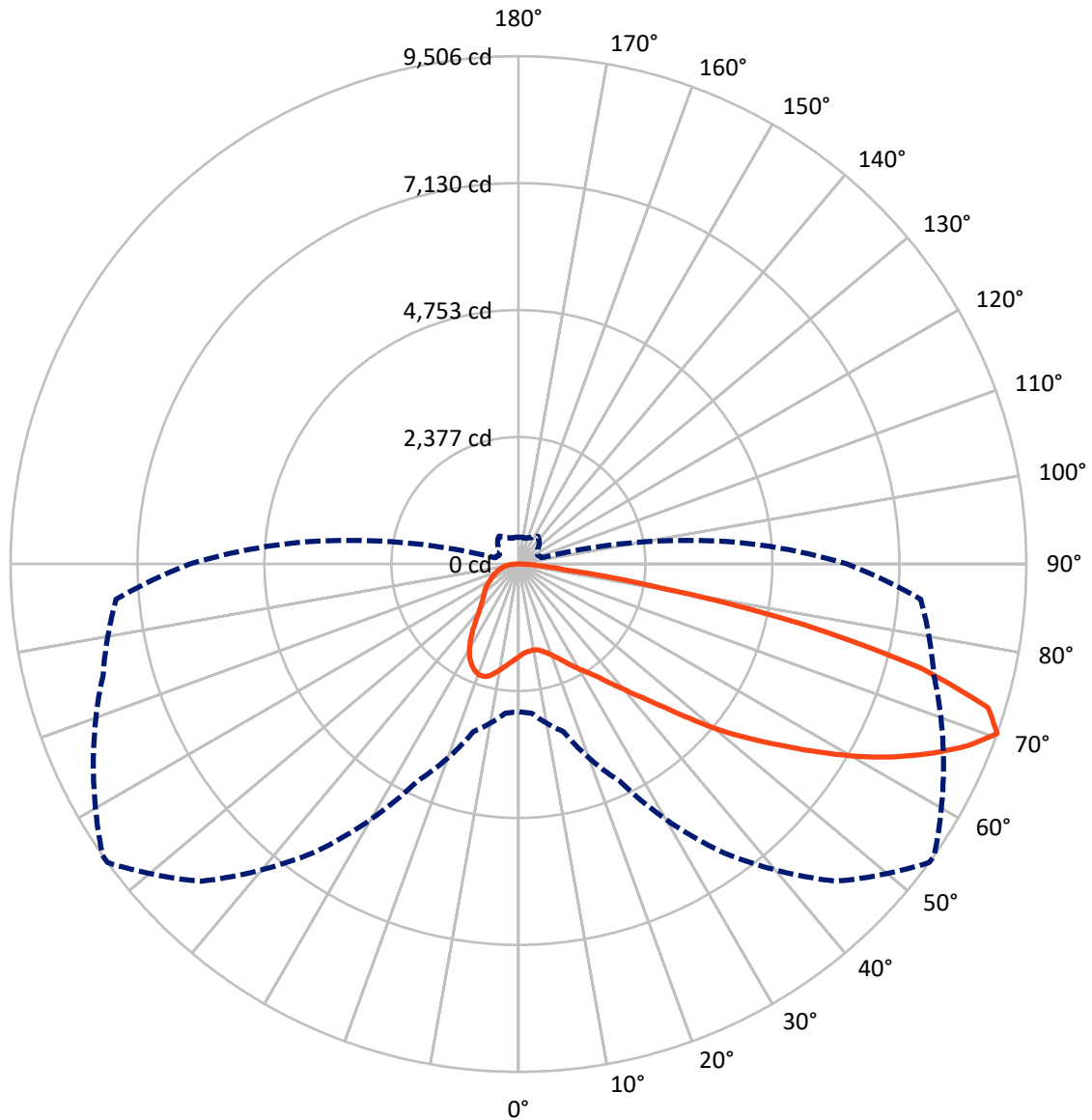
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc  
 Type III - Short - Non-Cutoff

REPORT NUMBER: P265855  
CATALOG NUMBER: ARCH-M-AF48-150-D-U-T3-7027

### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P265855

CATALOG NUMBER: ARCH-M-AF48-150-D-U-T3-7027

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3513.7	0.0	3513.7
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	11979.0	0.0	11979.0
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	15492.7	0.0	15492.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	170.1	1.1
10°-20°	543.5	3.5
20°-30°	944.3	6.1
30°-40°	1380.0	8.9
40°-50°	2165.8	14.0
50°-60°	3330.5	21.5
60°-70°	4069.1	26.3
70°-80°	2522.8	16.3
80°-90°	366.5	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°	15492.7	100.0
0°-180°	15492.7	100.0

**Coefficient of Utilization**



REPORT NUMBER: P265855

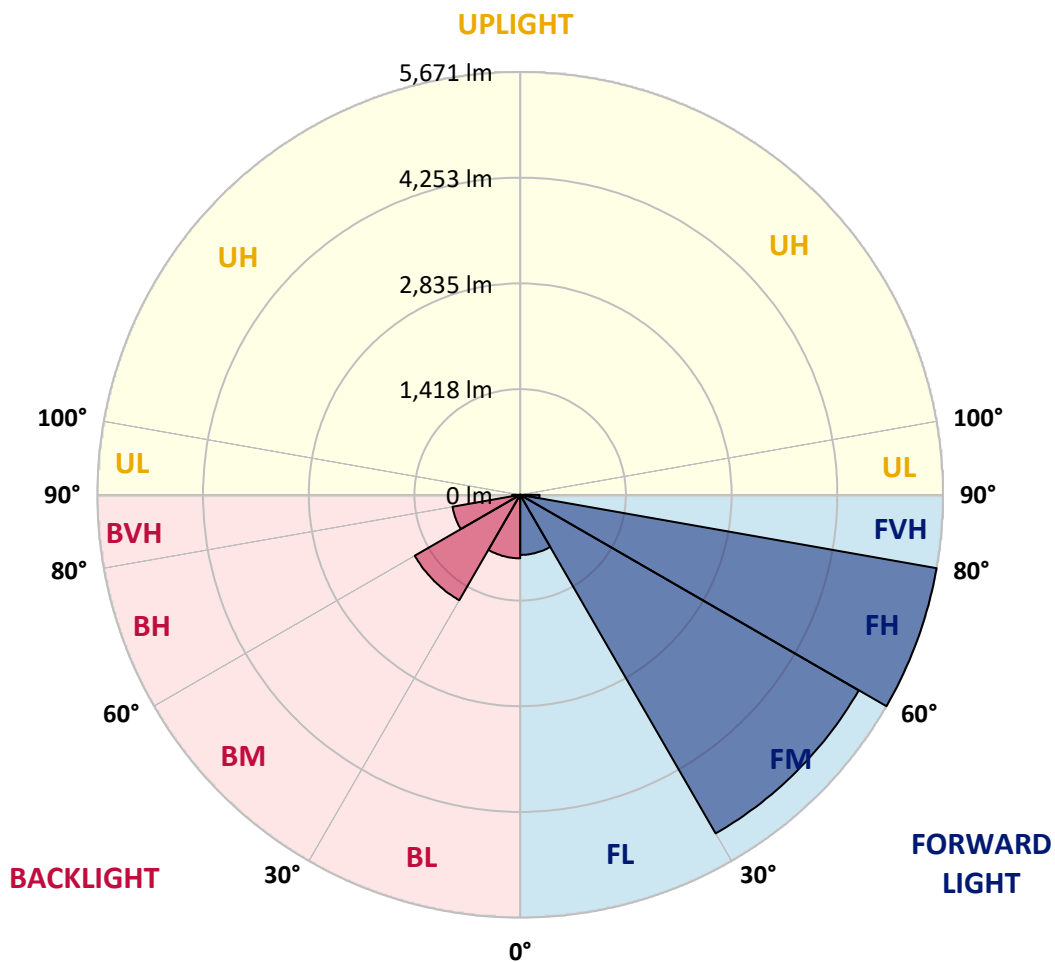
CATALOG NUMBER: ARCH-M-AF48-150-D-U-T3-7027

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	806.1	5.2			
FM	(30°-60°)	5243.6	33.8			
FH	(60°-80°)	5670.5	36.6			G3/7500
FVH	(80°-90°)	258.8	1.7			G3/500
BL	(0°-30°)	851.8	5.5	B2/1000		
BM	(30°-60°)	1632.8	10.5	B2/2500		
BH	(60°-80°)	921.4	5.9	B2/1000		G2/1000
BVH	(80°-90°)	107.7	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type III Short





REPORT NUMBER: P265855

CATALOG NUMBER: ARCH-M-AF48-150-D-U-T3-7027

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	1733.3	1733.3	1733.3	1733.3	1733.3	1733.3	1733.3	1733.3	1733.3	1733.3	1733.3
2.5°	1665.3	1659.6	1659.6	1668.1	1670.8	1679.4	1679.4	1682.3	1690.8	1705.0	1722.1
5°	1614.2	1611.3	1614.2	1625.6	1631.2	1648.2	1653.9	1656.7	1673.7	1696.4	1722.1
7.5°	1563.1	1560.3	1565.9	1583.0	1600.1	1625.6	1639.6	1642.6	1668.1	1699.2	1733.3
10°	1546.2	1543.3	1551.7	1565.9	1583.0	1611.3	1634.0	1636.8	1673.7	1710.6	1758.8
12.5°	1568.8	1565.9	1574.5	1588.7	1605.7	1625.6	1651.1	1653.9	1702.1	1750.3	1801.5
15°	1625.6	1625.6	1628.4	1636.8	1653.9	1670.8	1693.7	1696.4	1747.6	1804.2	1855.3
17.5°	1713.4	1707.8	1707.8	1705.0	1716.3	1724.8	1753.2	1755.9	1809.9	1861.0	1912.0
20°	1821.3	1818.3	1807.1	1792.8	1790.1	1795.7	1824.1	1827.0	1880.8	1923.5	1971.6
22.5°	1951.7	1954.6	1929.1	1897.8	1883.7	1892.2	1917.7	1920.5	1960.3	1997.1	2039.7
25°	2124.9	2116.2	2079.3	2034.0	2005.6	2005.6	2031.2	2031.2	2068.1	2090.7	2119.1
27.5°	2289.3	2272.4	2238.2	2173.0	2127.6	2136.2	2161.7	2161.7	2195.7	2204.3	2218.5
30°	2468.1	2451.0	2408.4	2326.3	2266.7	2260.9	2292.1	2289.3	2334.8	2331.9	2320.5
32.5°	2686.6	2677.9	2607.2	2502.0	2422.6	2402.8	2431.3	2434.0	2462.4	2453.9	2417.0
35°	2993.0	2990.1	2924.8	2740.4	2635.4	2598.5	2615.5	2615.5	2635.4	2612.7	2550.4
37.5°	3378.6	3384.4	3327.6	3055.2	2907.8	2845.4	2848.2	2845.4	2851.0	2825.4	2760.2
40°	3764.4	3778.7	3775.8	3446.7	3259.5	3151.8	3112.0	3106.3	3120.5	3109.3	3046.8
42.5°	4272.2	4306.4	4227.0	3929.0	3719.2	3537.5	3429.8	3415.5	3446.7	3461.0	3401.4
45°	4800.0	4788.7	4663.8	4448.1	4258.1	4025.6	3821.2	3798.6	3821.2	3863.8	3801.4
47.5°	5075.2	5066.6	5035.4	4927.7	4899.3	4632.6	4323.4	4303.5	4261.0	4320.6	4246.7
50°	5529.1	5537.5	5410.0	5398.5	5517.7	5370.2	4890.7	4845.4	4768.7	4817.0	4754.5
52.5°	5858.0	5821.2	5741.7	5841.0	6212.7	6133.3	5424.1	5404.3	5333.2	5322.0	5293.6
55°	5991.4	5991.4	6005.6	6235.5	6765.9	6660.9	6002.7	6022.6	5926.2	5846.8	5883.5
57.5°	6031.1	6048.2	6170.2	6550.4	7415.6	7072.3	6641.1	6669.5	6530.5	6371.6	6487.9
60°	5835.4	5886.5	6178.6	6729.1	7781.5	7509.1	7313.5	7321.9	7120.5	6887.8	7092.2
62.5°	5333.2	5395.7	5917.7	6802.8	7721.9	7957.4	7948.8	7968.8	7693.5	7404.2	7659.5
65°	4717.7	4780.2	5336.1	6595.6	7676.6	8277.9	8530.5	8584.4	8229.7	7841.0	8014.0
67.5°	3812.8	3895.1	4422.6	5897.8	7455.3	8541.8	9075.0	9131.8	8643.9	8067.9	7982.9
70°	2763.0	2802.8	3245.3	4482.3	6553.1	8397.0	9506.4	9503.4	8780.0	8051.0	7557.4
72.5°	1330.5	1361.7	1744.7	2782.9	4686.5	7126.2	9194.2	9248.1	8592.8	7804.1	6584.3
75°	547.4	578.7	706.3	1174.4	2459.6	4709.2	7792.8	7920.4	7804.1	7004.3	5151.7
77.5°	340.4	351.7	414.2	607.1	1123.4	2198.5	5455.2	5628.3	6184.3	5611.4	3401.4
80°	255.3	263.8	309.2	425.5	709.2	811.3	2709.2	2927.7	3747.5	3219.9	1540.5
82.5°	212.8	215.7	246.9	309.2	482.3	465.2	868.1	967.4	1747.6	1228.3	530.4
85°	198.5	204.3	221.3	221.3	306.4	292.2	360.3	377.3	507.8	419.9	184.4
87.5°	102.1	96.5	195.7	173.1	158.9	141.8	153.3	164.5	190.1	201.4	82.3
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: P265855

CATALOG NUMBER: ARCH-M-AF48-150-D-U-T3-7027

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1733.3	1733.3	1733.3	1733.3	1733.3	1733.3	1733.3	1733.3	1733.3	1733.3	1733.3
2.5°	1727.6	1736.2	1750.3	1764.5	1781.6	1801.5	1812.8	1827.0	1838.3	1832.6	1829.8
5°	1736.2	1750.3	1781.6	1809.9	1844.0	1883.7	1909.2	1937.6	1960.3	1965.9	1957.4
7.5°	1750.3	1775.9	1818.3	1869.6	1914.8	1965.9	2005.6	2045.4	2073.7	2079.3	2079.3
10°	1784.4	1812.8	1869.6	1937.6	1991.5	2045.4	2090.7	2121.9	2147.5	2158.8	2158.8
12.5°	1832.6	1866.7	1934.7	2017.1	2076.6	2127.6	2153.1	2167.4	2178.7	2190.1	2192.9
15°	1889.3	1926.2	2008.5	2096.5	2158.8	2184.4	2184.4	2181.5	2181.5	2187.3	2192.9
17.5°	1946.1	1985.9	2071.0	2164.6	2204.3	2190.1	2170.1	2161.7	2156.0	2153.1	2161.7
20°	2005.6	2045.4	2130.5	2218.5	2207.0	2147.5	2119.1	2099.2	2082.2	2073.7	2085.1
22.5°	2071.0	2107.9	2195.7	2255.4	2170.1	2079.3	2025.5	1994.2	1965.9	1949.0	1960.3
25°	2147.5	2184.4	2269.5	2266.7	2105.0	1977.3	1892.2	1841.2	1809.9	1792.8	1792.8
27.5°	2238.2	2269.5	2351.8	2238.2	2014.2	1841.2	1716.3	1668.1	1659.6	1645.3	1645.3
30°	2331.9	2357.4	2428.4	2173.0	1889.3	1662.5	1526.2	1503.6	1506.4	1492.2	1495.0
32.5°	2428.4	2453.9	2473.8	2076.6	1727.6	1461.0	1370.3	1353.1	1350.3	1339.1	1327.7
35°	2564.5	2601.4	2479.4	1946.1	1531.9	1293.6	1228.3	1211.4	1194.3	1154.6	1154.6
37.5°	2771.6	2811.3	2465.2	1784.4	1330.5	1163.1	1103.6	1080.8	1052.5	1012.7	998.6
40°	3055.2	3055.2	2434.0	1602.8	1168.8	1058.2	1001.4	973.0	941.9	902.1	893.6
42.5°	3390.1	3310.7	2385.8	1418.5	1049.6	987.2	936.2	905.0	868.1	822.7	817.0
45°	3781.5	3565.9	2317.6	1253.9	961.6	944.7	913.4	859.6	797.2	748.9	740.5
47.5°	4161.7	3795.7	2252.5	1137.6	888.0	927.7	902.1	811.3	726.2	658.2	649.7
50°	4578.8	4000.0	2175.9	1041.1	831.2	916.4	888.0	740.5	646.8	598.6	592.9
52.5°	4995.7	4207.0	2093.6	939.0	783.0	893.6	853.8	689.4	643.9	578.7	570.2
55°	5435.5	4448.1	1997.1	825.5	726.2	848.2	808.6	686.6	663.8	578.7	558.8
57.5°	5863.7	4714.8	1841.2	715.0	663.8	780.2	791.4	669.4	621.3	573.1	550.3
60°	6337.5	4998.6	1583.0	621.3	609.9	723.3	768.8	632.6	573.1	556.1	544.7
62.5°	6717.6	5253.8	1236.8	556.1	564.6	678.0	740.5	609.9	553.1	539.1	536.2
65°	6882.3	5259.5	888.0	499.3	519.1	635.5	712.0	590.0	536.2	530.4	527.7
67.5°	6709.3	4970.1	624.1	445.4	470.9	595.8	675.2	570.2	519.1	521.9	516.3
70°	6150.2	4360.3	456.8	394.4	425.5	553.1	635.5	544.7	499.3	504.9	496.5
72.5°	5146.1	3398.6	366.0	351.7	388.6	507.8	595.8	516.3	468.0	470.9	454.0
75°	3801.4	2252.5	306.4	314.9	346.0	465.2	544.7	479.4	434.1	422.7	411.3
77.5°	2260.9	1157.5	252.5	275.2	309.2	414.2	487.9	434.1	397.2	377.3	368.8
80°	933.2	468.0	207.1	232.7	269.5	368.8	431.1	380.2	354.7	334.8	323.4
82.5°	371.5	229.7	164.5	190.1	226.9	320.5	377.3	334.8	309.2	295.1	263.8
85°	141.8	113.5	110.6	133.3	170.1	246.9	312.0	280.8	261.0	224.0	215.7
87.5°	56.8	51.1	51.1	65.2	96.5	156.0	224.0	195.7	204.3	161.8	164.5
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)