

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: P265642

Luminaire Tested: **ARCH-L-AF72-160-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265642
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-160-D-U-T4W-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 705mA 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: 13137.1 lumens
Efficiency: N/A
Efficacy: 81.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G3

Input Watts (W): 162
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

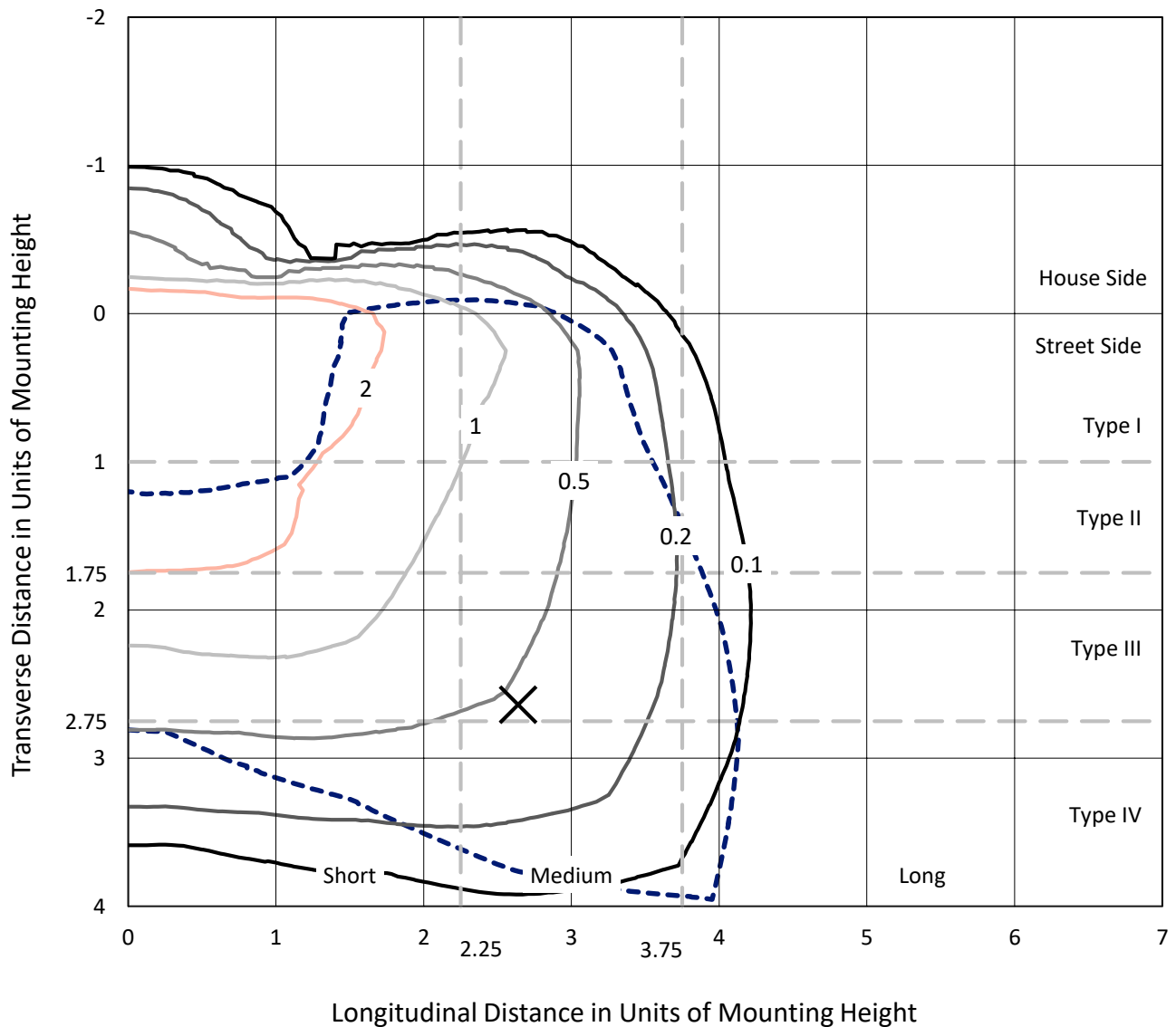


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

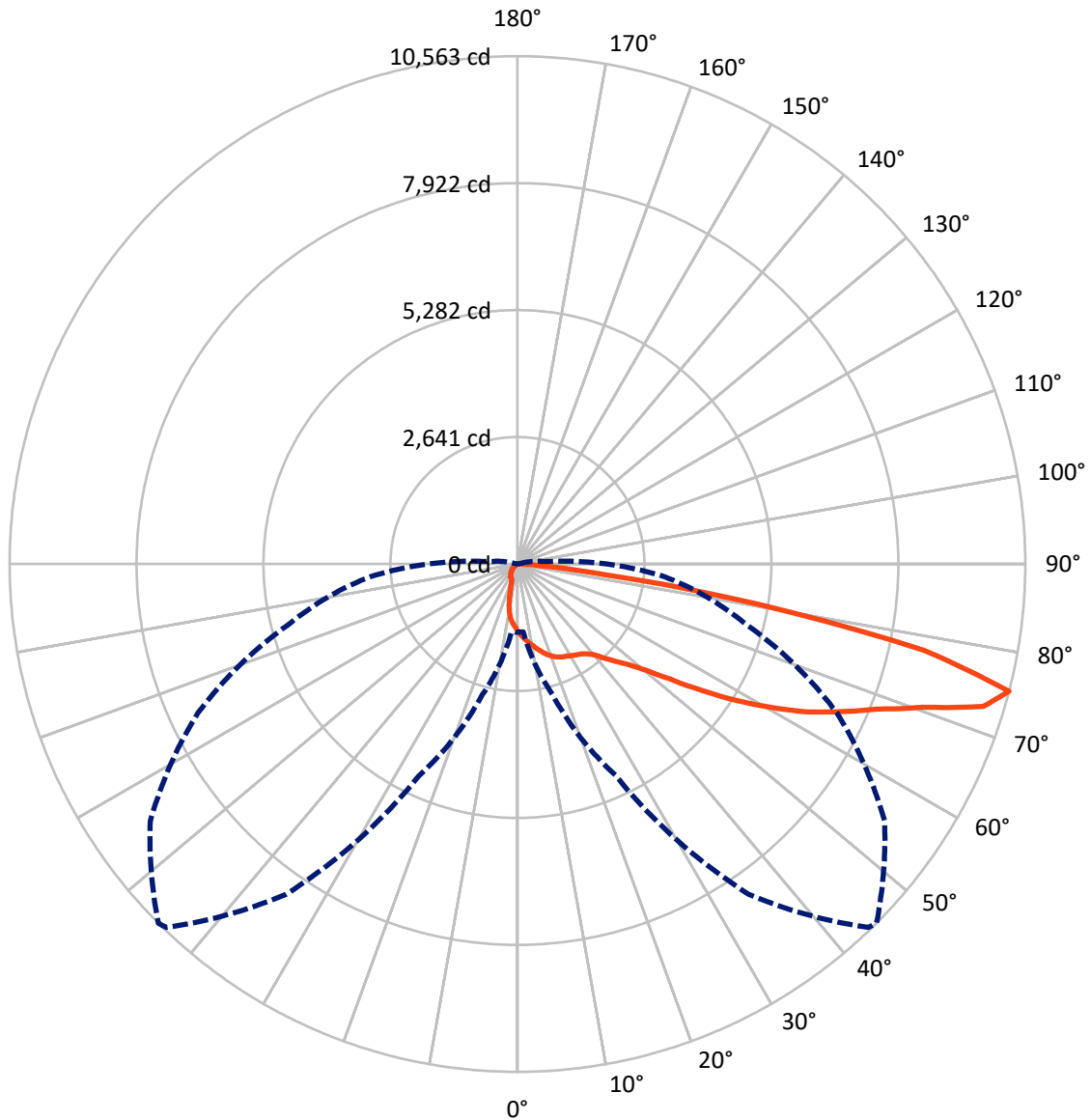


Based on 20 foot mounting height. Maximum calculated value = 4.7 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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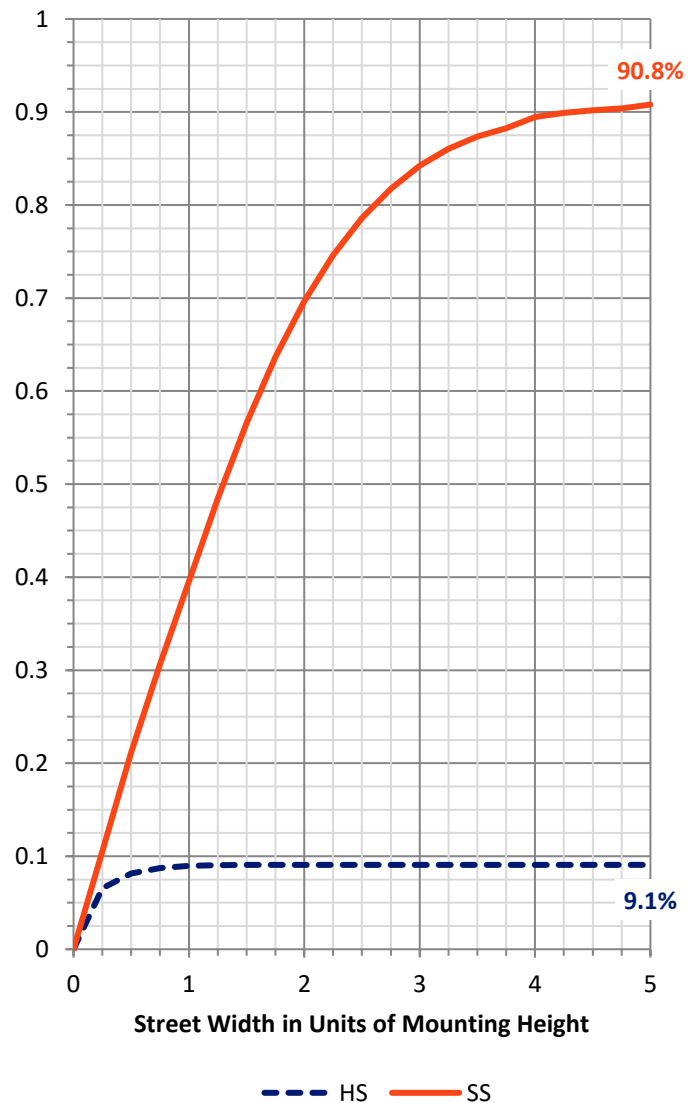
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1201.6	0.0	1201.6
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	11935.5	0.0	11935.5
	% Fixture	90.9	0.0	90.9
Total	Lumens	13137.1	0.0	13137.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.6	1.0
10°-20°	375.7	2.9
20°-30°	622.2	4.7
30°-40°	900.4	6.9
40°-50°	1474.4	11.2
50°-60°	2627.2	20.0
60°-70°	3862.3	29.4
70°-80°	2913.7	22.2
80°-90°	228.6	1.7
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°	13137.1	100.0
0°-180°	13137.1	100.0



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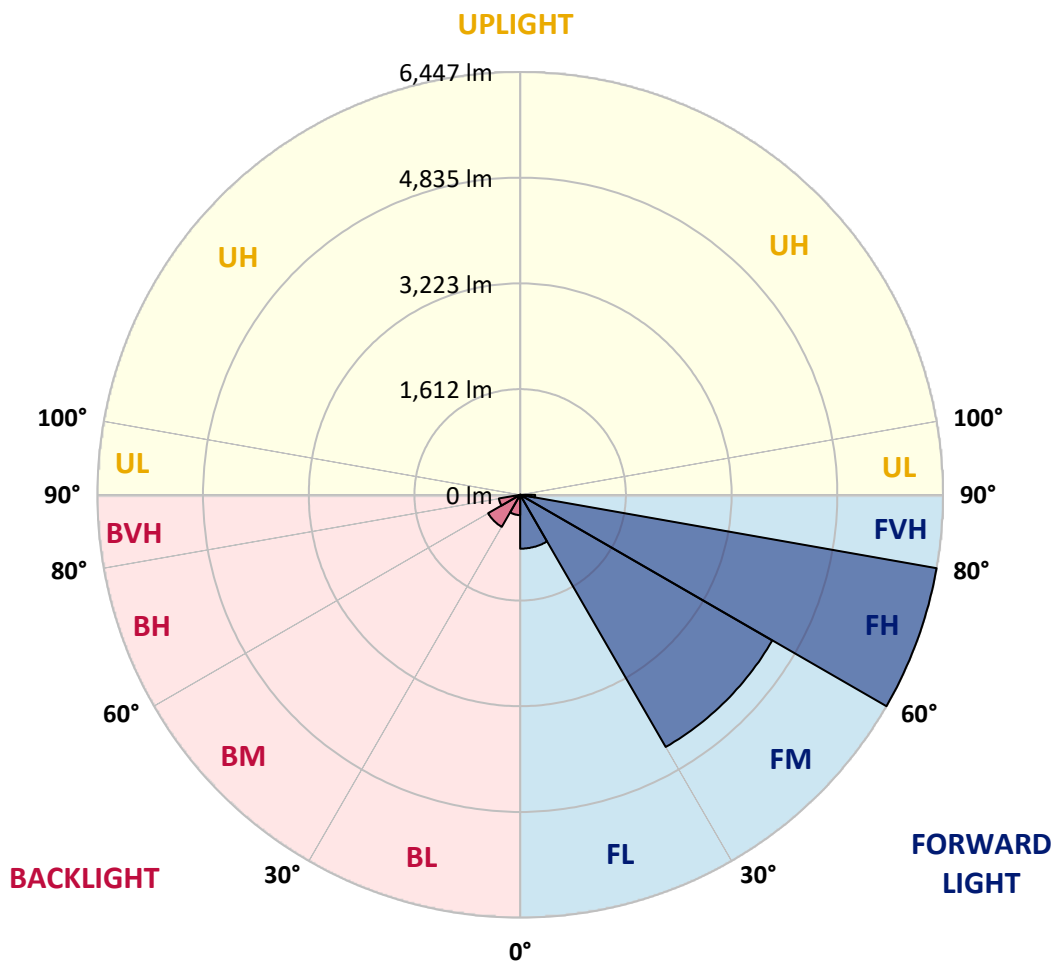
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	821.7	6.3			
FM	(30°-60°)	4439.0	33.8			
FH	(60°-80°)	6446.9	49.1			G3/7500
FVH	(80°-90°)	228.0	1.7			G3/500
BL	(0°-30°)	308.8	2.4	B1/500		
BM	(30°-60°)	563.1	4.3	B1/1000		
BH	(60°-80°)	329.1	2.5	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-G3

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0
2.5°	1526.3	1526.3	1523.3	1520.1	1504.7	1489.0	1485.8	1476.5	1448.5	1429.9	1411.2
5°	1653.8	1656.8	1650.6	1635.2	1600.9	1566.7	1563.6	1538.7	1485.8	1448.5	1408.3
7.5°	1775.1	1781.2	1765.7	1737.7	1697.3	1647.5	1644.4	1597.8	1529.5	1476.5	1417.5
10°	1877.5	1877.5	1855.8	1821.7	1778.1	1725.3	1719.0	1666.1	1588.6	1523.3	1445.6
12.5°	1989.4	1986.4	1955.3	1908.7	1859.0	1809.1	1806.1	1740.8	1666.1	1582.3	1485.8
15°	2092.2	2085.9	2045.5	2002.0	1949.1	1896.2	1893.2	1827.8	1750.2	1650.6	1544.9
17.5°	2148.0	2145.0	2107.7	2064.1	2020.6	1980.1	1977.1	1908.7	1824.7	1722.2	1604.1
20°	2157.4	2160.5	2129.4	2092.2	2067.2	2045.5	2045.5	1983.3	1893.2	1784.4	1666.1
22.5°	2160.5	2169.8	2148.0	2098.4	2092.2	2095.1	2101.4	2051.6	1958.5	1855.8	1731.6
25°	2182.3	2194.6	2179.1	2120.1	2113.8	2135.6	2141.7	2120.1	2036.2	1933.5	1806.1
27.5°	2225.8	2238.1	2225.8	2151.1	2141.7	2163.6	2169.8	2182.3	2120.1	2008.2	1883.8
30°	2312.7	2315.9	2288.0	2194.6	2176.1	2204.0	2213.3	2247.5	2197.8	2079.7	1958.5
32.5°	2465.0	2434.0	2350.1	2225.8	2210.2	2241.4	2250.7	2288.0	2269.3	2148.0	2036.2
35°	2776.0	2614.3	2421.7	2269.3	2253.8	2284.7	2297.2	2350.1	2359.4	2244.4	2132.4
37.5°	2772.9	2626.7	2589.5	2353.2	2331.5	2353.2	2368.7	2434.0	2471.3	2371.9	2272.4
40°	2968.7	2906.6	2906.6	2511.8	2440.2	2471.3	2486.9	2552.2	2617.4	2539.7	2437.1
42.5°	3584.1	3543.9	3500.2	2816.4	2592.6	2679.6	2688.9	2729.3	2807.1	2782.2	2661.0
45°	4271.3	4233.9	4066.1	3332.4	2853.6	2869.2	2890.9	2956.3	3068.3	3114.9	2971.9
47.5°	4808.9	4771.6	4628.6	3954.1	3260.8	3124.1	3124.1	3251.5	3425.6	3543.9	3407.0
50°	5241.2	5197.6	5110.5	4616.3	3929.2	3491.0	3472.3	3621.4	3879.5	4062.9	3969.7
52.5°	5660.8	5533.3	5480.5	5300.2	4684.8	4022.5	3972.8	4078.5	4436.0	4662.9	4585.2
55°	5940.5	5921.8	5865.9	5928.2	5477.3	4669.1	4625.6	4647.3	5094.9	5247.3	5150.9
57.5°	6201.7	6198.6	6322.9	6612.0	6341.6	5409.0	5340.6	5306.4	5732.3	5695.0	5778.8
60°	6525.0	6469.1	6758.0	7171.6	7134.2	6130.2	6052.4	5984.1	6220.4	6114.7	6531.1
62.5°	6540.5	6525.0	7112.5	7706.2	7920.7	6863.8	6773.6	6528.1	6646.2	6525.0	7249.2
65°	5946.8	6024.5	7261.7	7989.0	8579.7	7507.2	7398.5	7016.1	7025.5	6944.5	8094.7
67.5°	5813.1	5853.4	6851.4	8293.7	9055.4	8157.0	8054.5	7578.8	7466.8	7473.1	8595.3
70°	5480.5	5542.6	6341.6	8272.0	9431.5	9024.3	8921.6	8405.7	8135.2	7833.7	8209.8
72.5°	4187.3	4293.0	5343.7	7252.3	9328.9	10158.9	10130.9	9453.3	8402.6	7193.3	6211.1
75°	1417.5	1414.4	2807.1	4871.1	8380.7	10507.0	10563.0	9322.7	7330.1	4961.2	3083.7
77.5°	304.6	307.8	578.1	1973.9	5567.4	8436.7	8651.2	7031.7	4728.1	2210.2	705.7
80°	149.2	152.4	239.4	522.3	2225.8	4731.4	5067.0	3615.3	1747.1	441.3	118.1
82.5°	74.6	77.8	124.3	276.7	823.7	1681.7	1796.8	1330.5	500.4	248.7	59.1
85°	27.9	27.9	62.2	164.7	376.1	394.7	484.9	385.5	301.6	202.1	15.5
87.5°	6.2	6.2	34.1	80.8	167.9	124.3	124.3	118.1	183.4	136.8	6.2
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°	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0	1405.0
2.5°	1402.0	1389.6	1367.8	1346.0	1330.5	1311.9	1302.5	1293.2	1290.1	1286.9	1293.2
5°	1386.4	1367.8	1327.3	1293.2	1262.1	1237.2	1218.6	1200.0	1190.7	1184.3	1187.5
7.5°	1386.4	1358.4	1299.4	1246.6	1196.8	1143.9	1091.1	1050.7	1019.7	1001.0	1004.0
10°	1402.0	1364.6	1286.9	1215.4	1122.3	1010.4	895.3	808.2	749.1	715.1	715.1
12.5°	1436.2	1386.4	1290.1	1178.1	1019.7	823.7	649.7	544.1	500.4	475.7	478.7
15°	1482.8	1423.8	1305.5	1128.5	876.7	612.4	453.9	385.5	385.5	391.8	394.7
17.5°	1535.7	1470.3	1318.1	1053.8	693.2	438.4	357.4	351.2	360.6	376.1	376.1
20°	1588.6	1517.0	1324.2	935.7	519.1	348.2	338.8	338.8	345.0	360.6	363.8
22.5°	1653.8	1576.0	1318.1	789.6	388.5	329.5	326.4	326.4	326.4	345.0	345.0
25°	1722.2	1644.4	1293.2	634.2	329.5	317.1	314.0	310.9	310.9	326.4	329.5
27.5°	1799.8	1715.9	1234.1	484.9	310.9	304.6	301.6	295.4	295.4	307.8	307.8
30°	1877.5	1796.8	1143.9	366.8	295.4	292.2	286.0	279.8	273.5	286.0	286.0
32.5°	1961.4	1880.7	1025.9	292.2	273.5	273.5	270.5	261.0	254.8	261.0	264.2
35°	2073.5	1977.1	892.1	254.8	245.5	245.5	245.5	242.5	230.1	236.3	236.3
37.5°	2222.6	2110.7	736.7	236.3	223.8	217.6	217.6	217.6	208.2	211.5	211.5
40°	2412.3	2266.2	587.5	220.8	208.2	192.7	186.5	189.6	183.4	183.4	180.3
42.5°	2670.3	2434.0	441.3	208.2	195.8	174.1	161.7	158.6	152.4	149.2	149.2
45°	3040.3	2639.2	317.1	195.8	186.5	152.4	139.9	130.6	115.1	105.7	105.7
47.5°	3518.9	2872.3	236.3	183.4	177.1	133.7	118.1	99.5	77.8	71.4	71.4
50°	4103.4	3133.5	199.0	164.7	161.7	118.1	93.2	65.2	43.5	37.3	40.5
52.5°	4672.3	3379.1	177.1	146.2	143.0	102.5	68.5	34.1	18.7	18.7	18.7
55°	5150.9	3553.2	161.7	130.6	124.3	80.8	37.3	15.5	9.3	9.3	9.3
57.5°	5583.1	3652.6	146.2	115.1	99.5	56.0	15.5	6.2	6.2	3.1	3.1
60°	5977.9	3711.6	127.5	99.5	77.8	31.1	6.2	3.1	3.1	0.0	0.0
62.5°	6366.4	3755.2	108.9	80.8	59.1	12.4	3.1	3.1	0.0	0.0	0.0
65°	6661.7	3739.6	87.0	65.2	37.3	6.2	3.1	0.0	0.0	0.0	0.0
67.5°	6652.4	3528.3	65.2	49.8	18.7	3.1	0.0	0.0	0.0	0.0	0.0
70°	5949.8	2971.9	43.5	31.1	6.2	3.1	0.0	0.0	0.0	0.0	0.0
72.5°	4221.4	1905.6	27.9	18.7	3.1	0.0	0.0	0.0	0.0	0.0	0.0
75°	1859.0	578.1	15.5	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	363.8	133.7	9.3	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	87.0	15.5	3.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	37.3	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.3	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.2	3.1	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)