

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: P265606

Luminaire Tested: **ARCH-L-AF72-120-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265606
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-AF72-120-D-U-T4W-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 530mA 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: 10389 lumens
Efficiency: N/A
Efficacy: 84.5 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): 123
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

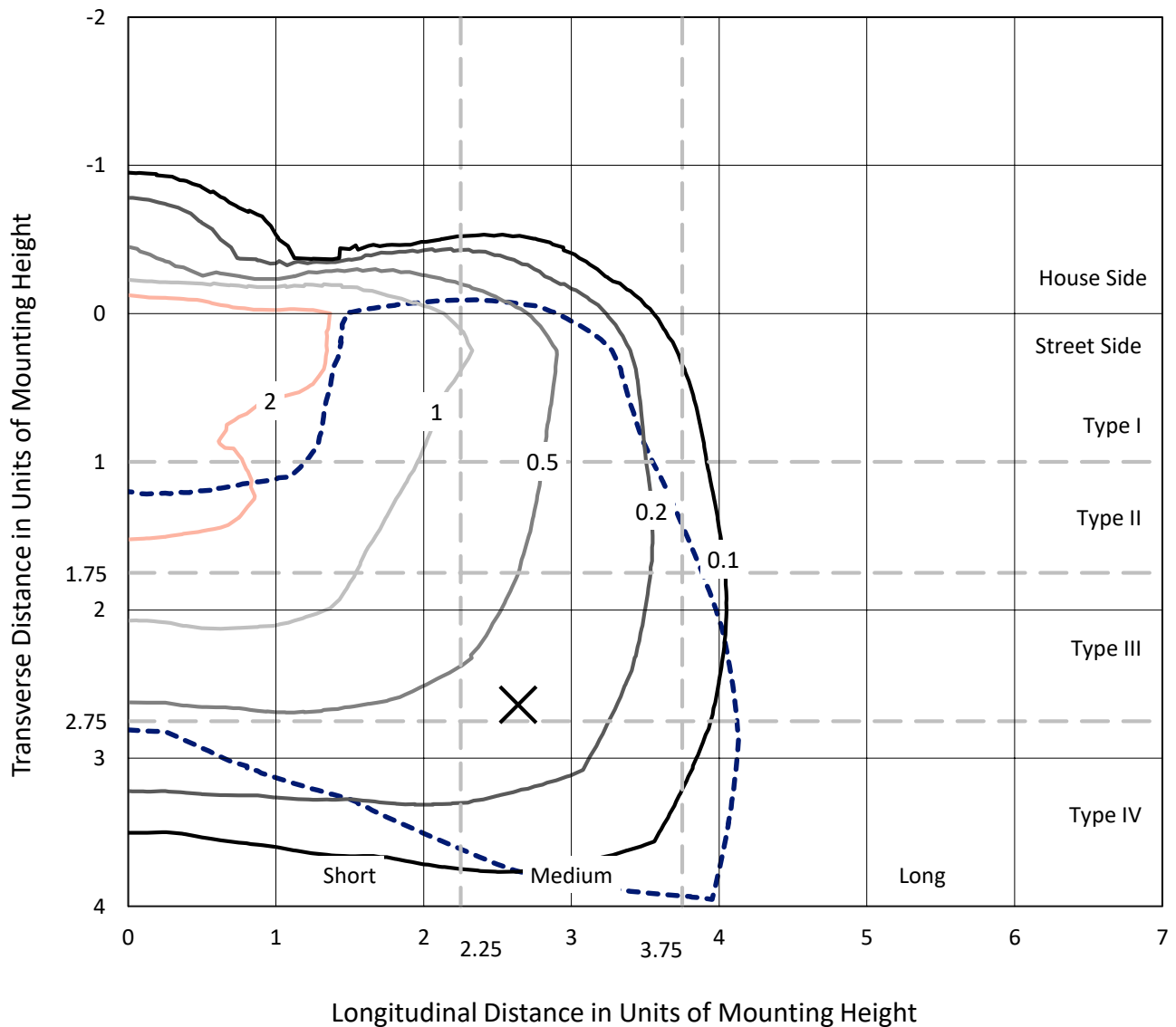


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

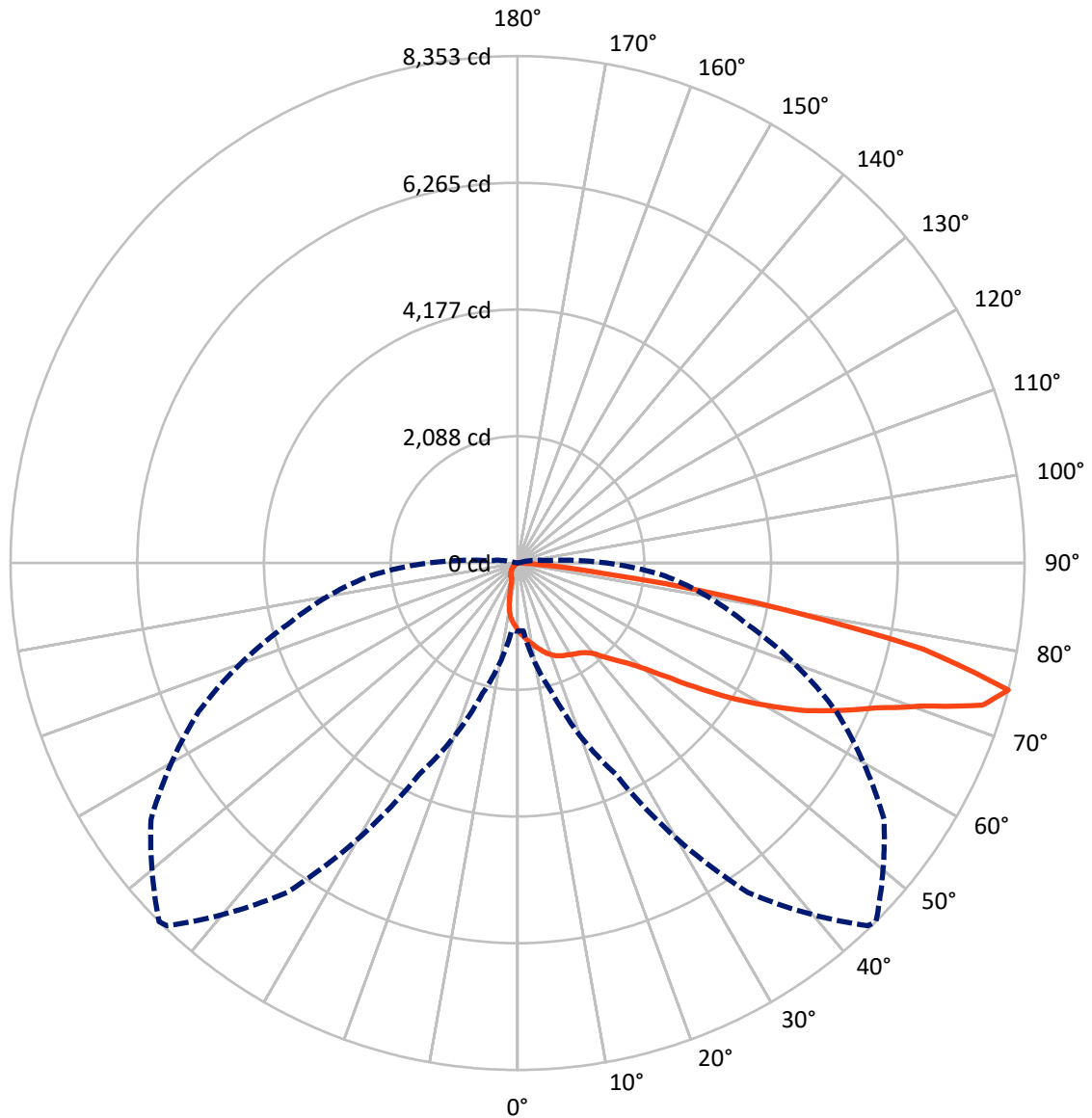


Based on 20 foot mounting height. Maximum calculated value = 3.7 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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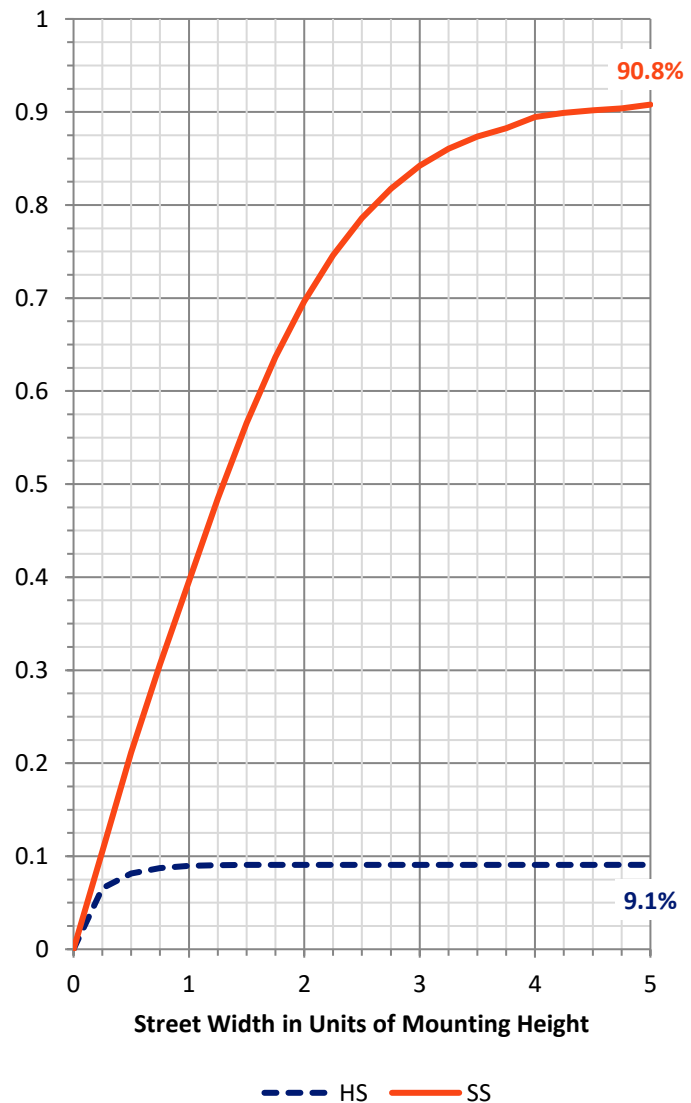
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	950.3	0.0	950.3
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	9438.7	0.0	9438.7
	% Fixture	90.9	0.0	90.9
Total	Lumens	10389.0	0.0	10389.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.9	1.0
10°-20°	297.1	2.9
20°-30°	492.0	4.7
30°-40°	712.1	6.9
40°-50°	1166.0	11.2
50°-60°	2077.6	20.0
60°-70°	3054.3	29.4
70°-80°	2304.2	22.2
80°-90°	180.8	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°	10389.0	100.0
0°-180°	10389.0	100.0



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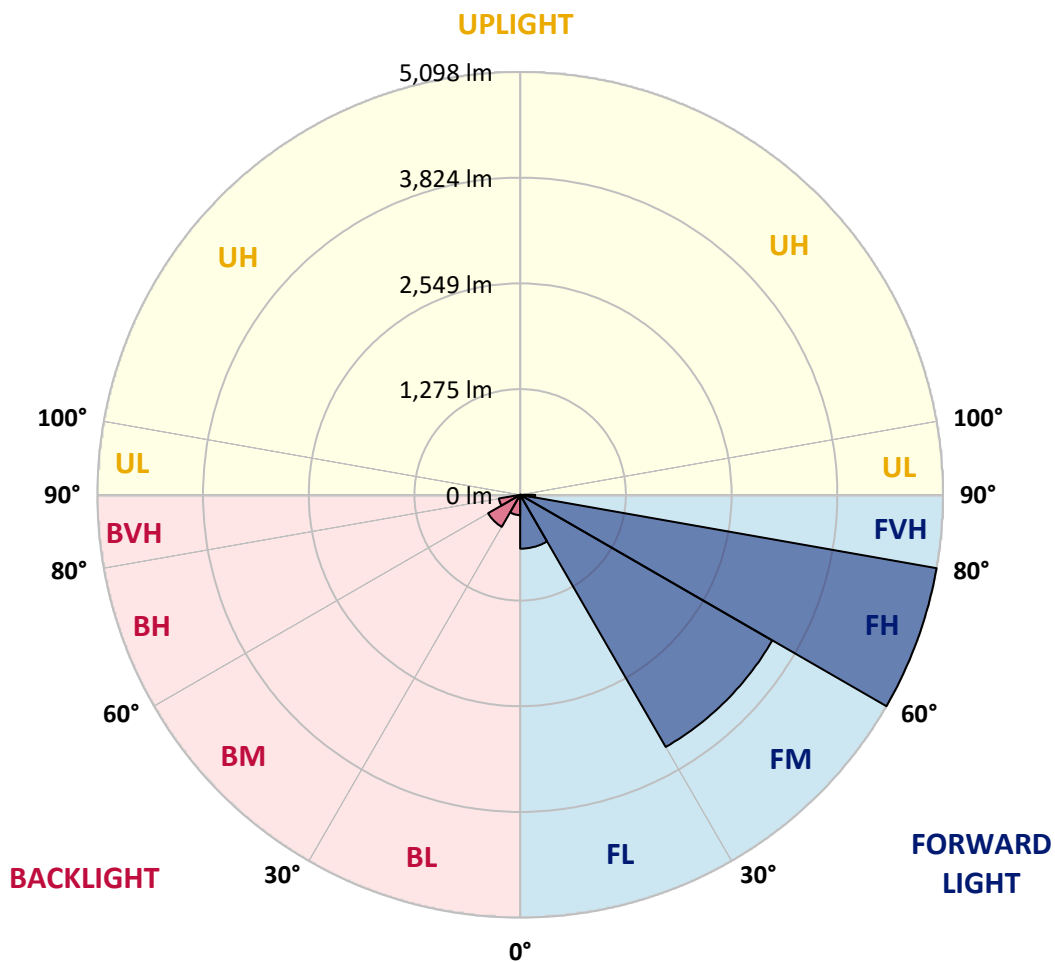
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	649.8	6.3			
FM	(30°-60°)	3510.4	33.8			
FH	(60°-80°)	5098.3	49.1			G3/7500
FVH	(80°-90°)	180.3	1.7			G2/225
BL	(0°-30°)	244.2	2.4	B1/500		
BM	(30°-60°)	445.3	4.3	B1/1000		
BH	(60°-80°)	260.3	2.5	B1/500		G1/500
BVH	(80°-90°)	0.5	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°	44°	45°	55°	65°	75°	85°
0°	1111.2	1111.2	1111.2	1111.2	1111.2	1111.2	1111.2	1111.2	1111.2	1111.2	1111.2
2.5°	1207.1	1207.1	1204.5	1202.1	1189.8	1177.5	1175.1	1167.6	1145.6	1130.8	1116.1
5°	1307.8	1310.3	1305.3	1293.1	1266.0	1239.0	1236.5	1216.8	1175.1	1145.6	1113.5
7.5°	1403.7	1408.6	1396.3	1374.1	1342.2	1302.9	1300.4	1263.6	1209.5	1167.6	1120.9
10°	1484.8	1484.8	1467.7	1440.6	1406.1	1364.3	1359.5	1317.6	1256.2	1204.5	1143.2
12.5°	1573.3	1570.9	1546.3	1509.4	1470.0	1430.7	1428.2	1376.7	1317.6	1251.2	1175.1
15°	1654.5	1649.6	1617.6	1583.2	1541.3	1499.6	1497.1	1445.6	1384.0	1305.3	1221.8
17.5°	1698.7	1696.2	1666.7	1632.3	1597.9	1565.9	1563.5	1509.4	1443.0	1361.9	1268.4
20°	1706.2	1708.5	1684.0	1654.5	1634.7	1617.6	1617.6	1568.4	1497.1	1411.1	1317.6
22.5°	1708.5	1715.9	1698.7	1659.3	1654.5	1657.0	1661.9	1622.5	1548.8	1467.7	1369.2
25°	1725.7	1735.5	1723.3	1676.5	1671.7	1688.9	1693.8	1676.5	1610.2	1529.1	1428.2
27.5°	1760.1	1770.0	1760.1	1701.2	1693.8	1711.0	1715.9	1725.7	1676.5	1588.1	1489.7
30°	1828.9	1831.5	1809.4	1735.5	1720.9	1742.9	1750.3	1777.3	1738.0	1644.5	1548.8
32.5°	1949.4	1924.9	1858.6	1760.1	1747.8	1772.4	1779.8	1809.4	1794.5	1698.7	1610.2
35°	2195.3	2067.4	1915.0	1794.5	1782.2	1806.9	1816.7	1858.6	1865.9	1775.0	1686.4
37.5°	2192.9	2077.3	2047.7	1861.0	1843.7	1861.0	1873.2	1924.9	1954.4	1875.8	1797.0
40°	2347.7	2298.6	2298.6	1986.3	1929.7	1954.4	1966.7	2018.3	2070.0	2008.4	1927.4
42.5°	2834.4	2802.5	2768.0	2227.3	2050.2	2119.0	2126.5	2158.4	2219.8	2200.2	2104.3
45°	3377.7	3348.3	3215.5	2635.3	2256.7	2268.9	2286.2	2337.8	2426.3	2463.2	2350.1
47.5°	3803.1	3773.5	3660.5	3127.0	2578.8	2470.6	2470.6	2571.4	2709.1	2802.5	2694.2
50°	4144.7	4110.4	4041.5	3650.6	3107.2	2760.8	2745.8	2863.9	3068.0	3213.0	3139.2
52.5°	4476.7	4375.9	4334.1	4191.4	3704.7	3181.1	3141.7	3225.4	3508.1	3687.5	3626.0
55°	4697.9	4683.0	4638.8	4688.1	4331.5	3692.5	3658.0	3675.1	4029.2	4149.6	4073.5
57.5°	4904.3	4902.0	5000.2	5228.9	5015.0	4277.5	4223.4	4196.3	4533.1	4503.7	4569.9
60°	5160.0	5115.8	5344.3	5671.3	5641.9	4847.9	4786.3	4732.2	4919.1	4835.4	5165.0
62.5°	5172.4	5160.0	5624.6	6094.1	6263.8	5428.0	5356.7	5162.5	5255.9	5160.0	5732.9
65°	4702.7	4764.3	5742.7	6317.9	6785.0	5936.8	5850.8	5548.4	5555.7	5491.9	6401.4
67.5°	4597.0	4629.0	5418.1	6558.7	7161.1	6450.5	6369.5	5993.4	5904.9	5909.8	6797.2
70°	4334.1	4383.2	5015.0	6541.5	7458.5	7136.5	7055.4	6647.3	6433.4	6194.9	6492.4
72.5°	3311.3	3395.0	4225.8	5735.3	7377.4	8033.8	8011.7	7475.8	6644.9	5688.5	4911.8
75°	1120.9	1118.5	2219.8	3852.2	6627.6	8309.1	8353.3	7372.5	5796.8	3923.4	2438.7
77.5°	240.9	243.4	457.2	1561.1	4402.9	6671.8	6841.5	5560.7	3739.0	1747.8	558.0
80°	117.9	120.5	189.4	413.0	1760.1	3741.5	4007.1	2859.0	1381.6	349.1	93.5
82.5°	59.0	61.4	98.4	218.7	651.5	1329.9	1420.8	1052.2	395.9	196.6	46.7
85°	22.1	22.1	49.1	130.3	297.5	312.3	383.4	304.9	238.5	159.8	12.2
87.5°	4.9	4.9	27.0	63.9	132.8	98.4	98.4	93.5	145.0	108.2	4.9
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°	1111.2	1111.2	1111.2	1111.2	1111.2	1111.2	1111.2	1111.2	1111.2	1111.2	1111.2
2.5°	1108.7	1098.8	1081.6	1064.4	1052.2	1037.5	1030.0	1022.7	1020.1	1017.7	1022.7
5°	1096.4	1081.6	1049.7	1022.7	998.0	978.4	963.6	948.9	941.6	936.7	939.1
7.5°	1096.4	1074.4	1027.7	985.8	946.5	904.7	862.8	830.9	806.3	791.5	794.0
10°	1108.7	1079.3	1017.7	961.1	887.4	799.0	708.0	639.1	592.4	565.5	565.5
12.5°	1135.7	1096.4	1020.1	931.7	806.3	651.5	513.8	430.2	395.9	376.1	378.5
15°	1172.6	1125.9	1032.5	892.3	693.2	484.2	359.0	304.9	304.9	309.7	312.3
17.5°	1214.4	1162.8	1042.4	833.4	548.1	346.7	282.6	277.8	285.1	297.5	297.5
20°	1256.2	1199.6	1047.2	739.9	410.5	275.3	268.0	268.0	272.8	285.1	287.5
22.5°	1307.8	1246.4	1042.4	624.4	307.3	260.6	258.2	258.2	258.2	272.8	272.8
25°	1361.9	1300.4	1022.7	501.6	260.6	250.7	248.3	245.9	245.9	258.2	260.6
27.5°	1423.4	1357.0	976.0	383.4	245.9	240.9	238.5	233.5	233.5	243.4	243.4
30°	1484.8	1420.8	904.7	290.2	233.5	231.0	226.2	221.3	216.3	226.2	226.2
32.5°	1551.3	1487.2	811.3	231.0	216.3	216.3	213.8	206.5	201.6	206.5	208.9
35°	1639.6	1563.5	705.4	201.6	194.3	194.3	194.3	191.8	181.8	186.8	186.8
37.5°	1757.8	1669.2	582.6	186.8	177.0	172.0	172.0	172.0	164.7	167.2	167.2
40°	1907.6	1792.1	464.7	174.5	164.7	152.4	147.5	149.9	145.0	145.0	142.7
42.5°	2111.6	1924.9	349.1	164.7	154.9	137.7	127.7	125.4	120.5	117.9	117.9
45°	2404.3	2087.1	250.7	154.9	147.5	120.5	110.6	103.2	91.0	83.6	83.6
47.5°	2782.8	2271.5	186.8	145.0	140.1	105.7	93.5	78.7	61.4	56.6	56.6
50°	3244.9	2478.0	157.4	130.3	127.7	93.5	73.8	51.7	34.5	29.6	32.0
52.5°	3694.9	2672.2	140.1	115.5	113.0	81.1	54.1	27.0	14.7	14.7	14.7
55°	4073.5	2809.9	127.7	103.2	98.4	63.9	29.6	12.2	7.4	7.4	7.4
57.5°	4415.1	2888.5	115.5	91.0	78.7	44.2	12.2	4.9	4.9	2.4	2.4
60°	4727.3	2935.2	100.8	78.7	61.4	24.6	4.9	2.4	2.4	0.0	0.0
62.5°	5034.6	2969.6	86.1	63.9	46.7	9.8	2.4	2.4	0.0	0.0	0.0
65°	5268.2	2957.4	68.8	51.7	29.6	4.9	2.4	0.0	0.0	0.0	0.0
67.5°	5260.8	2790.1	51.7	39.3	14.7	2.4	0.0	0.0	0.0	0.0	0.0
70°	4705.2	2350.1	34.5	24.6	4.9	2.4	0.0	0.0	0.0	0.0	0.0
72.5°	3338.5	1506.9	22.1	14.7	2.4	0.0	0.0	0.0	0.0	0.0	0.0
75°	1470.0	457.2	12.2	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	287.5	105.7	7.4	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	68.8	12.2	2.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	29.6	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.9	2.4	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)