

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: P572677

Luminaire Tested: **ARCH-S-PA2-100-740-U-T4W-HSS**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P572677
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-20)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-100-740-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1010mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10194 lumens
Efficiency: N/A
Efficacy: 98.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

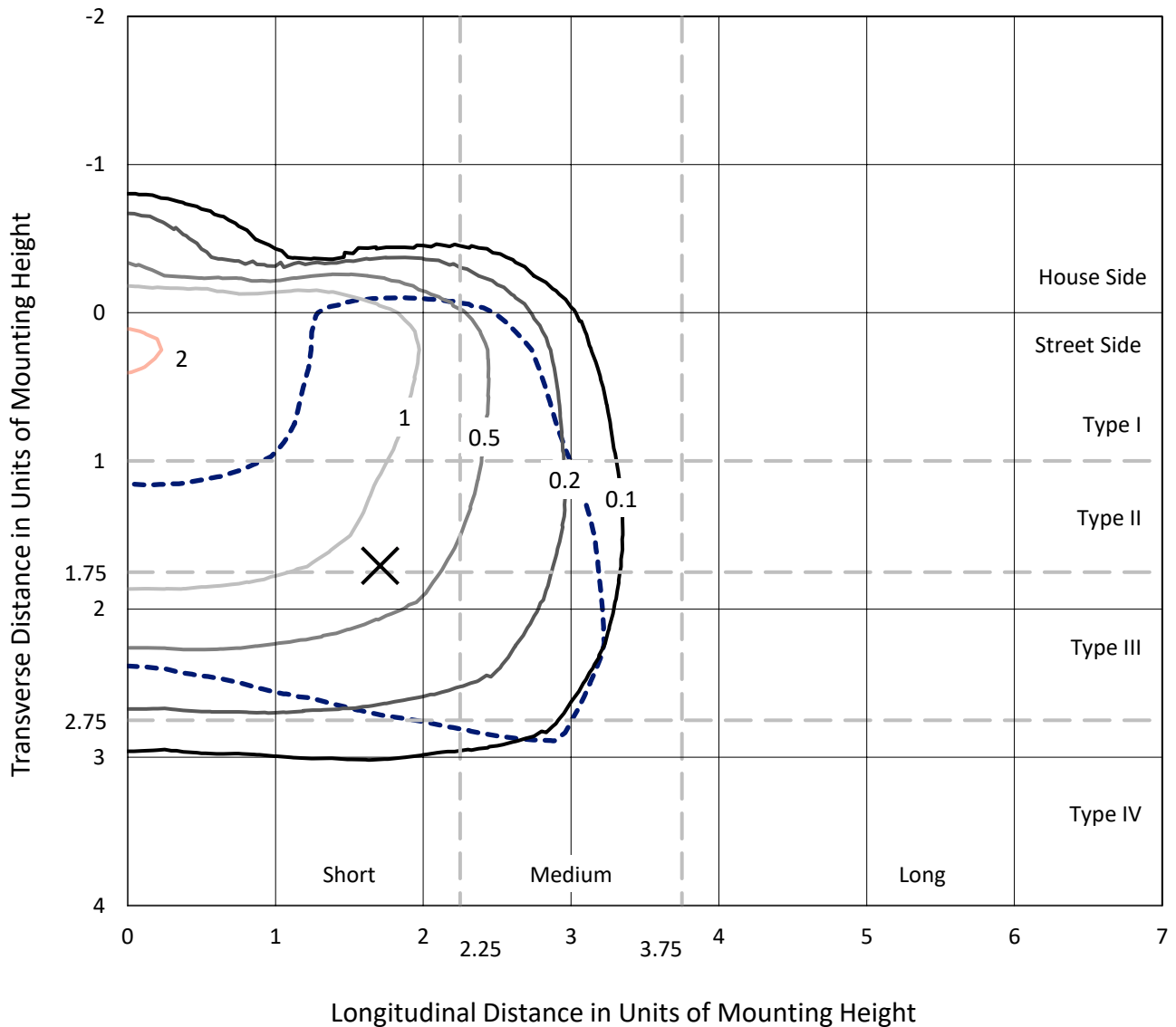
Input Watts (W): 103.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

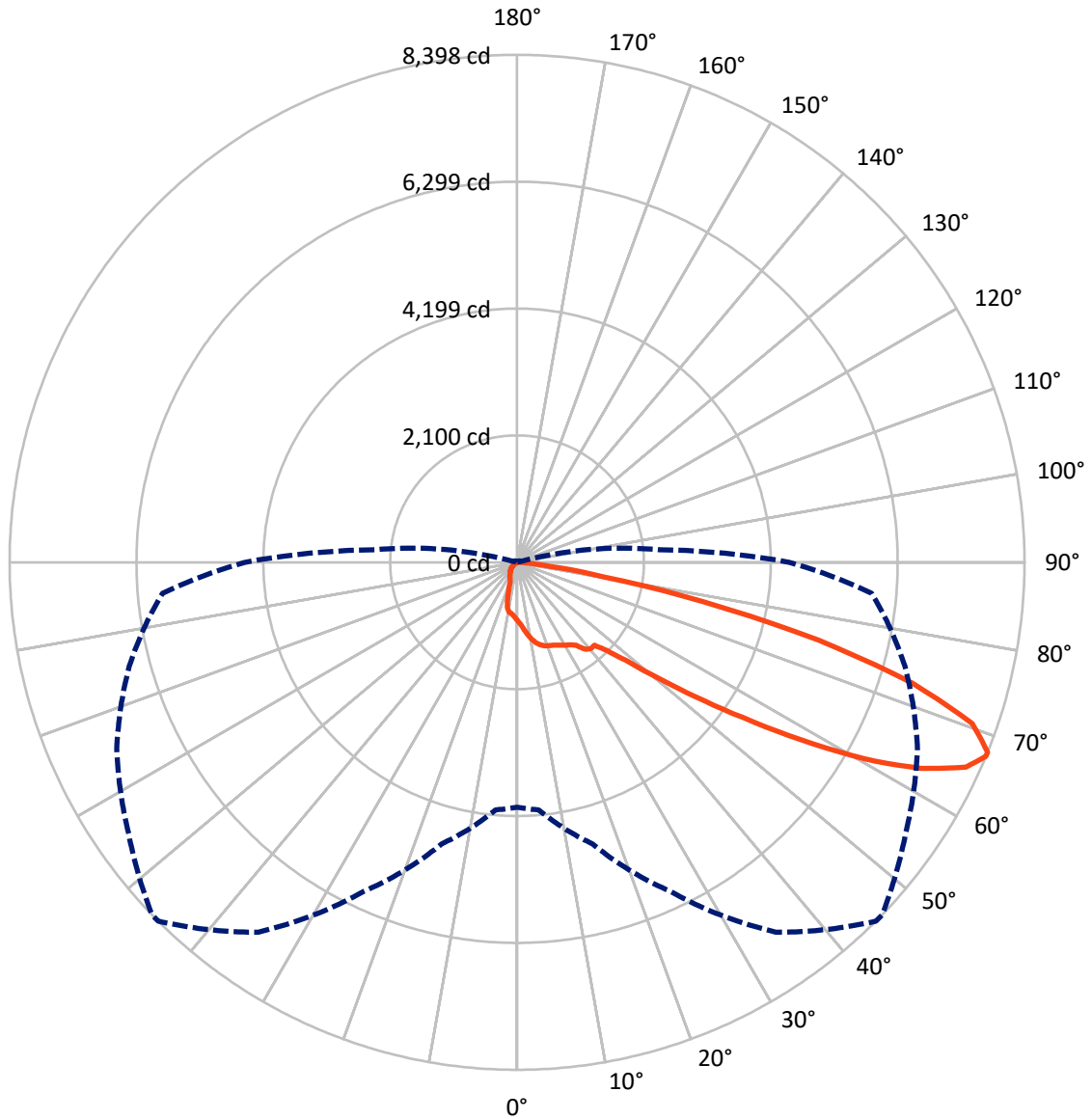
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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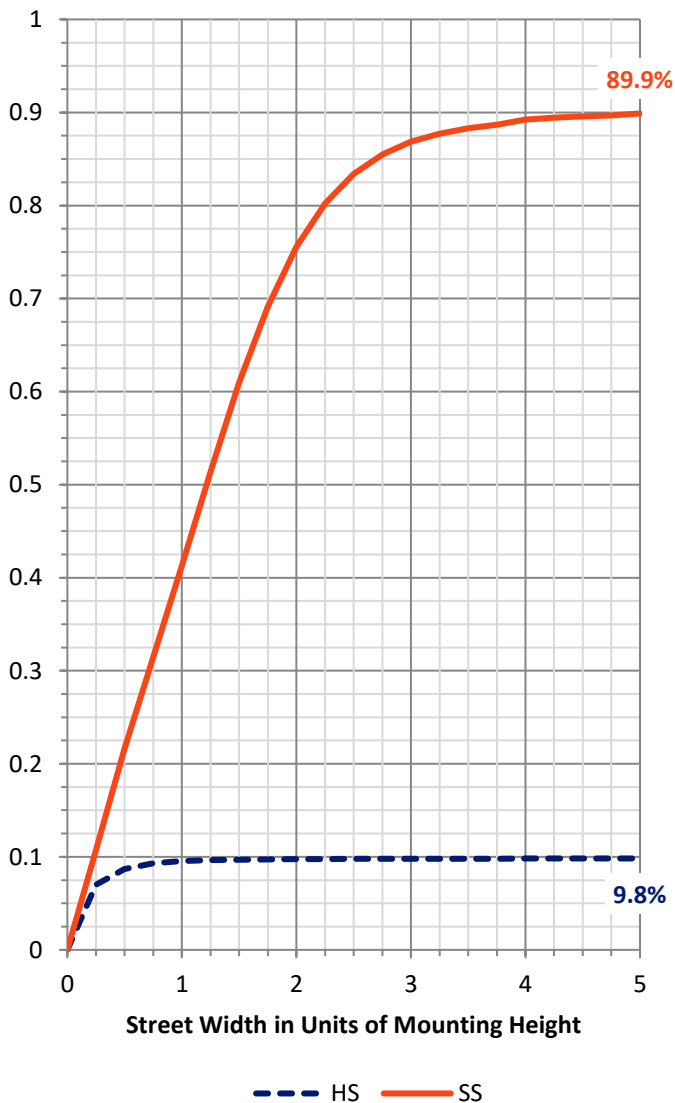
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1010.1	0.0	1010.1
	% Fixture	9.9	0.0	9.9
Street Side	Lumens	9183.9	0.0	9183.9
	% Fixture	90.1	0.0	90.1
Total	Lumens	10194.0	0.0	10194.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.8	0.9
10°-20°	292.5	2.9
20°-30°	467.9	4.6
30°-40°	673.4	6.6
40°-50°	1181.5	11.6
50°-60°	2489.4	24.4
60°-70°	3442.4	33.8
70°-80°	1441.2	14.1
80°-90°	109.0	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°	10194.0	100.0
0°-180°	10194.0	100.0



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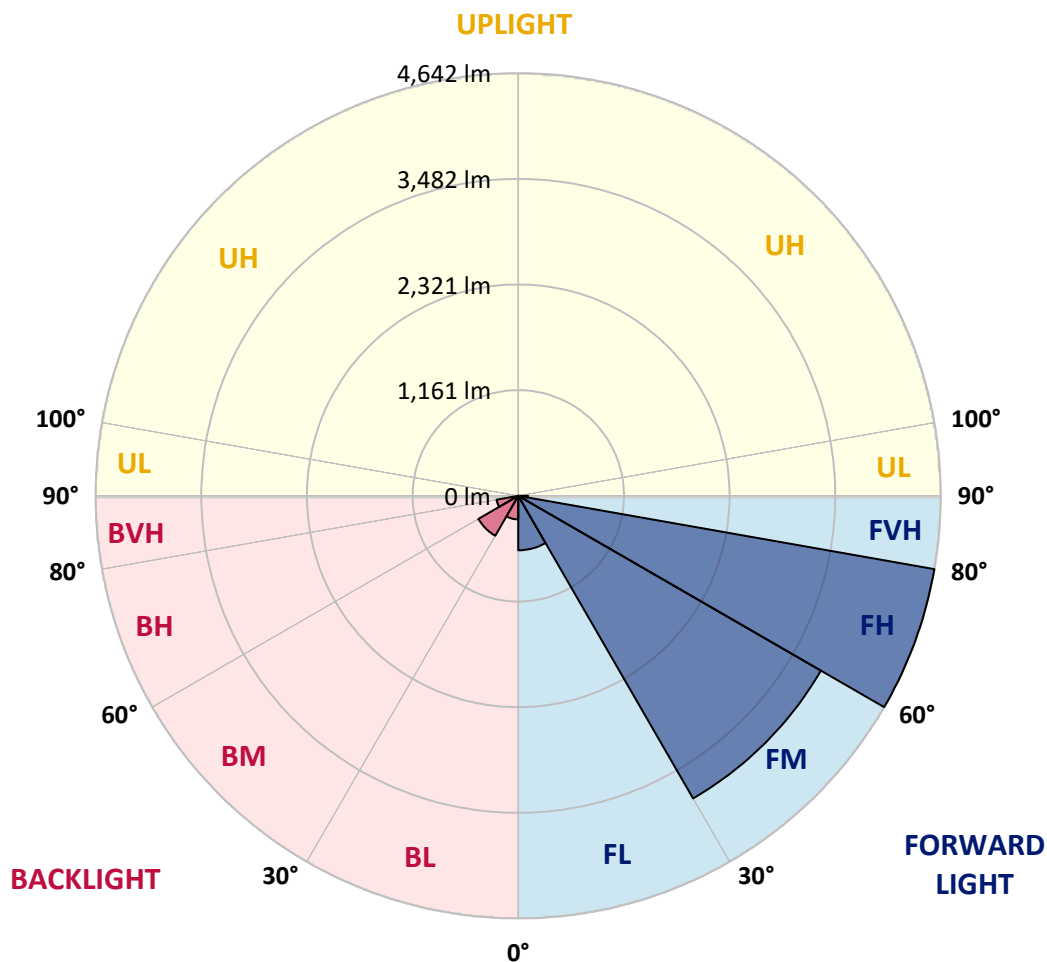
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	598.3	5.9			
FM (30°-60°)	3838.2	37.7			
FH (60°-80°)	4642.1	45.5			G2/5000
FVH (80°-90°)	105.3	1.0			G2/225
BL (0°-30°)	258.9	2.5	B1/500		
BM (30°-60°)	506.1	5.0	B1/1000		
BH (60°-80°)	241.4	2.4	B1/500		G1/500
BVH (80°-90°)	3.7	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-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	964.1	964.1	964.1	964.1	964.1	964.1	964.1	964.1	964.1	964.1	964.1
2.5°	1073.3	1054.5	1050.7	1046.9	1035.6	1020.6	1024.3	1013.0	994.2	982.9	971.6
5°	1205.1	1186.3	1178.7	1156.1	1133.5	1099.7	1099.7	1069.5	1035.6	1005.5	975.4
7.5°	1340.7	1325.6	1310.5	1276.7	1242.8	1197.6	1193.8	1148.6	1095.9	1050.7	1001.7
10°	1453.6	1442.4	1423.5	1382.1	1336.9	1287.9	1276.7	1235.2	1167.4	1107.2	1043.2
12.5°	1544.0	1532.7	1506.4	1464.9	1408.5	1359.5	1355.7	1303.0	1235.2	1171.2	1092.1
15°	1611.8	1593.0	1562.9	1517.7	1461.2	1416.0	1408.5	1363.3	1299.2	1227.7	1133.5
17.5°	1623.1	1611.8	1585.5	1536.5	1487.5	1449.9	1446.1	1412.2	1355.7	1280.4	1182.5
20°	1593.0	1589.2	1566.6	1529.0	1491.3	1472.5	1468.7	1446.1	1400.9	1333.1	1235.2
22.5°	1547.8	1544.0	1529.0	1510.1	1495.1	1491.3	1491.3	1483.8	1457.4	1393.4	1303.0
25°	1517.7	1513.9	1506.4	1495.1	1495.1	1517.7	1521.4	1529.0	1506.4	1457.4	1359.5
27.5°	1521.4	1513.9	1506.4	1495.1	1510.1	1551.6	1555.3	1574.2	1555.3	1510.1	1423.5
30°	1574.2	1562.9	1540.3	1513.9	1532.7	1589.2	1593.0	1615.6	1600.5	1577.9	1495.1
32.5°	1657.0	1649.5	1604.3	1559.1	1570.4	1626.9	1634.4	1675.8	1694.7	1660.8	1559.1
35°	1777.5	1751.2	1694.7	1649.5	1641.9	1683.4	1694.7	1762.5	1811.4	1728.6	1596.8
37.5°	1875.4	1852.8	1762.5	1690.9	1732.3	1826.5	1830.2	1913.1	1871.7	1736.1	1657.0
40°	2206.8	2203.1	2044.9	1818.9	1773.8	1879.2	1894.3	1909.3	1890.5	1822.7	1788.8
42.5°	2741.6	2696.4	2519.4	2172.9	1864.1	1875.4	1883.0	1962.0	2060.0	2029.8	2041.1
45°	3321.5	3283.9	3084.3	2647.4	2172.9	2078.8	2086.3	2214.4	2402.7	2440.3	2500.6
47.5°	3856.3	3796.1	3683.1	3242.5	2700.2	2425.3	2440.3	2594.7	2907.3	2990.1	3084.3
50°	4308.2	4266.8	4161.4	3871.4	3347.9	2971.3	2986.4	3114.4	3521.1	3653.0	3773.5
52.5°	4963.5	4907.0	4703.6	4568.1	4172.7	3683.1	3649.2	3784.8	4251.7	4338.4	4500.3
55°	5566.0	5449.3	5328.8	5272.3	5106.6	4534.2	4522.9	4549.2	4937.1	4982.3	5272.3
57.5°	5822.1	5799.5	5901.2	6089.5	6127.2	5535.9	5487.0	5385.3	5690.3	5686.6	6025.5
60°	5984.1	5984.1	6255.2	6722.2	7023.5	6605.4	6537.7	6221.3	6330.5	6334.3	6646.9
62.5°	5882.4	5908.7	6330.5	7034.8	7641.1	7513.0	7467.8	6936.8	6929.3	6842.7	6951.9
65°	5253.5	5298.7	5976.5	6861.5	7867.0	8168.3	8149.5	7546.9	7328.5	7012.2	6767.4
67°	4285.6	4368.5	5189.5	6236.4	7610.9	8394.3	8398.0	7810.5	7332.3	6729.7	6115.9
67.5°	4052.1	4112.4	4824.2	6010.4	7471.6	8398.0	8398.0	7844.4	7309.7	6643.1	5889.9
70°	2583.4	2598.5	3374.3	4650.9	6383.3	7991.3	8021.4	7588.3	6658.2	5377.7	4135.0
72.5°	1276.7	1242.8	1781.3	2993.9	4790.3	6838.9	6918.0	6481.2	5268.5	3513.6	2184.2
75°	500.9	534.8	775.8	1593.0	3001.4	5155.6	5215.8	4714.9	3389.3	1811.4	862.4
77.5°	222.2	222.2	331.4	715.5	1577.9	3163.4	3193.5	2877.2	1788.8	745.7	263.6
80°	120.5	128.0	173.2	312.6	794.6	1453.6	1585.5	1427.3	809.7	327.6	90.4
82.5°	60.3	64.0	105.4	177.0	399.2	549.8	580.0	606.3	372.8	203.4	37.7
85°	22.6	26.4	56.5	101.7	180.8	184.5	184.5	237.3	203.4	154.4	18.8
87.5°	3.8	7.5	26.4	41.4	71.6	64.0	56.5	75.3	113.0	97.9	11.3
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°	964.1	964.1	964.1	964.1	964.1	964.1	964.1	964.1	964.1	964.1	964.1
2.5°	964.1	956.5	941.5	930.2	922.7	915.1	907.6	907.6	903.8	903.8	907.6
5°	964.1	949.0	918.9	900.1	885.0	873.7	866.2	866.2	862.4	866.2	869.9
7.5°	982.9	960.3	918.9	885.0	866.2	847.3	839.8	836.0	836.0	839.8	836.0
10°	1013.0	982.9	930.2	885.0	858.6	832.3	790.8	753.2	719.3	704.2	700.5
12.5°	1050.7	1013.0	949.0	896.3	854.9	764.5	651.5	580.0	534.8	512.2	504.6
15°	1092.1	1046.9	971.6	911.4	798.4	628.9	482.0	403.0	376.6	380.4	384.1
17.5°	1137.3	1088.4	1005.5	903.8	685.4	467.0	354.0	335.2	346.5	357.8	357.8
20°	1182.5	1129.8	1039.4	847.3	538.5	346.5	316.3	320.1	331.4	342.7	342.7
22.5°	1242.8	1186.3	1073.3	749.4	399.2	301.3	301.3	308.8	316.3	327.6	327.6
25°	1306.8	1250.3	1095.9	628.9	297.5	282.4	286.2	293.7	301.3	312.6	312.6
27.5°	1374.6	1318.1	1092.1	485.8	259.8	259.8	263.6	274.9	282.4	293.7	293.7
30°	1449.9	1400.9	1050.7	354.0	241.0	237.3	237.3	248.6	259.8	267.4	271.1
32.5°	1513.9	1472.5	979.1	267.4	226.0	218.4	214.7	218.4	229.7	237.3	241.0
35°	1566.6	1551.6	873.7	229.7	210.9	199.6	192.1	188.3	192.1	192.1	195.8
37.5°	1664.5	1668.3	749.4	214.7	199.6	184.5	169.5	158.2	150.6	146.9	143.1
40°	1849.1	1845.3	617.6	203.4	188.3	169.5	146.9	131.8	113.0	105.4	105.4
42.5°	2108.9	2052.4	470.7	192.1	177.0	154.4	124.3	101.7	82.9	79.1	79.1
45°	2575.9	2342.4	354.0	184.5	165.7	135.6	101.7	75.3	64.0	60.3	60.3
47.5°	3091.8	2677.6	282.4	173.2	154.4	120.5	79.1	60.3	49.0	49.0	49.0
50°	3660.5	2997.7	237.3	161.9	135.6	101.7	64.0	49.0	45.2	41.4	45.2
52.5°	4281.9	3250.0	207.1	146.9	116.7	82.9	52.7	45.2	37.7	37.7	37.7
55°	4839.2	3419.5	173.2	128.0	97.9	67.8	49.0	37.7	33.9	30.1	26.4
57.5°	5343.9	3509.8	139.3	109.2	75.3	56.5	41.4	30.1	26.4	18.8	18.8
60°	5603.7	3427.0	109.2	86.6	60.3	45.2	33.9	26.4	18.8	11.3	11.3
62.5°	5645.1	3212.3	86.6	67.8	52.7	37.7	26.4	18.8	11.3	7.5	7.5
65°	5283.6	2835.7	71.6	56.5	41.4	30.1	22.6	15.1	7.5	3.8	3.8
67°	4635.9	2440.3	64.0	49.0	37.7	26.4	18.8	11.3	7.5	3.8	0.0
67.5°	4507.8	2368.8	60.3	49.0	37.7	26.4	18.8	11.3	7.5	3.8	0.0
70°	2960.0	1638.2	56.5	45.2	33.9	22.6	15.1	11.3	3.8	0.0	0.0
72.5°	1615.6	824.7	52.7	41.4	30.1	22.6	15.1	7.5	3.8	0.0	0.0
75°	591.3	312.6	45.2	37.7	26.4	22.6	15.1	7.5	3.8	0.0	0.0
77.5°	199.6	109.2	41.4	37.7	30.1	22.6	15.1	7.5	3.8	0.0	0.0
80°	67.8	49.0	33.9	30.1	22.6	18.8	15.1	7.5	3.8	0.0	0.0
82.5°	26.4	15.1	11.3	11.3	11.3	15.1	15.1	11.3	3.8	0.0	0.0
85°	11.3	7.5	3.8	3.8	3.8	3.8	3.8	3.8	3.8	0.0	0.0
87.5°	11.3	7.5	3.8	3.8	3.8	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)