

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: P573487

Luminaire Tested: **ARCH-S-PA2-80-740-U-T4W-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573487  
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-PA2-80-740-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 820mA 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: 8674 lumens  
Efficiency: N/A  
Efficacy: 104.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

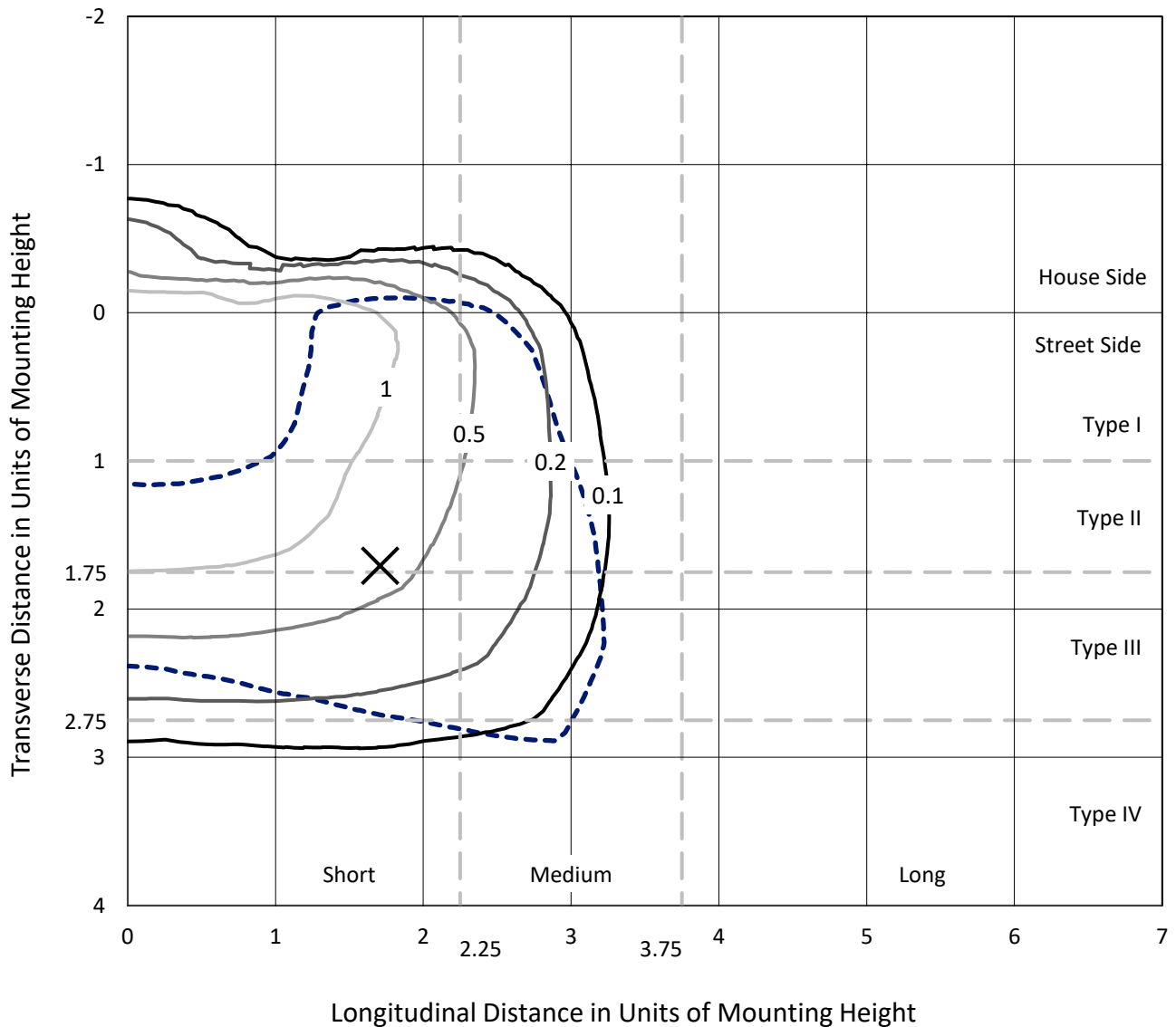
Input Watts (W): 83  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

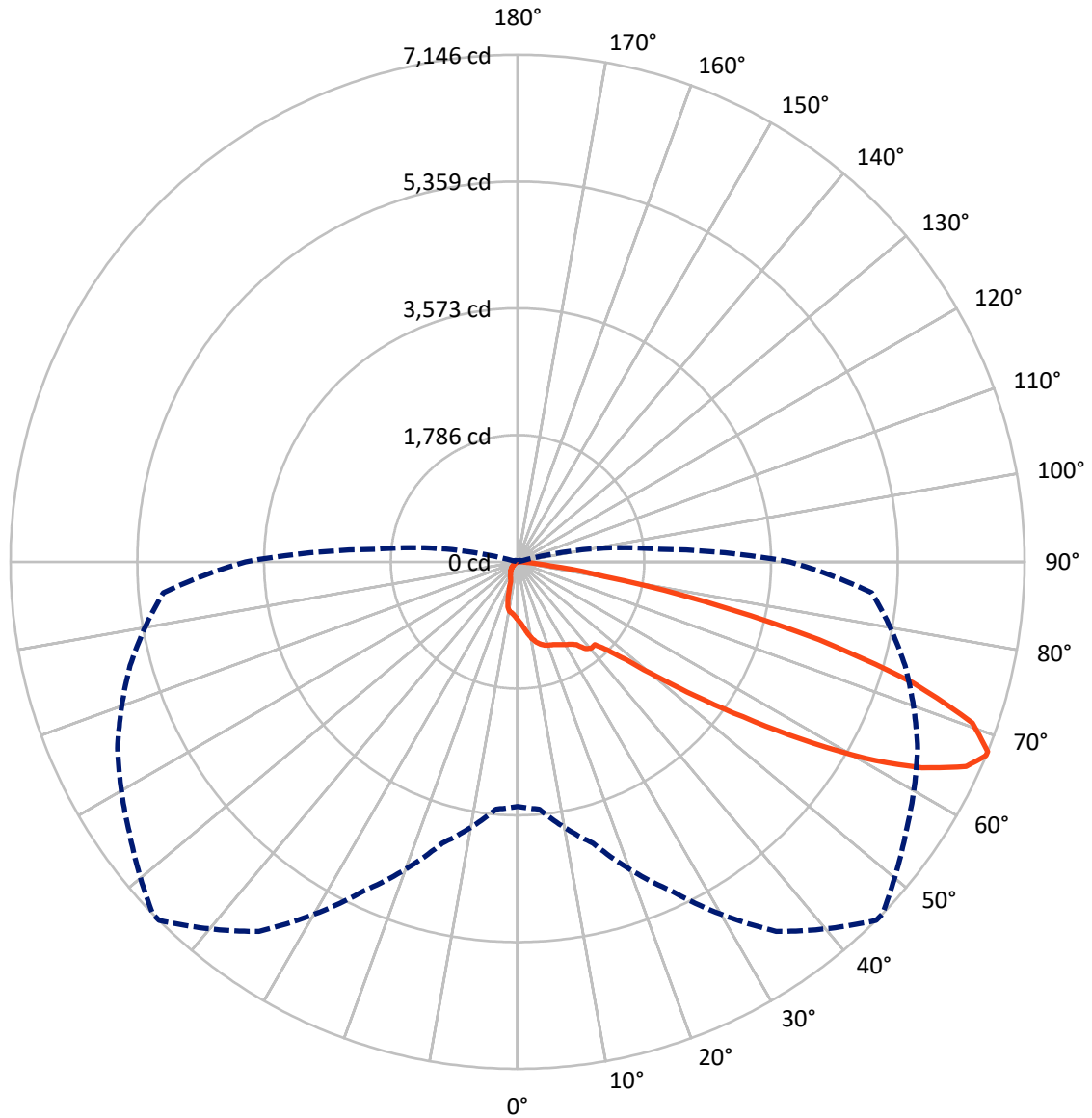
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 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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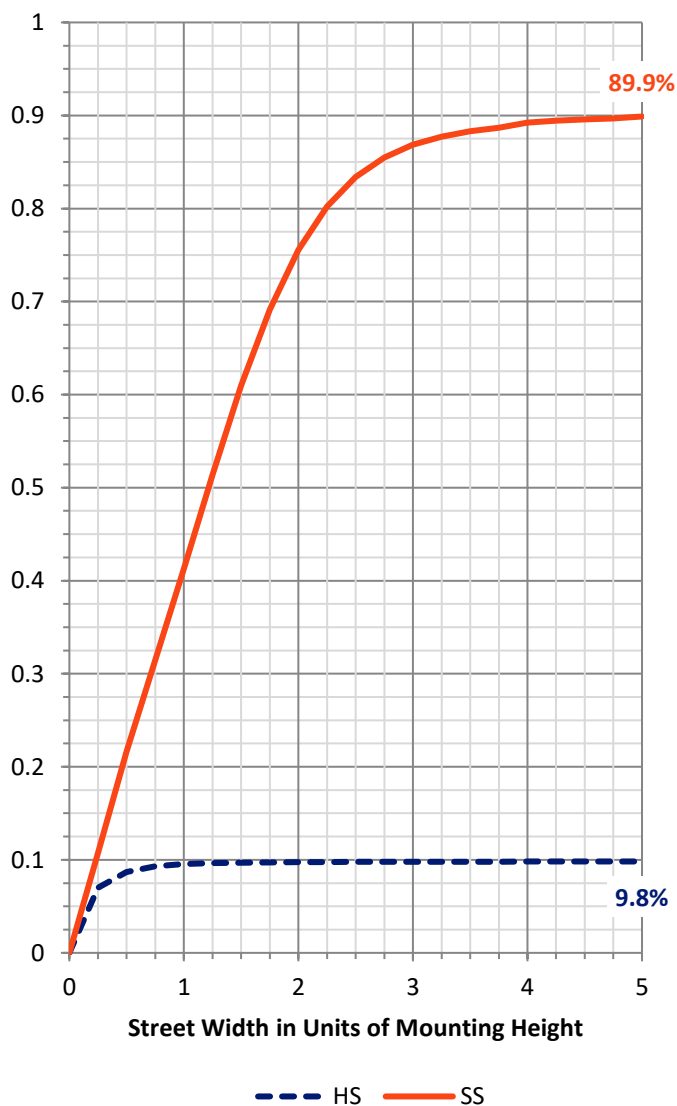
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	859.5	0.0	859.5
	% Fixture	9.9	0.0	9.9
<b>Street Side</b>	Lumens	7814.5	0.0	7814.5
	% Fixture	90.1	0.0	90.1
<b>Total</b>	Lumens	8674.0	0.0	8674.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.3	0.9
10°-20°	248.9	2.9
20°-30°	398.1	4.6
30°-40°	573.0	6.6
40°-50°	1005.3	11.6
50°-60°	2118.2	24.4
60°-70°	2929.1	33.8
70°-80°	1226.3	14.1
80°-90°	92.7	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°	8674.0	100.0
0°-180°	8674.0	100.0

**Coefficient of Utilization**



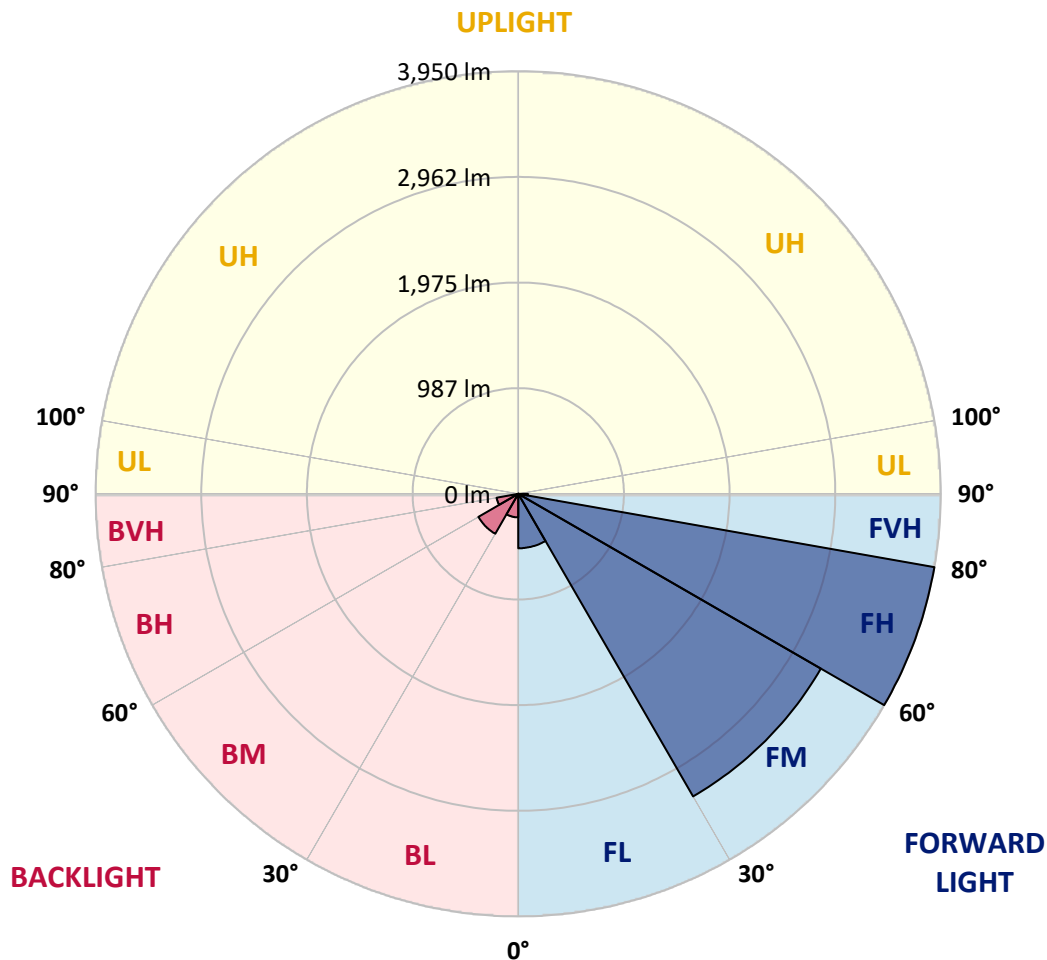
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	509.1	5.9			
FM (30°-60°)	3265.9	37.7			
FH (60°-80°)	3949.9	45.5			G2/5000
FVH (80°-90°)	89.6	1.0			G1/100
BL (0°-30°)	220.3	2.5	B1/500		
BM (30°-60°)	430.6	5.0	B1/1000		
BH (60°-80°)	205.4	2.4	B1/500		G1/500
BVH (80°-90°)	3.1	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°	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3
2.5°	913.3	897.2	894.0	890.8	881.2	868.4	871.6	862.0	846.0	836.3	826.7
5°	1025.4	1009.4	1003.0	983.8	964.5	935.7	935.7	910.1	881.2	855.6	829.9
7.5°	1140.8	1127.9	1115.1	1086.3	1057.5	1019.0	1015.8	977.3	932.5	894.0	852.4
10°	1236.9	1227.3	1211.3	1176.0	1137.6	1095.9	1086.3	1051.0	993.4	942.1	887.6
12.5°	1313.8	1304.2	1281.8	1246.5	1198.4	1156.8	1153.6	1108.7	1051.0	996.6	929.3
15°	1371.5	1355.5	1329.8	1291.4	1243.3	1204.9	1198.4	1160.0	1105.5	1044.6	964.5
17.5°	1381.1	1371.5	1349.1	1307.4	1265.7	1233.7	1230.5	1201.7	1153.6	1089.5	1006.2
20°	1355.5	1352.3	1333.0	1301.0	1268.9	1252.9	1249.7	1230.5	1192.0	1134.4	1051.0
22.5°	1317.0	1313.8	1301.0	1285.0	1272.1	1268.9	1268.9	1262.5	1240.1	1185.6	1108.7
25°	1291.4	1288.2	1281.8	1272.1	1272.1	1291.4	1294.6	1301.0	1281.8	1240.1	1156.8
27.5°	1294.6	1288.2	1281.8	1272.1	1285.0	1320.2	1323.4	1339.4	1323.4	1285.0	1211.3
30°	1339.4	1329.8	1310.6	1288.2	1304.2	1352.3	1355.5	1374.7	1361.9	1342.6	1272.1
32.5°	1409.9	1403.5	1365.1	1326.6	1336.2	1384.3	1390.7	1426.0	1442.0	1413.1	1326.6
35°	1512.5	1490.0	1442.0	1403.5	1397.1	1432.4	1442.0	1499.7	1541.3	1470.8	1358.7
37.5°	1595.8	1576.6	1499.7	1438.8	1474.0	1554.1	1557.3	1627.8	1592.6	1477.2	1409.9
40°	1877.8	1874.6	1740.0	1547.7	1509.3	1599.0	1611.8	1624.6	1608.6	1550.9	1522.1
42.5°	2332.8	2294.4	2143.7	1848.9	1586.2	1595.8	1602.2	1669.5	1752.8	1727.2	1736.8
45°	2826.3	2794.2	2624.4	2252.7	1848.9	1768.8	1775.2	1884.2	2044.4	2076.5	2127.7
47.5°	3281.3	3230.0	3133.9	2759.0	2297.6	2063.6	2076.5	2207.8	2473.8	2544.3	2624.4
50°	3665.8	3630.6	3540.9	3294.1	2848.7	2528.3	2541.1	2650.0	2996.1	3108.3	3210.8
52.5°	4223.4	4175.3	4002.3	3886.9	3550.5	3133.9	3105.1	3220.4	3617.8	3691.5	3829.3
55°	4736.1	4636.8	4534.2	4486.2	4345.2	3858.1	3848.5	3870.9	4201.0	4239.4	4486.2
57.5°	4954.0	4934.8	5021.3	5181.5	5213.6	4710.5	4668.8	4582.3	4841.9	4838.6	5127.0
60°	5091.8	5091.8	5322.5	5719.9	5976.2	5620.5	5562.8	5293.7	5386.6	5389.8	5655.8
62.5°	5005.3	5027.7	5386.6	5985.8	6501.7	6392.8	6354.3	5902.5	5896.1	5822.4	5915.3
65°	4470.1	4508.6	5085.4	5838.4	6694.0	6950.3	6934.3	6421.6	6235.8	5966.6	5758.3
67°	3646.6	3717.1	4415.7	5306.5	6476.1	7142.6	7145.8	6645.9	6239.0	5726.3	5203.9
67.5°	3447.9	3499.2	4104.8	5114.2	6357.5	7145.8	7145.8	6674.8	6219.7	5652.6	5011.7
70°	2198.2	2211.0	2871.1	3957.4	5431.5	6799.7	6825.4	6456.9	5665.4	4575.9	3518.4
72.5°	1086.3	1057.5	1515.7	2547.5	4076.0	5819.2	5886.5	5514.8	4483.0	2989.7	1858.6
75°	426.2	455.0	660.1	1355.5	2553.9	4386.8	4438.1	4011.9	2884.0	1541.3	733.8
77.5°	189.1	189.1	282.0	608.8	1342.6	2691.7	2717.3	2448.2	1522.1	634.5	224.3
80°	102.5	108.9	147.4	266.0	676.1	1236.9	1349.1	1214.5	688.9	278.8	76.9
82.5°	51.3	54.5	89.7	150.6	339.7	467.8	493.5	515.9	317.2	173.0	32.0
85°	19.2	22.4	48.1	86.5	153.8	157.0	157.0	201.9	173.0	131.4	16.0
87.5°	3.2	6.4	22.4	35.2	60.9	54.5	48.1	64.1	96.1	83.3	9.6
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°	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3
2.5°	820.3	813.9	801.1	791.5	785.1	778.7	772.3	772.3	769.1	769.1	772.3
5°	820.3	807.5	781.9	765.9	753.0	743.4	737.0	737.0	733.8	737.0	740.2
7.5°	836.3	817.1	781.9	753.0	737.0	721.0	714.6	711.4	711.4	714.6	711.4
10°	862.0	836.3	791.5	753.0	730.6	708.2	672.9	640.9	612.0	599.2	596.0
12.5°	894.0	862.0	807.5	762.6	727.4	650.5	554.4	493.5	455.0	435.8	429.4
15°	929.3	890.8	826.7	775.5	679.3	535.1	410.2	342.9	320.4	323.6	326.8
17.5°	967.7	926.1	855.6	769.1	583.2	397.3	301.2	285.2	294.8	304.4	304.4
20°	1006.2	961.3	884.4	721.0	458.2	294.8	269.2	272.4	282.0	291.6	291.6
22.5°	1057.5	1009.4	913.3	637.7	339.7	256.4	256.4	262.8	269.2	278.8	278.8
25°	1111.9	1063.9	932.5	535.1	253.1	240.3	243.5	249.9	256.4	266.0	266.0
27.5°	1169.6	1121.5	929.3	413.4	221.1	221.1	224.3	233.9	240.3	249.9	249.9
30°	1233.7	1192.0	894.0	301.2	205.1	201.9	201.9	211.5	221.1	227.5	230.7
32.5°	1288.2	1252.9	833.1	227.5	192.3	185.9	182.7	185.9	195.5	201.9	205.1
35°	1333.0	1320.2	743.4	195.5	179.4	169.8	163.4	160.2	163.4	163.4	166.6
37.5°	1416.3	1419.6	637.7	182.7	169.8	157.0	144.2	134.6	128.2	125.0	121.8
40°	1573.4	1570.2	525.5	173.0	160.2	144.2	125.0	112.2	96.1	89.7	89.7
42.5°	1794.5	1746.4	400.6	163.4	150.6	131.4	105.7	86.5	70.5	67.3	67.3
45°	2191.8	1993.1	301.2	157.0	141.0	115.4	86.5	64.1	54.5	51.3	51.3
47.5°	2630.8	2278.3	240.3	147.4	131.4	102.5	67.3	51.3	41.7	41.7	41.7
50°	3114.7	2550.7	201.9	137.8	115.4	86.5	54.5	41.7	38.5	35.2	38.5
52.5°	3643.4	2765.4	176.2	125.0	99.3	70.5	44.9	38.5	32.0	32.0	32.0
55°	4117.7	2909.6	147.4	108.9	83.3	57.7	41.7	32.0	28.8	25.6	22.4
57.5°	4547.0	2986.5	118.6	92.9	64.1	48.1	35.2	25.6	22.4	16.0	16.0
60°	4768.2	2916.0	92.9	73.7	51.3	38.5	28.8	22.4	16.0	9.6	9.6
62.5°	4803.4	2733.4	73.7	57.7	44.9	32.0	22.4	16.0	9.6	6.4	6.4
65°	4495.8	2412.9	60.9	48.1	35.2	25.6	19.2	12.8	6.4	3.2	3.2
67°	3944.6	2076.5	54.5	41.7	32.0	22.4	16.0	9.6	6.4	3.2	0.0
67.5°	3835.7	2015.6	51.3	41.7	32.0	22.4	16.0	9.6	6.4	3.2	0.0
70°	2518.7	1393.9	48.1	38.5	28.8	19.2	12.8	9.6	3.2	0.0	0.0
72.5°	1374.7	701.8	44.9	35.2	25.6	19.2	12.8	6.4	3.2	0.0	0.0
75°	503.1	266.0	38.5	32.0	22.4	19.2	12.8	6.4	3.2	0.0	0.0
77.5°	169.8	92.9	35.2	32.0	25.6	19.2	12.8	6.4	3.2	0.0	0.0
80°	57.7	41.7	28.8	25.6	19.2	16.0	12.8	6.4	3.2	0.0	0.0
82.5°	22.4	12.8	9.6	9.6	9.6	12.8	12.8	9.6	3.2	0.0	0.0
85°	9.6	6.4	3.2	3.2	3.2	3.2	3.2	3.2	3.2	0.0	0.0
87.5°	9.6	6.4	3.2	3.2	3.2	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)