

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: P234814

Luminaire Tested: **ARCH-M-AF48-130-D-U-T3-8027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234814
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-AF48-130-D-U-T3-8027
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 2700K, 845mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12548 lumens
Efficiency: N/A
Efficacy: 95.8 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 - G2

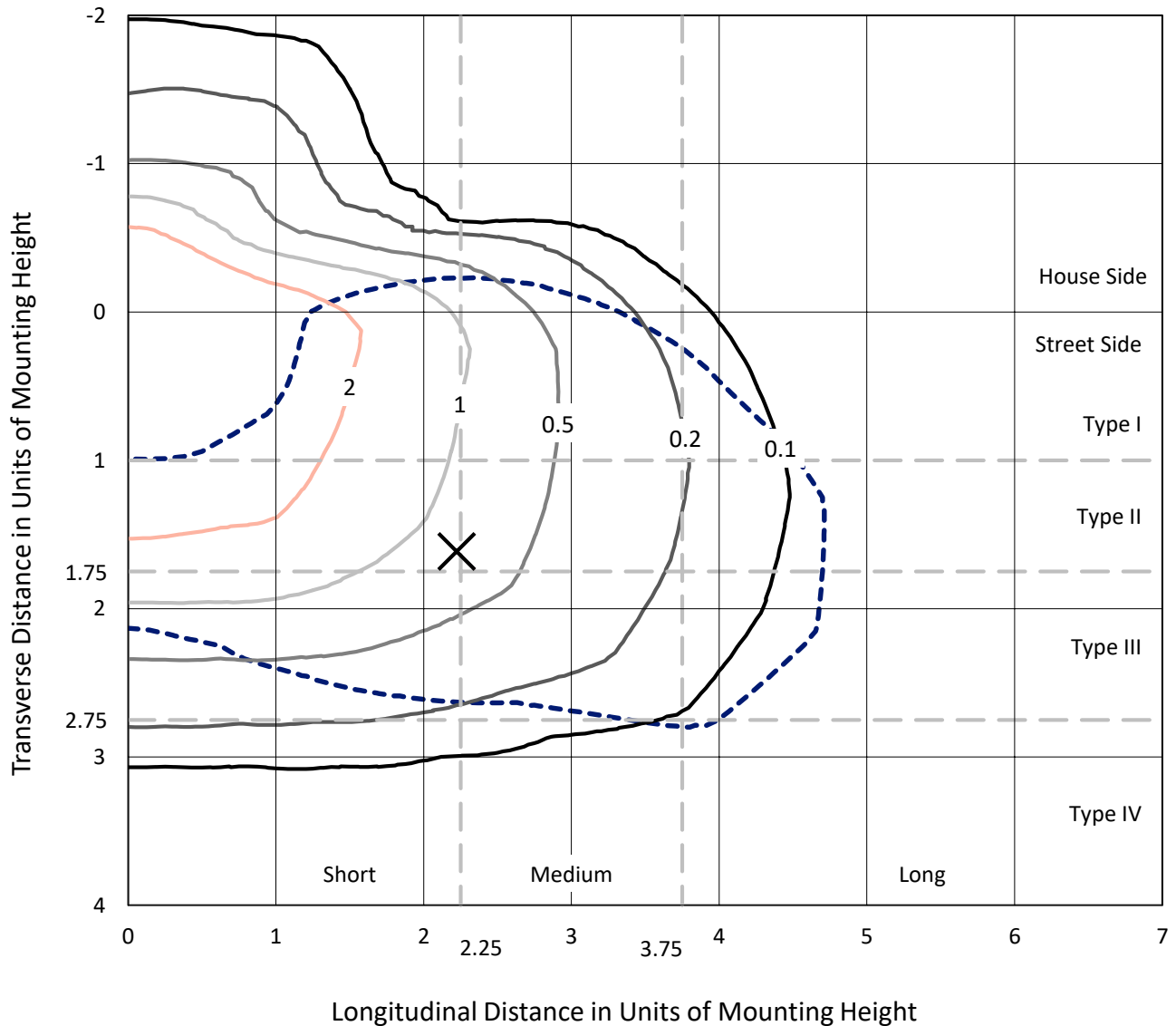
Input Watts (W): 131
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P234814
 CATALOG NUMBER: ARCH-M-AF48-130-D-U-T3-8027

Iso-Footcandle Lines of Horizontal Illumination

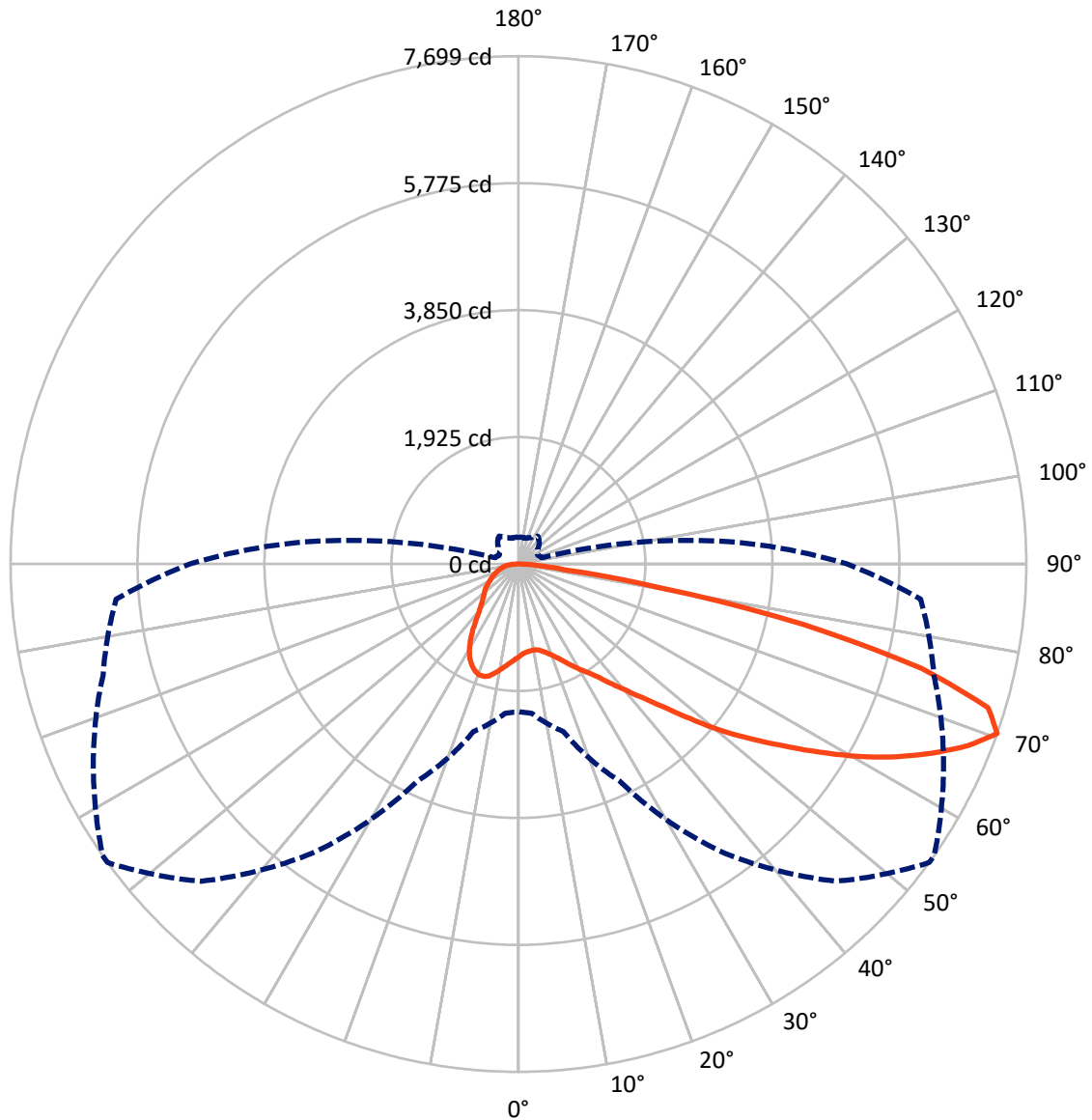
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.1 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P234814
CATALOG NUMBER: ARCH-M-AF48-130-D-U-T3-8027

Luminous Intensity Polar Plot



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

REPORT NUMBER: P234814

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T3-8027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2845.8	0.0	2845.8
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	9702.1	0.0	9702.1
	% Fixture	77.3	0.0	77.3
Total	Lumens	12548.0	0.0	12548.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.8	1.1
10°-20°	440.2	3.5
20°-30°	764.8	6.1
30°-40°	1117.7	8.9
40°-50°	1754.2	14.0
50°-60°	2697.5	21.5
60°-70°	3295.7	26.3
70°-80°	2043.3	16.3
80°-90°	296.8	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°	12548.0	100.0
0°-180°	12548.0	100.0



REPORT NUMBER: P234814

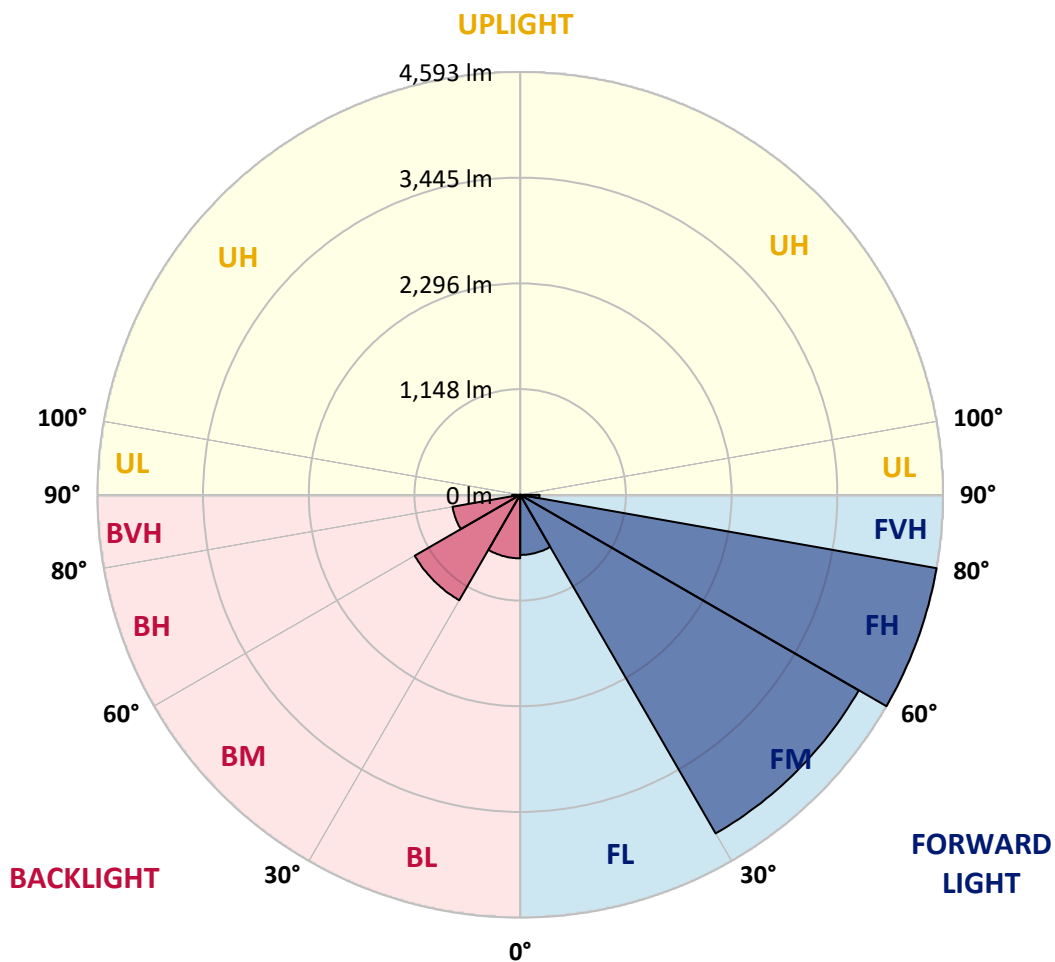
CATALOG NUMBER: ARCH-M-AF48-130-D-U-T3-8027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	652.9	5.2			
FM	(30°-60°)	4246.9	33.8			
FH	(60°-80°)	4592.8	36.6			G2/5000
FVH	(80°-90°)	209.6	1.7			G2/225
BL	(0°-30°)	689.9	5.5	B2/1000		
BM	(30°-60°)	1322.4	10.5	B2/2500		
BH	(60°-80°)	746.3	5.9	B2/1000		G2/1000
BVH	(80°-90°)	87.2	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short





REPORT NUMBER: P234814

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T3-8027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9
2.5°	1348.7	1344.1	1344.1	1351.0	1353.3	1360.2	1360.2	1362.5	1369.4	1380.9	1394.7
5°	1307.4	1305.1	1307.4	1316.6	1321.2	1334.9	1339.5	1341.8	1355.6	1374.0	1394.7
7.5°	1266.0	1263.7	1268.3	1282.1	1295.9	1316.6	1328.0	1330.3	1351.0	1376.3	1403.9
10°	1252.2	1249.9	1256.8	1268.3	1282.1	1305.1	1323.4	1325.7	1355.6	1385.5	1424.5
12.5°	1270.6	1268.3	1275.2	1286.7	1300.5	1316.6	1337.2	1339.5	1378.6	1417.7	1459.0
15°	1316.6	1316.6	1318.9	1325.7	1339.5	1353.3	1371.7	1374.0	1415.4	1461.3	1502.7
17.5°	1387.8	1383.2	1383.2	1380.9	1390.1	1397.0	1420.0	1422.2	1465.9	1507.3	1548.6
20°	1475.1	1472.8	1463.6	1452.1	1449.8	1454.4	1477.4	1479.7	1523.3	1557.8	1596.9
22.5°	1580.8	1583.1	1562.4	1537.1	1525.6	1532.5	1553.2	1555.5	1587.7	1617.5	1652.0
25°	1720.9	1714.1	1684.2	1647.4	1624.4	1624.4	1645.1	1645.1	1675.0	1693.4	1716.3
27.5°	1854.2	1840.4	1812.9	1760.0	1723.2	1730.1	1750.8	1750.8	1778.4	1785.3	1796.8
30°	1999.0	1985.2	1950.7	1884.1	1835.8	1831.2	1856.5	1854.2	1891.0	1888.7	1879.5
32.5°	2175.9	2169.0	2111.5	2026.5	1962.2	1946.1	1969.1	1971.4	1994.4	1987.5	1957.6
35°	2424.0	2421.7	2368.9	2219.5	2134.5	2104.7	2118.4	2118.4	2134.5	2116.1	2065.6
37.5°	2736.5	2741.1	2695.2	2474.6	2355.1	2304.5	2306.8	2304.5	2309.1	2288.5	2235.6
40°	3049.0	3060.5	3058.2	2791.7	2640.0	2552.7	2520.5	2515.9	2527.4	2518.2	2467.7
42.5°	3460.3	3487.8	3423.5	3182.3	3012.2	2865.2	2777.9	2766.4	2791.7	2803.1	2754.9
45°	3887.6	3878.4	3777.3	3602.7	3448.8	3260.4	3094.9	3076.6	3094.9	3129.4	3078.9
47.5°	4110.5	4103.6	4078.3	3991.0	3968.1	3752.1	3501.6	3485.5	3451.1	3499.3	3439.6
50°	4478.1	4485.0	4381.6	4372.4	4468.9	4349.5	3961.2	3924.4	3862.4	3901.4	3850.9
52.5°	4744.7	4714.8	4650.5	4730.9	5031.9	4967.5	4393.1	4377.0	4319.6	4310.4	4287.4
55°	4852.6	4852.6	4864.1	5050.2	5479.9	5394.9	4861.8	4877.9	4799.8	4735.5	4765.3
57.5°	4884.8	4898.6	4997.4	5305.3	6006.1	5728.1	5378.8	5401.8	5289.2	5160.5	5254.7
60°	4726.3	4767.6	5004.3	5450.0	6302.5	6081.9	5923.4	5930.2	5767.1	5578.7	5744.1
62.5°	4319.6	4370.1	4792.9	5509.8	6254.2	6444.9	6438.0	6454.1	6231.2	5996.9	6203.7
65°	3821.0	3871.6	4321.9	5342.1	6217.5	6704.6	6909.1	6952.7	6665.5	6350.7	6490.9
67.5°	3088.0	3154.7	3582.0	4776.8	6038.2	6918.2	7350.2	7396.2	7001.0	6534.5	6465.6
70°	2237.9	2270.1	2628.5	3630.3	5307.6	6801.1	7699.4	7697.1	7111.2	6520.7	6121.0
72.5°	1077.6	1102.9	1413.1	2254.0	3795.7	5771.7	7446.7	7490.4	6959.6	6320.9	5332.9
75°	443.4	468.7	572.1	951.2	1992.1	3814.1	6311.7	6415.1	6320.9	5672.9	4172.5
77.5°	275.7	284.9	335.5	491.7	909.9	1780.7	4418.4	4558.5	5008.9	4544.8	2754.9
80°	206.8	213.7	250.4	344.6	574.4	657.1	2194.3	2371.2	3035.2	2607.8	1247.6
82.5°	172.3	174.6	199.9	250.4	390.6	376.8	703.1	783.5	1415.4	994.9	429.7
85°	160.8	165.4	179.2	179.2	248.1	236.7	291.8	305.6	411.3	340.1	149.3
87.5°	82.7	78.1	158.5	140.2	128.7	114.9	124.1	133.3	153.9	163.1	66.6
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: P234814

CATALOG NUMBER: ARCH-M-AF48-130-D-U-T3-8027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9	1403.9
2.5°	1399.3	1406.2	1417.7	1429.1	1442.9	1459.0	1468.2	1479.7	1488.9	1484.3	1482.0
5°	1406.2	1417.7	1442.9	1465.9	1493.5	1525.6	1546.3	1569.3	1587.7	1592.3	1585.4
7.5°	1417.7	1438.3	1472.8	1514.2	1550.9	1592.3	1624.4	1656.6	1679.6	1684.2	1684.2
10°	1445.2	1468.2	1514.2	1569.3	1613.0	1656.6	1693.4	1718.6	1739.3	1748.5	1748.5
12.5°	1484.3	1511.9	1567.0	1633.6	1681.9	1723.2	1743.9	1755.4	1764.6	1773.8	1776.1
15°	1530.2	1560.1	1626.7	1698.0	1748.5	1769.2	1769.2	1766.9	1766.9	1771.5	1776.1
17.5°	1576.2	1608.4	1677.3	1753.1	1785.3	1773.8	1757.7	1750.8	1746.2	1743.9	1750.8
20°	1624.4	1656.6	1725.5	1796.8	1787.6	1739.3	1716.3	1700.3	1686.5	1679.6	1688.8
22.5°	1677.3	1707.2	1778.4	1826.6	1757.7	1684.2	1640.5	1615.3	1592.3	1578.5	1587.7
25°	1739.3	1769.2	1838.1	1835.8	1704.9	1601.5	1532.5	1491.2	1465.9	1452.1	1452.1
27.5°	1812.9	1838.1	1904.8	1812.9	1631.3	1491.2	1390.1	1351.0	1344.1	1332.6	1332.6
30°	1888.7	1909.4	1966.8	1760.0	1530.2	1346.4	1236.1	1217.8	1220.1	1208.6	1210.9
32.5°	1966.8	1987.5	2003.6	1681.9	1399.3	1183.3	1109.8	1096.0	1093.7	1084.5	1075.3
35°	2077.1	2107.0	2008.2	1576.2	1240.7	1047.7	994.9	981.1	967.3	935.1	935.1
37.5°	2244.8	2277.0	1996.7	1445.2	1077.6	942.0	893.8	875.4	852.4	820.3	808.8
40°	2474.6	2474.6	1971.4	1298.2	946.6	857.0	811.1	788.1	762.8	730.7	723.8
42.5°	2745.7	2681.4	1932.3	1148.8	850.1	799.6	758.2	733.0	703.1	666.3	661.7
45°	3062.8	2888.2	1877.2	1015.6	778.9	765.1	739.8	696.2	645.6	606.6	599.7
47.5°	3370.7	3074.3	1824.3	921.4	719.2	751.3	730.7	657.1	588.2	533.1	526.2
50°	3708.4	3239.7	1762.3	843.2	673.2	742.1	719.2	599.7	523.9	484.8	480.2
52.5°	4046.2	3407.4	1695.7	760.5	634.2	723.8	691.6	558.3	521.6	468.7	461.8
55°	4402.3	3602.7	1617.5	668.6	588.2	687.0	654.8	556.0	537.7	468.7	452.6
57.5°	4749.3	3818.7	1491.2	579.0	537.7	631.9	641.0	542.2	503.2	464.1	445.7
60°	5133.0	4048.5	1282.1	503.2	494.0	585.9	622.7	512.4	464.1	450.3	441.1
62.5°	5440.8	4255.3	1001.8	450.3	457.2	549.1	599.7	494.0	448.0	436.6	434.3
65°	5574.1	4259.9	719.2	404.4	420.5	514.7	576.7	477.9	434.3	429.7	427.4
67.5°	5434.0	4025.5	505.5	360.7	381.4	482.5	546.8	461.8	420.5	422.8	418.2
70°	4981.3	3531.5	369.9	319.4	344.6	448.0	514.7	441.1	404.4	409.0	402.1
72.5°	4167.9	2752.6	296.4	284.9	314.8	411.3	482.5	418.2	379.1	381.4	367.6
75°	3078.9	1824.3	248.1	255.0	280.3	376.8	441.1	388.3	351.5	342.4	333.2
77.5°	1831.2	937.4	204.5	222.9	250.4	335.5	395.2	351.5	321.7	305.6	298.7
80°	755.9	379.1	167.7	188.4	218.3	298.7	349.2	307.9	287.2	271.1	261.9
82.5°	301.0	186.1	133.3	153.9	183.8	259.6	305.6	271.1	250.4	239.0	213.7
85°	114.9	91.9	89.6	108.0	137.9	199.9	252.7	227.5	211.4	181.5	174.6
87.5°	46.0	41.4	41.4	52.8	78.1	126.4	181.5	158.5	165.4	131.0	133.3
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)