

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: P214672

Luminaire Tested: **ARCH-AF24-30-D-U-T2R-7050-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214672
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-30-D-U-T2R-7050-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3084 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 31
Input Voltage (V): NR
Input Current (A_{in}): 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

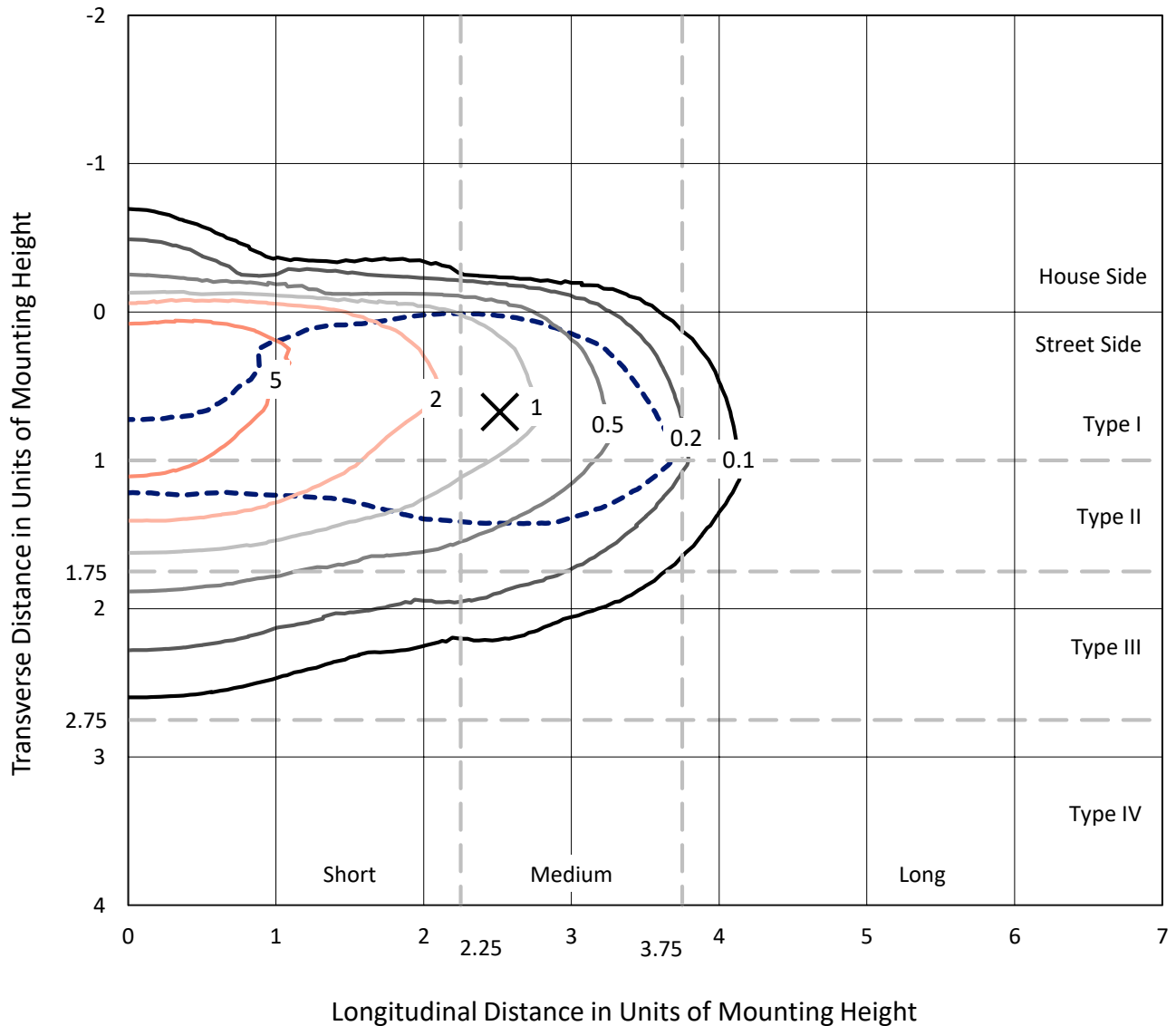


REPORT NUMBER: P214672

CATALOG NUMBER: ARCH-AF24-30-D-U-T2R-7050-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

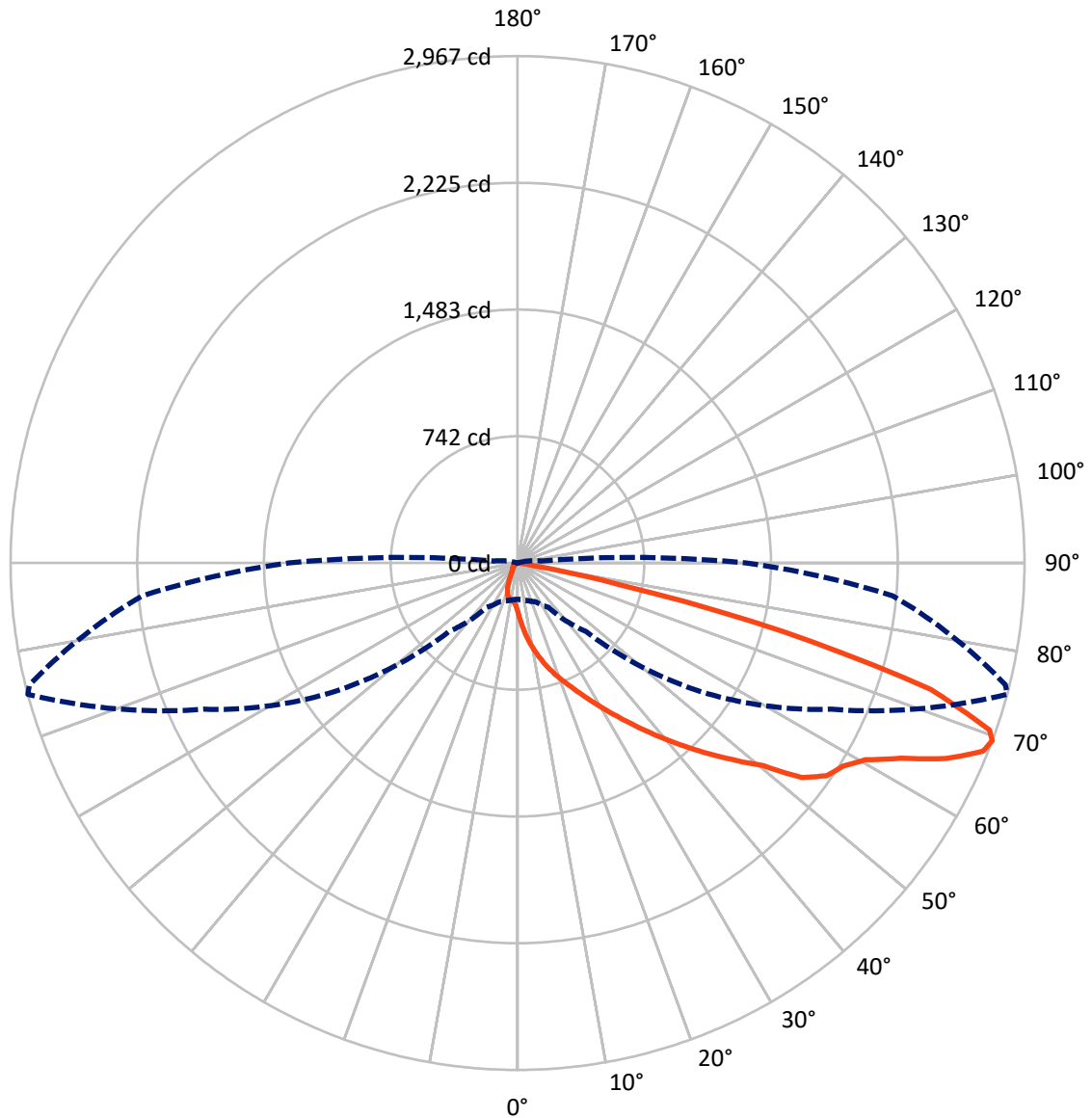


Based on 10 foot mounting height. Maximum calculated value = 7.9 fc
 Type II - Medium - Full Cutoff

REPORT NUMBER: P214672

CATALOG NUMBER: ARCH-AF24-30-D-U-T2R-7050-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P214672

CATALOG NUMBER: ARCH-AF24-30-D-U-T2R-7050-HSS

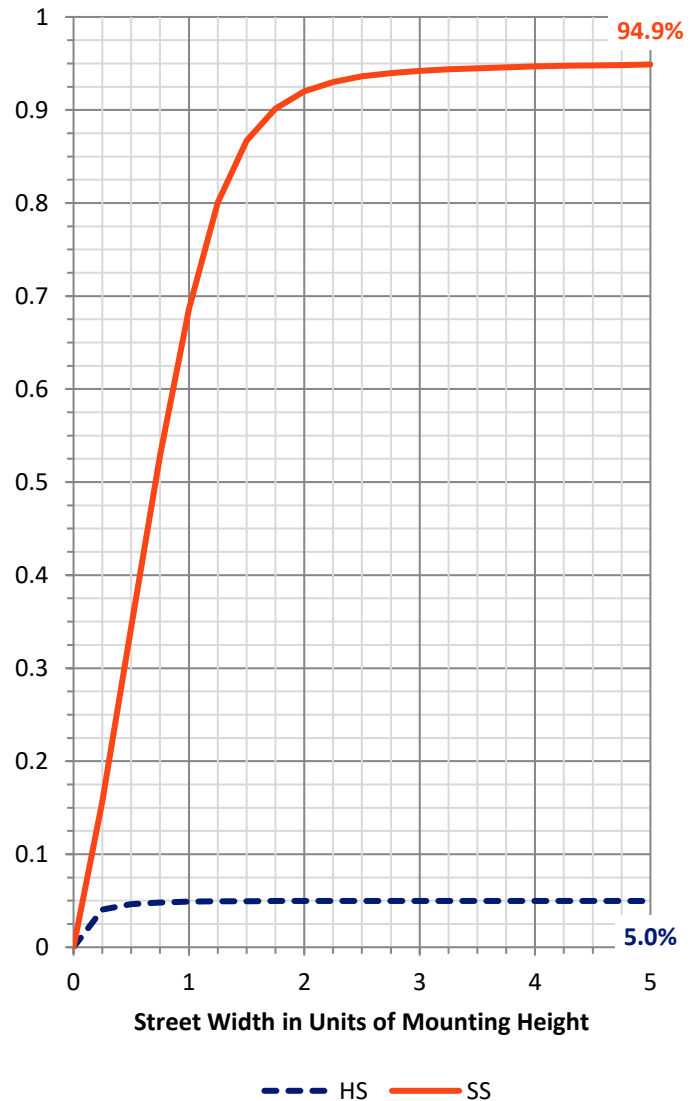
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	153.9	0.0	153.9
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	2930.1	0.0	2930.1
	% Fixture	95.0	0.0	95.0
Total	Lumens	3084.0	0.0	3084.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.5	1.1
10°-20°	119.6	3.9
20°-30°	228.4	7.4
30°-40°	409.7	13.3
40°-50°	627.6	20.4
50°-60°	729.5	23.7
60°-70°	646.0	20.9
70°-80°	278.6	9.0
80°-90°	11.2	0.4
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°	3084.0	100.0
0°-180°	3084.0	100.0

Coefficient of Utilization



REPORT NUMBER: P214672

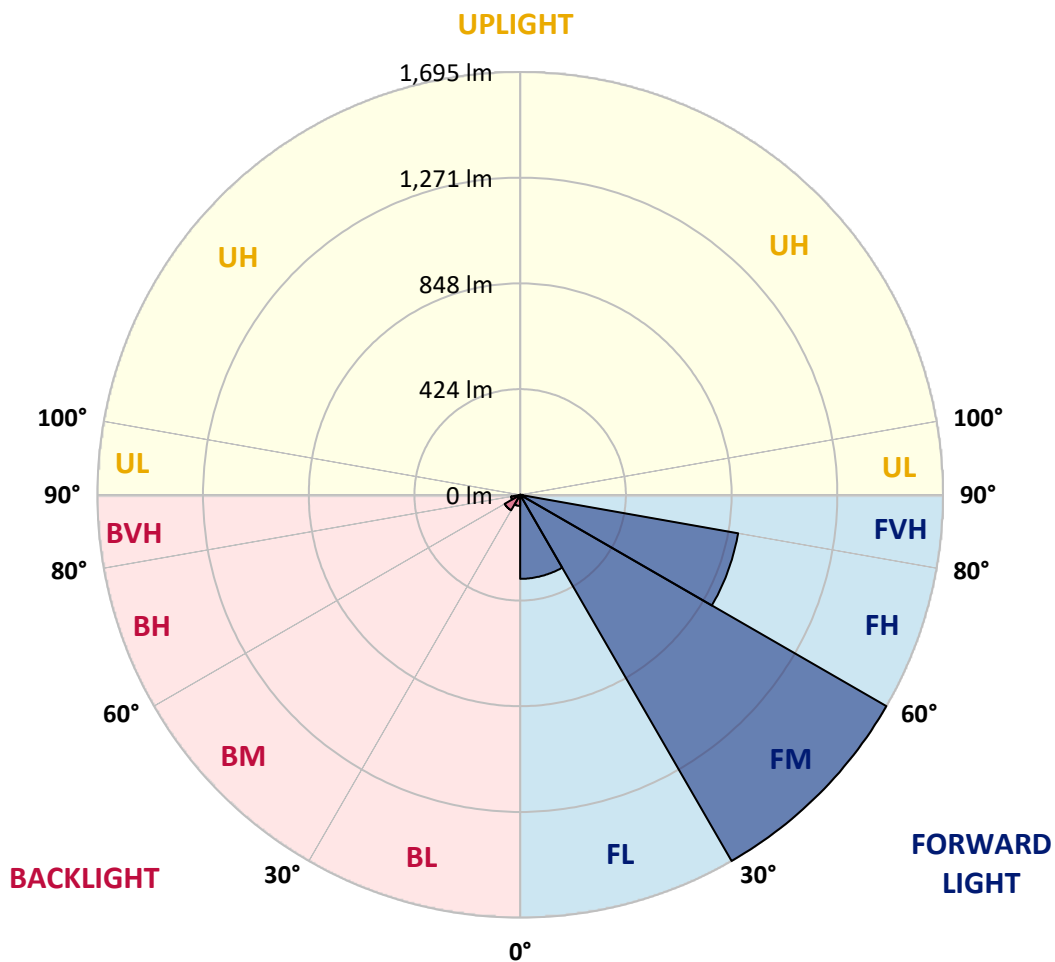
CATALOG NUMBER: ARCH-AF24-30-D-U-T2R-7050-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	336.8	10.9			
FM (30°-60°)	1695.0	55.0			
FH (60°-80°)	887.3	28.8			G1/1800
FVH (80°-90°)	11.0	0.4			G1/100
BL (0°-30°)	44.7	1.4	B0/110		
BM (30°-60°)	71.7	2.3	B0/220		
BH (60°-80°)	37.3	1.2	B0/110		G0/110
BVH (80°-90°)	0.2	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type II Medium





REPORT NUMBER: P214672

CATALOG NUMBER: ARCH-AF24-30-D-U-T2R-7050-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0
2.5°	472.7	468.1	463.4	458.1	446.1	425.5	399.5	371.5	336.9	330.9	302.9
5°	573.9	571.9	567.3	559.9	546.6	524.0	494.7	453.4	395.5	385.5	326.2
7.5°	645.2	643.8	639.8	631.2	619.2	596.6	565.9	521.3	454.1	442.8	355.5
10°	709.1	708.4	705.1	697.1	685.1	660.5	627.9	581.3	510.0	497.4	389.5
12.5°	767.0	767.7	766.3	762.4	753.7	730.4	693.1	642.5	563.9	550.0	430.1
15°	801.0	803.0	808.3	816.3	818.9	800.3	761.7	705.8	619.2	607.2	476.7
17.5°	789.7	791.7	808.3	835.6	861.6	864.2	829.6	765.7	673.8	661.8	522.7
20°	762.4	765.0	782.3	819.6	870.2	905.5	891.5	830.9	725.7	711.1	566.6
22.5°	793.0	793.0	798.3	820.9	866.9	922.1	940.8	896.2	779.0	761.0	610.5
25°	898.2	896.2	884.9	875.5	890.2	939.5	978.1	962.8	841.6	820.9	657.2
27.5°	1031.3	1040.7	1019.4	985.4	952.1	973.4	1011.4	1028.7	910.8	889.5	705.1
30°	1180.5	1184.5	1159.2	1113.9	1055.3	1034.7	1050.7	1085.3	986.1	962.8	755.0
32.5°	1315.0	1311.6	1290.3	1243.1	1170.5	1125.9	1101.3	1130.5	1068.0	1041.3	806.3
35°	1434.2	1436.8	1410.9	1356.3	1285.0	1237.7	1179.2	1181.8	1159.8	1129.2	865.6
37.5°	1541.4	1536.7	1512.1	1457.5	1392.9	1341.6	1279.7	1235.1	1260.4	1228.4	932.1
40°	1628.6	1623.9	1597.9	1544.7	1484.1	1442.1	1393.5	1306.3	1366.2	1329.6	1003.4
42.5°	1697.8	1692.5	1670.5	1619.3	1560.7	1523.4	1500.1	1394.2	1479.4	1442.8	1083.3
45°	1731.8	1727.1	1713.8	1675.2	1623.9	1591.3	1602.6	1495.4	1600.6	1570.0	1171.2
47.5°	1691.8	1689.8	1705.1	1698.5	1669.2	1651.9	1691.2	1605.9	1727.8	1697.8	1272.4
50°	1570.7	1574.0	1618.6	1673.9	1687.8	1708.5	1763.7	1722.5	1864.3	1832.3	1388.9
52.5°	1271.7	1294.3	1428.8	1562.0	1665.2	1743.1	1849.0	1888.9	2086.7	2055.4	1570.7
55°	949.4	958.8	1105.2	1333.0	1574.0	1740.4	1912.2	1986.8	2196.5	2164.6	1618.6
57.5°	753.0	756.4	828.9	1061.3	1386.2	1680.5	1945.5	2022.1	2244.5	2217.8	1689.8
60°	591.2	595.2	647.8	807.6	1121.9	1518.7	1897.6	2052.7	2338.3	2317.0	1814.3
62.5°	460.1	464.1	496.0	589.9	841.6	1269.7	1801.0	2102.0	2516.8	2506.8	2018.1
65°	356.2	357.5	379.5	423.5	594.6	1000.0	1683.2	2147.9	2757.8	2749.1	2183.2
67.5°	263.0	265.0	280.3	307.6	401.5	718.4	1490.1	2112.6	2939.6	2914.3	2243.1
69°	212.4	214.4	227.7	249.7	316.9	565.9	1313.6	2025.4	2966.9	2942.9	2205.2
70°	181.8	183.1	196.4	215.1	270.3	480.7	1173.8	1950.2	2930.9	2907.6	2118.6
72.5°	116.5	123.2	136.5	148.5	179.1	318.3	792.3	1617.3	2528.8	2488.8	1659.2
75°	64.6	66.6	90.6	105.2	119.2	207.1	440.8	1008.7	1608.6	1580.6	887.5
77.5°	53.3	54.6	63.9	79.9	79.9	115.9	166.5	397.5	611.9	552.0	240.4
80°	37.3	38.6	48.6	52.6	57.3	65.2	53.9	87.2	94.5	83.9	36.0
82.5°	26.0	27.3	33.3	43.3	45.9	30.6	20.0	26.0	27.3	27.3	14.0
85°	4.7	6.7	24.6	36.0	27.3	9.3	11.3	9.3	8.7	9.3	3.3
87.5°	0.0	0.0	15.3	17.3	14.6	4.0	4.7	3.3	2.0	2.7	1.3
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: P214672

CATALOG NUMBER: ARCH-AF24-30-D-U-T2R-7050-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0	287.0
2.5°	289.0	275.0	251.0	233.7	219.1	207.7	203.1	195.7	190.4	193.1	189.8
5°	297.0	272.3	233.7	209.1	191.8	177.1	165.1	155.8	148.5	147.1	145.8
7.5°	309.6	274.3	223.7	193.1	167.1	144.5	125.8	111.9	101.2	101.2	97.2
10°	326.9	279.6	217.7	177.1	138.5	107.9	89.2	75.9	70.6	69.9	68.6
12.5°	350.9	289.6	213.1	156.5	107.9	78.6	67.2	62.6	60.6	59.9	59.3
15°	383.5	304.3	207.7	131.2	81.9	64.6	59.9	55.9	53.9	53.3	52.6
17.5°	414.8	317.6	196.4	105.2	66.6	58.6	53.3	49.9	47.3	46.6	46.6
20°	444.1	328.9	177.1	81.9	59.9	52.6	47.3	43.3	40.6	39.9	39.9
22.5°	474.7	338.2	153.1	66.6	54.6	46.6	41.3	37.3	34.6	34.0	33.3
25°	507.3	344.9	125.8	59.3	49.3	41.3	35.3	32.0	30.0	29.3	28.6
27.5°	542.6	347.6	99.9	53.9	43.3	36.0	30.6	27.3	26.0	25.3	25.3
30°	574.6	344.9	77.2	47.9	38.0	31.3	26.6	24.0	22.6	22.0	22.0
32.5°	607.9	338.2	61.9	42.6	33.3	26.6	22.6	20.6	20.0	19.3	19.3
35°	643.2	329.6	53.3	38.0	28.6	23.3	20.0	18.6	18.0	17.3	17.3
37.5°	684.5	318.9	48.6	34.0	25.3	20.6	17.3	16.6	16.0	16.0	16.0
40°	731.1	305.6	45.3	30.6	22.6	18.0	15.3	14.6	14.0	14.0	14.0
42.5°	780.3	290.3	41.9	27.3	20.0	15.3	13.3	13.3	12.7	12.7	12.0
45°	835.6	275.0	38.6	24.0	17.3	13.3	11.3	10.7	10.7	10.0	10.0
47.5°	900.8	261.0	35.3	21.3	15.3	11.3	10.0	9.3	8.7	8.0	8.0
50°	992.7	259.7	31.3	18.6	14.0	9.3	8.0	7.3	6.7	6.0	6.0
52.5°	1083.9	247.7	26.6	15.3	11.3	8.0	6.0	5.3	4.7	4.7	4.0
55°	1104.6	227.7	23.3	13.3	8.7	6.0	4.7	3.3	3.3	2.7	2.7
57.5°	1149.9	218.4	20.0	10.7	6.7	4.7	2.7	2.0	2.0	2.0	2.0
60°	1239.1	215.7	17.3	9.3	4.7	3.3	2.0	1.3	1.3	0.7	0.7
62.5°	1362.3	213.1	14.6	8.0	3.3	2.0	1.3	0.7	0.0	0.0	0.0
65°	1430.2	195.1	12.0	6.0	2.7	2.0	0.7	0.0	0.0	0.0	0.0
67.5°	1412.2	161.1	10.7	4.0	2.0	1.3	0.7	0.0	0.0	0.0	0.0
69°	1337.0	135.8	8.7	3.3	2.0	1.3	0.7	0.0	0.0	0.0	0.0
70°	1246.4	117.2	8.0	2.7	1.3	0.7	0.7	0.0	0.0	0.0	0.0
72.5°	884.9	61.3	5.3	2.0	1.3	0.7	0.0	0.0	0.0	0.0	0.0
75°	413.5	27.3	3.3	1.3	0.7	0.7	0.0	0.0	0.0	0.0	0.0
77.5°	91.2	12.7	2.0	1.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0
80°	17.3	4.7	1.3	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	6.0	2.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.7	0.0	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)