

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: LUMARK

Report Number: P881733

Luminaire Tested: **NAV-SB1B-740-U-SL4-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881733
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-10)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-740-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4241 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

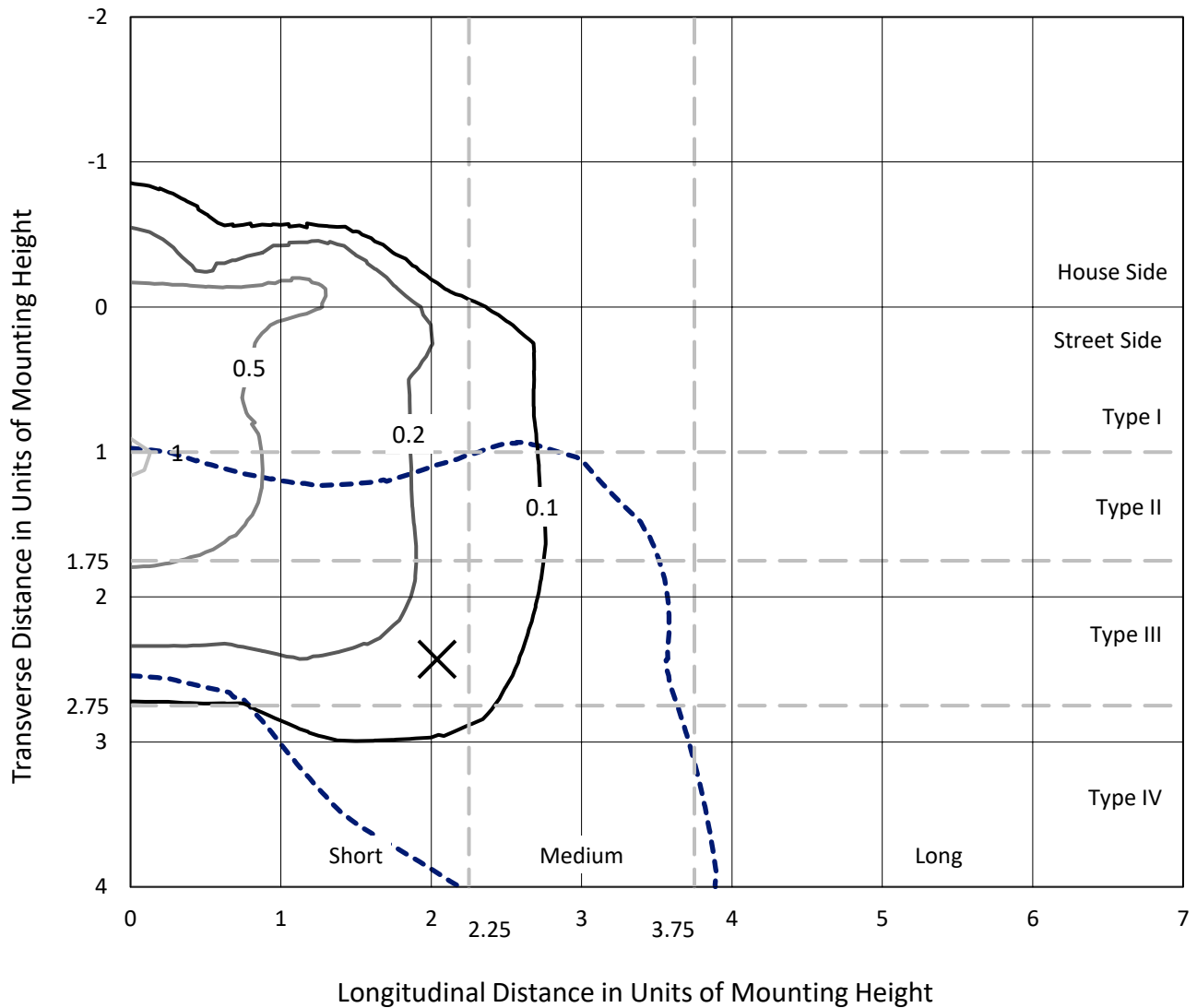
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

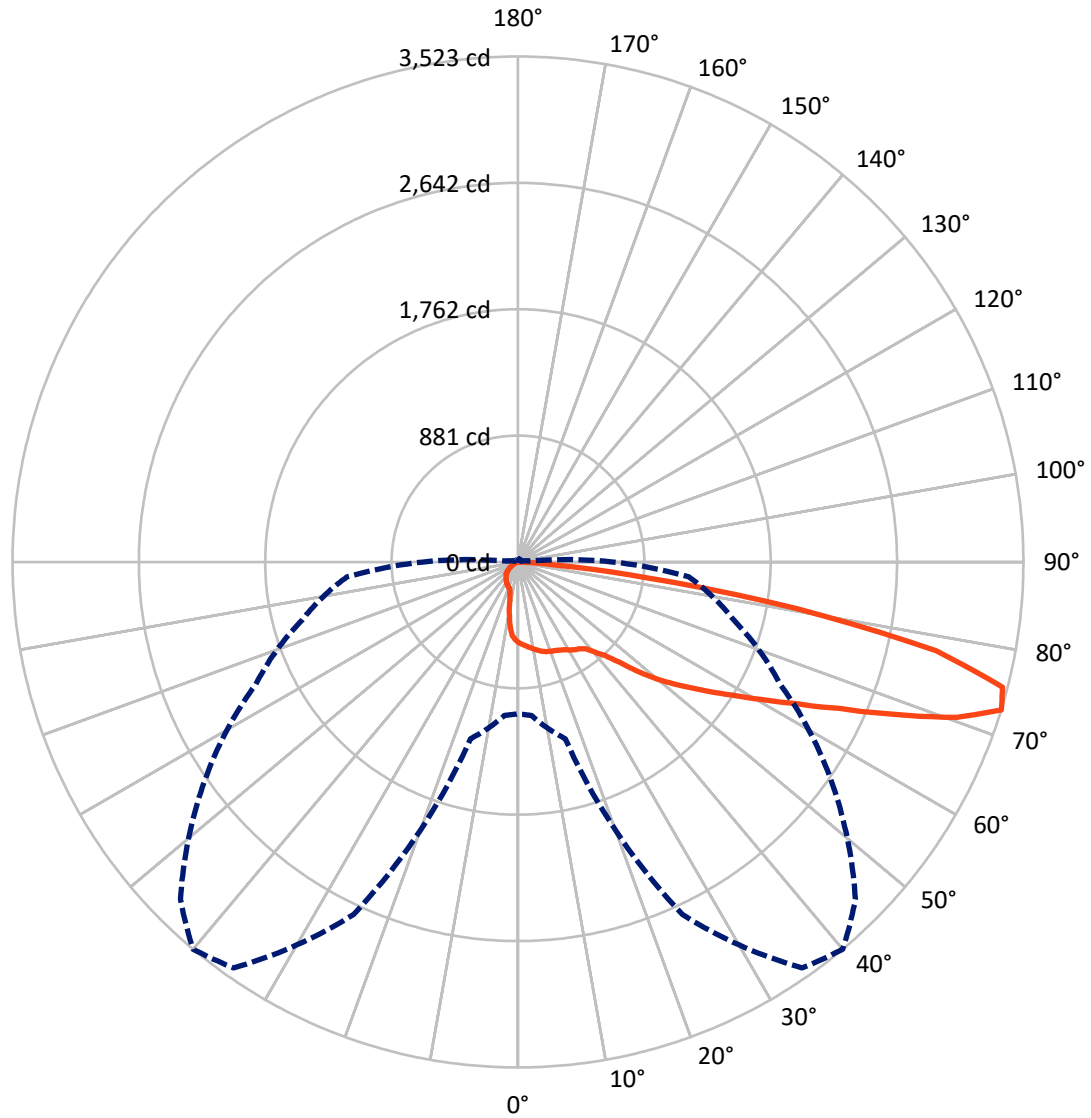
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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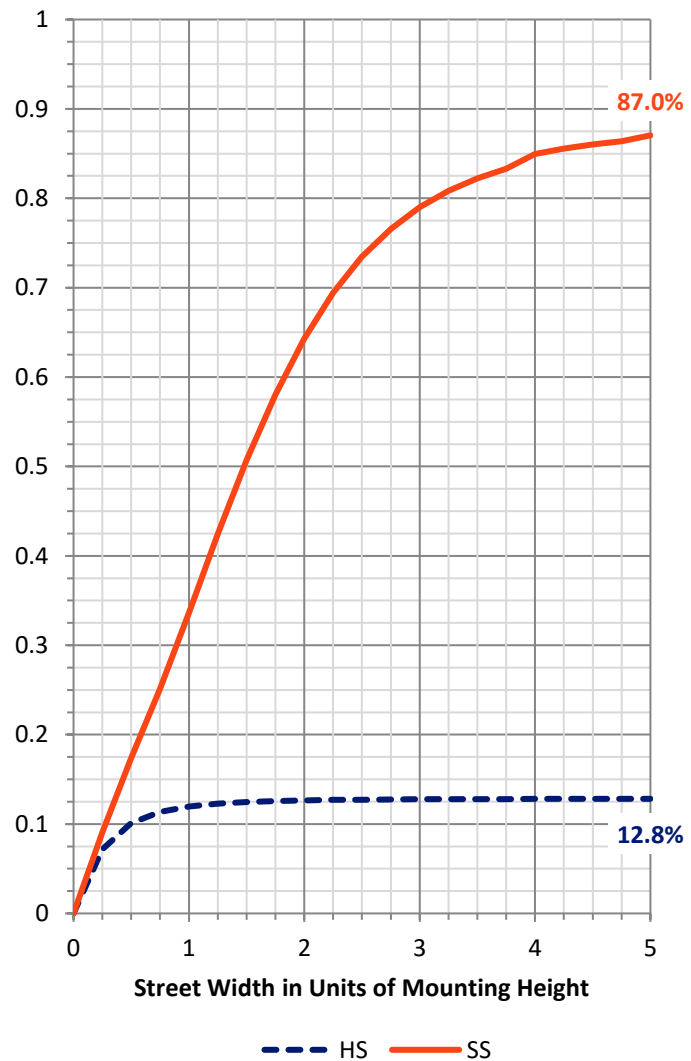
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	547.7	0.0	547.7
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	3693.3	0.0	3693.3
	% Fixture	87.1	0.0	87.1
Total	Lumens	4241.0	0.0	4241.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.3	1.2
10°-20°	139.3	3.3
20°-30°	225.3	5.3
30°-40°	332.7	7.8
40°-50°	559.9	13.2
50°-60°	869.4	20.5
60°-70°	1087.9	25.7
70°-80°	890.7	21.0
80°-90°	84.5	2.0
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°	4241.0	100.0
0°-180°	4241.0	100.0

Coefficient of Utilization



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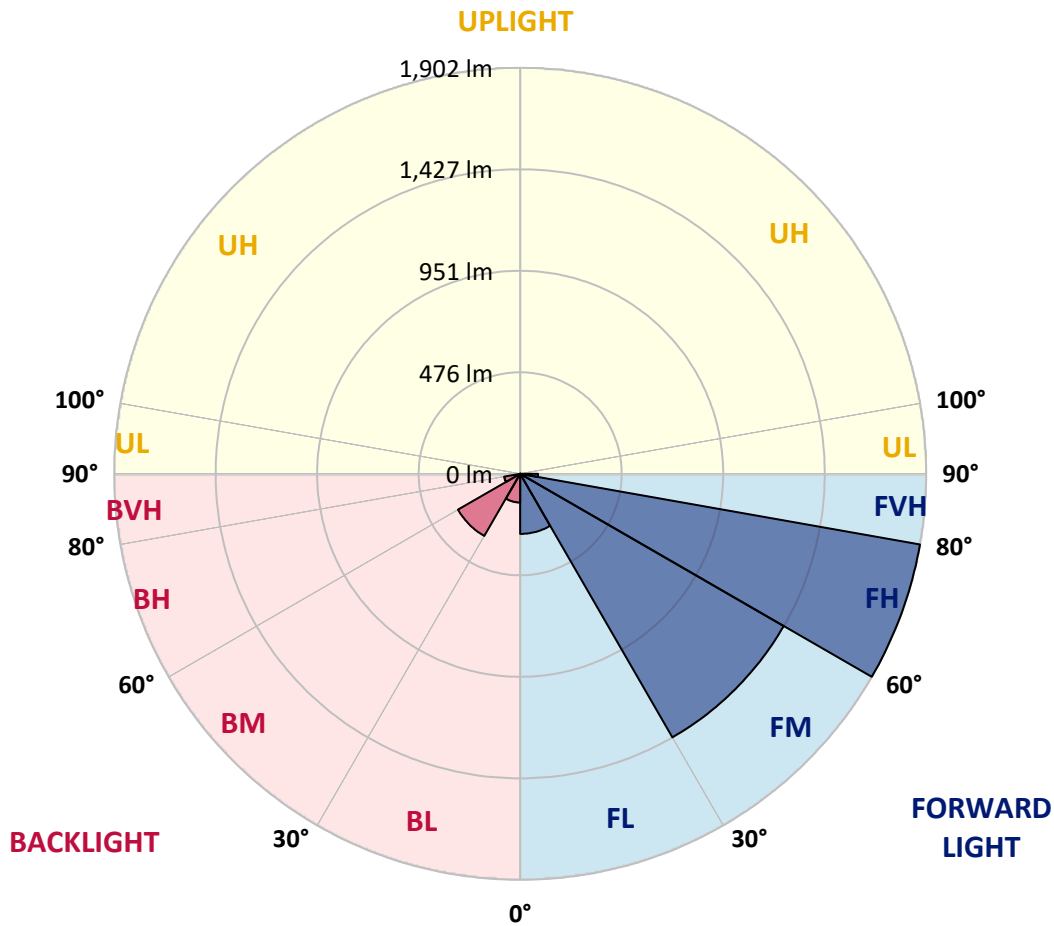
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	281.5	6.6			
FM (30°-60°)	1425.7	33.6			
FH (60°-80°)	1902.3	44.9			G2/5000
FVH (80°-90°)	83.8	2.0			G1/100
BL (0°-30°)	134.4	3.2	B1/500		
BM (30°-60°)	336.3	7.9	B1/1000		
BH (60°-80°)	76.3	1.8	B0/110		G0/110
BVH (80°-90°)	0.6	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	561.5	561.5	561.5	561.5	561.5	561.5	561.5	561.5	561.5	561.5	561.5
2.5°	578.5	580.7	579.4	576.9	576.2	575.0	573.4	572.7	570.5	568.6	566.3
5°	594.8	597.0	595.4	591.9	590.3	588.7	586.5	584.5	580.1	575.9	570.8
7.5°	612.7	614.6	612.7	607.5	605.0	603.1	599.9	597.0	591.9	585.8	579.4
10°	632.5	634.1	631.2	624.5	620.3	617.4	614.6	611.4	606.6	599.9	592.2
12.5°	651.0	652.9	648.4	640.4	635.6	632.8	629.6	627.0	622.2	615.8	607.9
15°	667.9	670.8	663.1	654.5	649.1	646.8	643.6	642.0	638.8	634.4	627.0
17.5°	680.7	682.6	674.6	664.4	658.3	656.7	654.5	655.5	654.8	652.6	647.8
20°	691.5	692.8	682.3	669.8	663.1	663.4	662.8	666.0	667.3	667.3	667.0
22.5°	705.0	705.3	691.9	676.2	668.2	670.5	671.4	674.9	677.5	680.0	685.8
25°	722.5	721.9	705.9	684.5	677.5	680.7	682.9	684.2	687.1	691.2	704.3
27.5°	748.7	746.8	726.4	697.9	689.6	692.5	696.7	696.0	694.7	697.9	720.0
30°	781.9	779.4	752.2	716.8	709.1	711.7	712.9	707.2	697.9	700.8	733.7
32.5°	834.6	830.2	792.5	737.9	726.0	728.9	727.3	715.5	701.8	704.6	747.4
35°	926.3	915.5	862.1	781.9	745.2	742.0	738.2	726.7	709.8	706.9	758.9
37.5°	1121.2	1102.0	1011.0	867.9	788.7	767.9	756.1	744.6	718.4	706.9	772.0
40°	1340.9	1321.4	1216.4	1011.6	860.8	825.7	797.6	765.7	727.3	711.0	792.5
42.5°	1570.3	1548.9	1440.9	1189.8	964.0	891.8	839.4	782.6	742.0	723.8	819.6
45°	1826.5	1799.6	1658.4	1375.7	1113.8	1001.7	906.8	817.4	767.6	746.5	856.7
47.5°	2096.7	2061.9	1875.3	1556.2	1275.1	1153.8	1030.1	879.7	805.3	780.3	906.8
50°	2336.2	2301.8	2099.2	1745.0	1425.9	1298.4	1170.7	965.9	861.8	828.3	974.2
52.5°	2508.4	2482.2	2303.0	1939.8	1582.7	1434.2	1298.1	1066.2	933.3	889.6	1053.8
55°	2623.7	2599.8	2447.4	2124.5	1765.1	1583.7	1423.7	1175.2	1019.6	963.1	1141.6
57.5°	2693.7	2679.9	2551.9	2289.3	1945.9	1747.2	1567.4	1294.9	1121.2	1049.6	1239.7
60°	2718.6	2707.4	2616.7	2446.4	2164.4	1943.7	1736.4	1430.0	1244.5	1148.0	1340.3
62.5°	2652.2	2654.4	2663.3	2632.7	2394.7	2173.7	1938.9	1592.3	1381.2	1259.5	1434.8
65°	2339.4	2358.0	2527.9	2839.0	2699.7	2461.8	2196.7	1790.4	1537.7	1386.3	1509.9
67.5°	1937.0	1963.8	2175.3	2959.8	3024.9	2835.8	2555.7	2042.7	1724.2	1515.3	1538.3
70°	1482.8	1511.5	1767.7	2934.5	3329.3	3244.7	2999.7	2363.7	1917.5	1604.8	1465.8
72.5°	1058.2	1072.9	1274.8	2710.0	3454.2	3523.2	3326.8	2667.8	2016.2	1555.3	1195.6
75°	743.6	741.1	874.9	2182.3	3259.7	3489.4	3212.1	2503.3	1824.5	1235.5	737.2
77.5°	323.9	324.5	437.0	1325.3	2601.7	2980.2	2670.0	1568.0	1271.9	654.8	311.1
80°	84.0	86.6	160.3	527.7	1566.4	1967.0	1628.4	689.3	587.7	159.7	59.4
82.5°	29.7	31.6	73.8	165.8	577.8	902.0	725.1	220.4	153.3	45.7	16.0
85°	8.6	10.2	39.6	50.8	119.5	254.9	176.0	42.8	37.7	23.6	4.2
87.5°	0.0	1.3	8.0	7.0	7.0	4.8	8.9	4.8	6.1	2.9	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

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	561.5	561.5	561.5	561.5	561.5	561.5	561.5	561.5	561.5	561.5	561.5
2.5°	564.4	562.2	557.4	552.3	547.5	543.0	541.7	536.9	534.7	535.0	534.7
5°	567.3	563.1	553.9	542.7	531.2	518.1	507.2	491.9	478.8	477.2	476.3
7.5°	575.0	568.3	553.2	531.5	502.8	466.7	433.1	399.9	381.1	370.8	370.2
10°	586.8	577.8	554.8	513.3	452.3	387.8	337.0	295.1	273.7	263.8	261.9
12.5°	600.8	590.9	557.4	482.3	387.1	302.5	247.6	222.0	217.5	216.9	216.6
15°	620.6	609.8	560.3	440.5	316.5	230.3	205.1	205.4	208.9	210.8	210.5
17.5°	642.7	631.8	556.1	389.4	246.9	196.8	196.1	199.0	204.1	206.0	205.7
20°	665.0	654.8	541.4	329.3	199.6	187.5	190.1	193.2	198.4	200.9	200.9
22.5°	688.0	679.1	518.1	265.4	180.2	180.8	184.0	187.2	192.9	195.8	195.8
25°	712.6	705.0	487.1	212.7	171.8	173.8	177.9	181.8	187.8	191.3	191.3
27.5°	737.5	731.8	452.0	177.6	164.2	166.4	171.2	176.3	182.4	186.5	186.9
30°	764.7	761.5	423.9	164.5	156.8	158.8	164.2	169.9	176.6	181.8	182.4
32.5°	792.5	791.8	410.1	174.1	150.1	151.4	156.2	161.9	170.3	176.6	177.3
35°	820.0	821.2	402.2	201.2	147.9	144.4	147.6	152.7	162.6	170.6	171.8
37.5°	855.1	858.3	401.8	230.6	153.3	137.4	139.6	143.1	151.7	161.0	162.6
40°	907.5	924.4	422.3	255.9	162.9	131.0	131.6	132.2	136.7	144.4	146.9
42.5°	977.1	1026.6	496.1	273.1	166.7	125.2	123.0	119.5	118.8	123.0	125.2
45°	1063.7	1150.2	625.7	282.7	162.9	118.8	112.8	103.5	100.0	102.9	102.9
47.5°	1165.6	1285.7	779.4	284.9	156.5	110.8	100.0	87.8	85.0	85.9	85.6
50°	1264.9	1387.2	914.5	266.4	146.0	100.6	85.9	75.7	73.8	74.1	74.1
52.5°	1352.7	1422.1	952.8	222.6	131.9	88.2	73.8	66.8	65.5	65.5	65.2
55°	1410.9	1384.4	849.7	170.3	114.4	75.4	63.2	59.7	59.1	58.8	58.1
57.5°	1423.0	1261.7	641.7	123.0	89.4	63.6	56.2	54.3	53.0	51.7	51.1
60°	1379.6	1057.3	408.5	85.9	67.1	54.3	49.8	48.6	46.0	43.4	42.5
62.5°	1285.7	798.6	226.2	59.7	54.0	46.3	44.1	42.5	37.7	33.5	32.3
65°	1159.5	530.9	100.0	46.6	44.1	39.0	37.7	35.5	29.7	24.9	24.0
67.5°	1032.7	305.7	45.0	37.4	35.5	31.9	31.0	29.4	25.2	20.8	20.1
70°	888.0	154.9	31.0	29.7	27.5	24.3	25.2	24.9	20.8	16.9	16.3
72.5°	661.2	77.0	23.3	22.4	19.8	17.2	20.8	20.4	16.3	12.8	12.1
75°	374.4	38.0	16.9	15.7	11.8	12.8	16.6	15.7	11.2	8.3	7.7
77.5°	148.5	19.5	11.2	9.6	7.0	8.6	12.1	10.5	5.7	3.5	3.2
80°	34.2	9.6	5.7	4.2	3.2	5.1	6.4	3.8	1.6	0.3	0.0
82.5°	9.6	4.2	1.9	1.6	1.6	1.9	1.6	0.6	0.0	0.0	0.0
85°	3.2	1.9	0.6	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0
87.5°	1.3	0.6	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)