

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: P965041

Luminaire Tested: **NAV-SB3D-727-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965041
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-727-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29047.5 lumens
Efficiency: N/A
Efficacy: 133.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

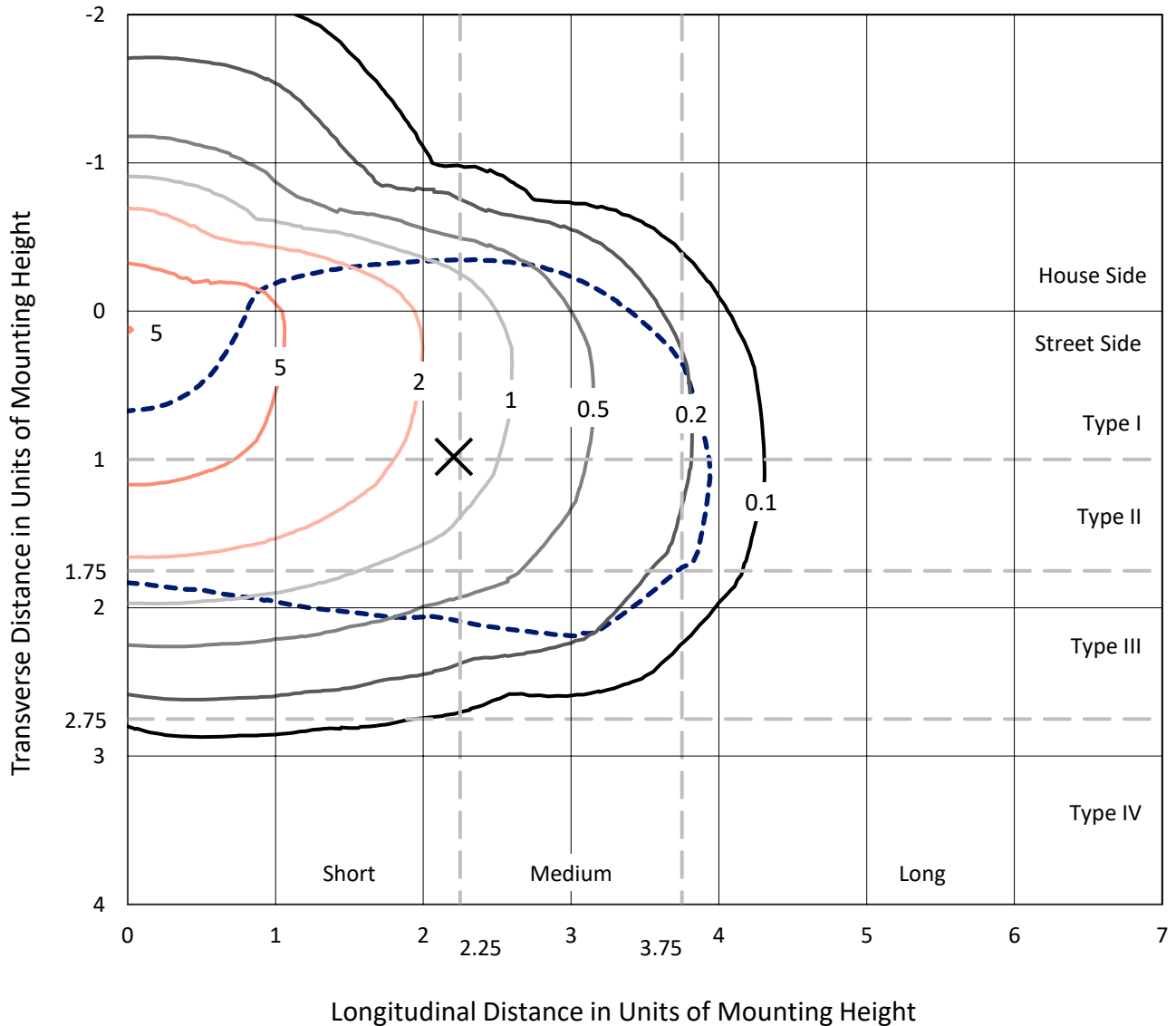
Input Watts (W): 218.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

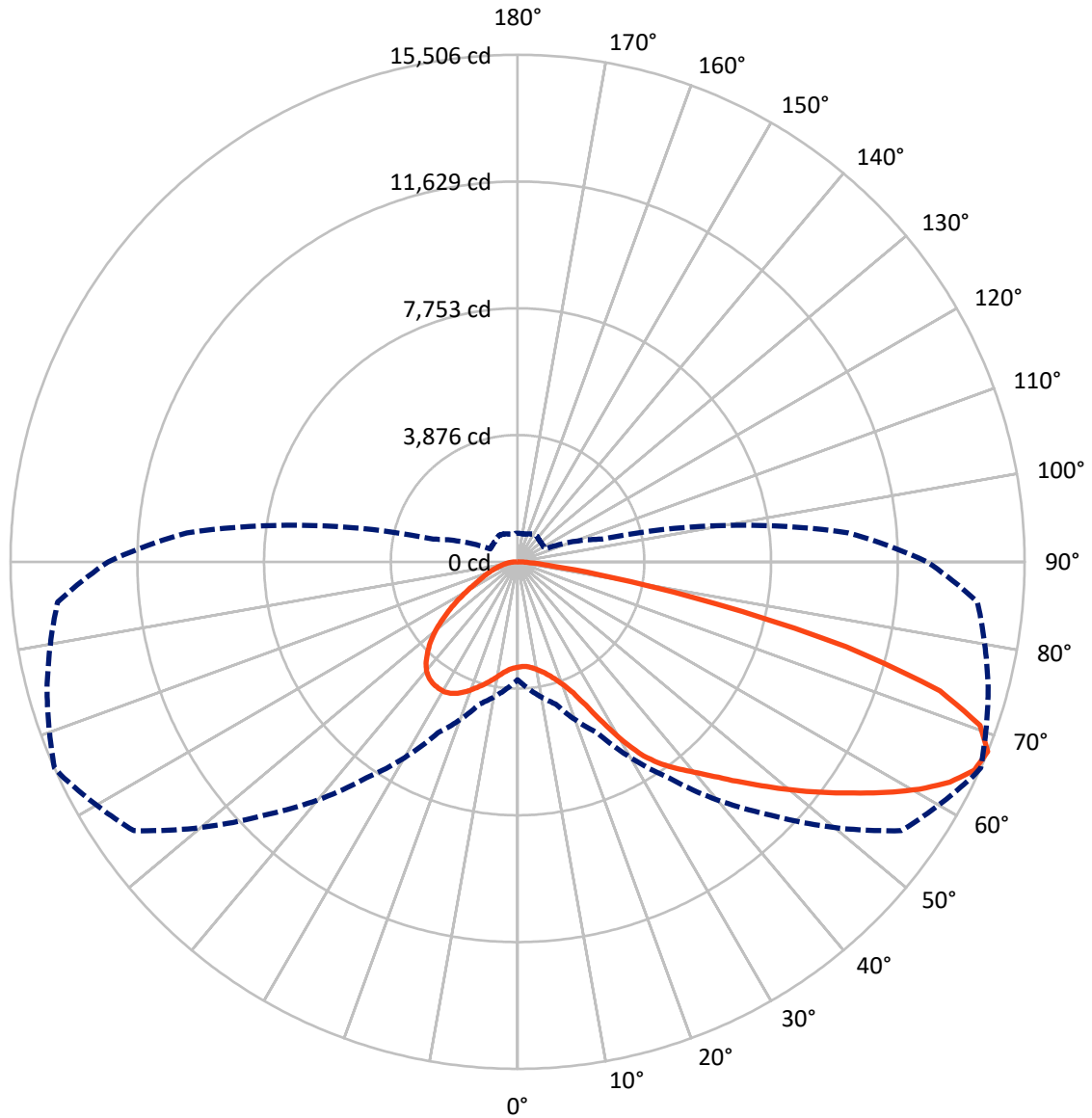
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7222.6	0.0	7222.6
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	21824.9	0.0	21824.9
	% Fixture	75.1	0.0	75.1
Total	Lumens	29047.5	0.0	29047.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	319.4	1.1
10°-20°	1055.3	3.6
20°-30°	2034.1	7.0
30°-40°	3566.5	12.3
40°-50°	5302.2	18.3
50°-60°	6721.1	23.1
60°-70°	6576.4	22.6
70°-80°	3137.0	10.8
80°-90°	335.3	1.2
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°	29047.5	100.0
0°-180°	29047.5	100.0

Coefficient of Utilization



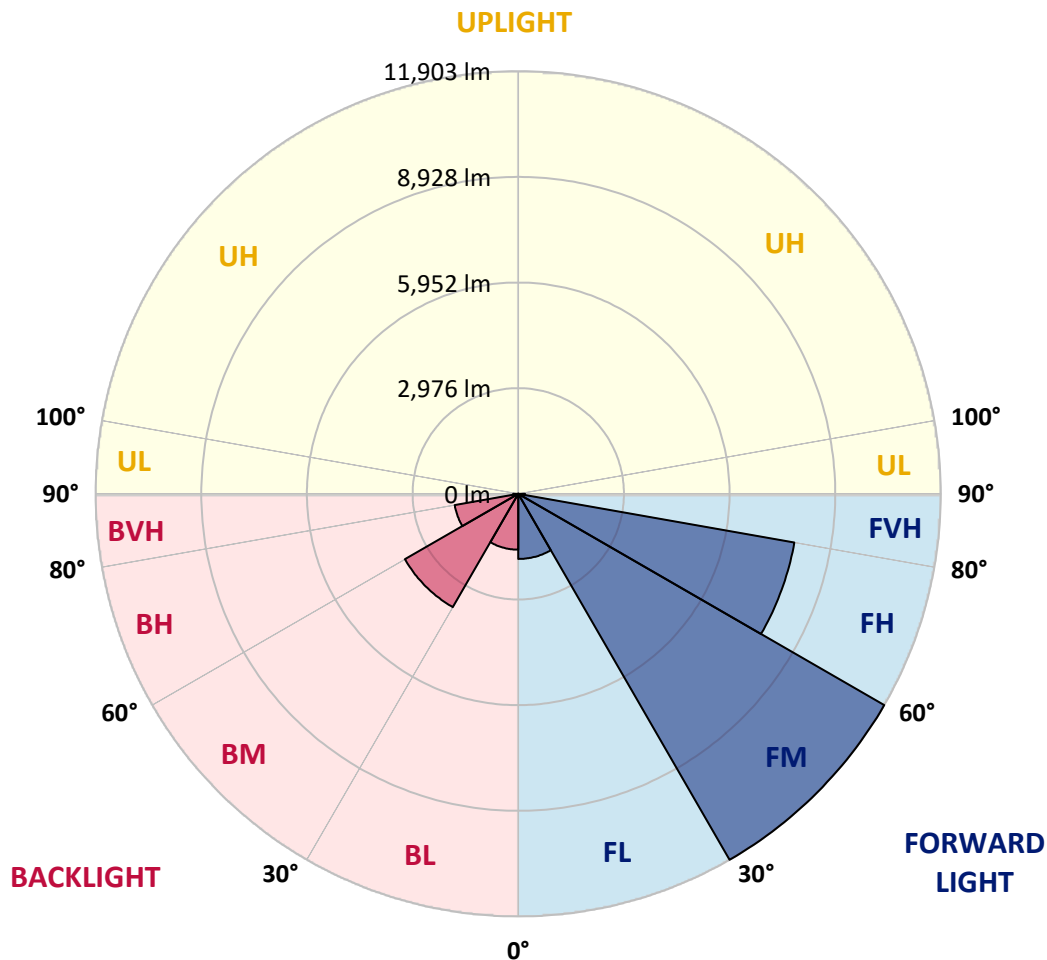
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1835.5	6.3			
FM (30°-60°)	11903.4	41.0			
FH (60°-80°)	7895.9	27.2			G4/12000
FVH (80°-90°)	190.1	0.7			G2/225
BL (0°-30°)	1573.3	5.4	B3/2500		
BM (30°-60°)	3686.5	12.7	B3/5000		
BH (60°-80°)	1817.6	6.3	B3/2500		G3/2500
BVH (80°-90°)	145.2	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3221.8	3221.8	3221.8	3221.8	3221.8	3221.8	3221.8	3221.8	3221.8	3221.8	3221.8
2.5°	3188.2	3206.5	3201.9	3194.3	3192.8	3195.8	3200.4	3205.0	3203.4	3211.0	3223.3
5°	3179.0	3197.3	3195.8	3195.8	3201.9	3214.1	3221.8	3229.4	3221.8	3230.9	3247.7
7.5°	3185.1	3198.8	3205.0	3211.0	3226.3	3249.2	3267.5	3284.3	3275.2	3285.8	3307.3
10°	3263.0	3273.6	3279.7	3279.7	3290.5	3316.4	3334.7	3365.2	3357.6	3374.4	3401.9
12.5°	3404.8	3415.6	3415.6	3409.5	3417.1	3433.9	3440.0	3473.5	3459.8	3487.3	3514.7
15°	3578.9	3600.2	3583.5	3572.7	3575.8	3592.6	3591.1	3617.0	3603.3	3626.1	3650.6
17.5°	3771.2	3798.6	3771.2	3769.6	3763.5	3781.8	3783.4	3806.2	3781.8	3798.6	3815.5
20°	3998.5	4036.8	4013.8	4021.5	4007.7	4015.3	4023.0	4056.5	4018.4	4030.6	4026.0
22.5°	4319.0	4364.9	4340.5	4369.5	4360.2	4354.2	4352.7	4412.1	4352.7	4357.2	4313.0
25°	4786.0	4841.0	4798.3	4838.0	4838.0	4857.8	4880.7	4957.0	4857.8	4828.8	4714.4
27.5°	5475.9	5530.8	5447.0	5471.3	5463.7	5512.6	5488.2	5677.4	5570.6	5523.2	5292.8
30°	6306.1	6403.8	6245.1	6239.0	6231.4	6309.2	6344.3	6469.5	6361.0	6313.8	6036.0
32.5°	7203.5	7305.8	7116.6	7061.6	7032.6	7079.9	7050.9	7151.6	7076.9	7003.6	6660.2
35°	8152.8	8253.5	8073.4	7966.6	7850.6	7751.5	7647.6	7673.6	7603.3	7491.9	7136.4
37.5°	9050.2	9234.8	9044.1	8929.6	8716.0	8522.2	8232.2	8111.6	8045.9	7943.7	7585.1
40°	9964.3	10069.7	9924.7	9827.0	9595.0	9291.3	8827.4	8572.5	8484.0	8384.8	8081.1
42.5°	10637.4	10738.1	10660.3	10593.2	10411.5	10059.0	9459.2	9140.2	9012.0	8900.6	8642.7
45°	11171.6	11246.4	11197.5	11221.9	11144.1	10802.3	10114.0	9749.2	9616.4	9480.5	9277.6
47.5°	11386.7	11466.2	11544.0	11689.0	11821.7	11569.9	10817.5	10408.5	10268.0	10129.2	9929.3
50°	11362.3	11443.2	11669.1	11977.4	12389.5	12305.5	11559.2	11110.5	10980.8	10822.1	10637.4
52.5°	11167.0	11258.6	11548.6	12061.4	12717.6	12856.5	12314.7	11835.5	11713.4	11524.1	11339.5
55°	10654.2	10709.1	11144.1	11870.5	12795.4	13241.1	13054.9	12607.7	12485.6	12221.6	12020.2
57.5°	9703.4	9782.8	10416.2	11356.3	12600.1	13502.0	13705.1	13419.6	13302.1	12922.1	12711.4
60°	8462.6	8589.3	9314.3	10492.4	12102.6	13500.5	14295.7	14217.8	14120.1	13611.9	13392.1
62.5°	7058.6	7205.0	7902.5	9271.5	11232.7	13117.4	14665.0	14886.3	14836.0	14248.3	13967.6
65°	5420.9	5521.7	6216.1	7691.9	9878.9	12294.9	14707.7	15342.6	15351.7	14732.1	14268.2
67.5°	3609.4	3899.4	4502.2	5772.0	8065.8	10950.3	14332.3	15417.4	15505.9	14898.5	14117.1
70°	1761.2	2142.8	2733.4	3751.3	5772.0	8888.4	13350.9	14803.9	15000.8	14413.1	13216.7
72.5°	731.0	854.6	1176.7	1851.3	3313.3	5997.9	11379.1	13140.3	13505.1	12771.0	11112.0
75°	492.9	534.1	673.0	949.3	1509.4	2957.7	8206.3	9798.0	10385.6	9645.5	7884.2
77.5°	380.0	406.0	489.9	663.9	897.4	1118.7	4392.3	5904.7	6208.4	5747.6	4102.4
80°	299.1	319.0	366.2	483.8	636.4	598.3	1497.2	2675.4	2850.9	2391.5	1318.7
82.5°	259.4	267.1	262.5	328.1	422.7	349.5	491.4	987.4	1089.7	790.6	430.4
85°	187.7	209.1	218.2	203.0	224.4	177.0	201.4	349.5	384.6	343.4	242.6
87.5°	76.3	113.0	138.9	131.2	82.4	50.3	62.5	102.3	117.5	128.2	79.3
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°	3221.8	3221.8	3221.8	3221.8	3221.8	3221.8	3221.8	3221.8	3221.8	3221.8	3221.8
2.5°	3224.8	3235.5	3243.1	3252.2	3258.4	3267.5	3285.8	3296.5	3298.0	3305.7	3304.2
5°	3253.8	3269.0	3285.8	3310.2	3337.7	3360.7	3395.7	3420.1	3429.3	3436.9	3435.4
7.5°	3316.4	3337.7	3368.3	3411.0	3450.7	3481.2	3524.0	3553.0	3582.0	3592.6	3594.2
10°	3409.5	3440.0	3484.3	3542.2	3584.9	3624.7	3668.9	3693.4	3722.3	3734.6	3740.6
12.5°	3525.5	3557.5	3615.5	3696.4	3736.0	3763.5	3778.8	3772.7	3778.8	3789.5	3792.5
15°	3658.2	3693.4	3759.0	3845.9	3873.5	3849.0	3815.5	3784.9	3780.3	3783.4	3794.0
17.5°	3815.5	3841.4	3917.7	3990.9	3971.1	3870.4	3797.1	3748.3	3723.8	3716.2	3726.9
20°	4035.2	4035.2	4097.7	4143.6	4010.8	3839.9	3725.4	3646.0	3595.7	3574.3	3569.7
22.5°	4302.2	4277.8	4317.5	4285.5	4003.1	3754.4	3595.7	3458.4	3382.0	3351.4	3346.9
25°	4641.1	4612.1	4601.4	4403.0	3948.2	3618.6	3360.7	3194.3	3127.2	3110.4	3113.4
27.5°	5152.4	5079.1	4940.2	4467.2	3847.4	3404.8	3086.0	2931.8	2893.6	2895.1	2899.7
30°	5833.1	5686.5	5346.2	4477.8	3682.6	3102.7	2805.1	2695.2	2676.9	2684.6	2710.5
32.5°	6463.3	6324.5	5761.3	4428.9	3429.3	2806.7	2553.3	2480.0	2452.5	2461.7	2473.9
35°	6957.8	6919.7	6145.9	4360.2	3117.9	2528.9	2327.4	2264.8	2211.4	2199.2	2208.4
37.5°	7424.8	7409.5	6434.3	4264.1	2809.7	2332.0	2145.8	2063.4	1985.5	1942.8	1944.3
40°	7937.6	7922.3	6623.6	4116.1	2536.5	2161.1	1982.5	1874.1	1778.0	1700.2	1707.8
42.5°	8514.5	8424.5	6713.6	3903.9	2304.5	2016.1	1849.7	1703.2	1576.6	1504.8	1509.4
45°	9144.8	8941.8	6712.1	3633.8	2109.1	1883.3	1707.8	1500.2	1382.7	1315.6	1312.5
47.5°	9813.2	9436.4	6629.7	3334.7	1919.9	1736.8	1488.0	1329.3	1251.4	1210.2	1201.1
50°	10503.1	9898.7	6489.3	2991.3	1726.1	1570.4	1350.6	1242.3	1182.7	1144.6	1130.9
52.5°	11151.7	10318.5	6319.8	2602.2	1529.2	1408.7	1289.7	1205.7	1143.1	1100.3	1082.1
55°	11754.6	10680.2	6080.3	2203.8	1369.0	1300.3	1260.6	1190.4	1118.7	1068.4	1048.5
57.5°	12290.3	10915.2	5666.7	1829.8	1254.5	1225.5	1230.1	1164.5	1082.1	1039.4	1011.9
60°	12735.9	11087.6	5054.7	1483.5	1161.4	1152.3	1182.7	1115.6	1019.5	970.7	949.3
62.5°	13002.9	11084.6	4303.8	1214.8	1082.1	1085.1	1120.2	1054.6	956.9	911.1	897.4
65°	12980.1	10812.9	3479.7	1039.4	1005.7	1008.8	1054.6	987.4	905.0	877.5	876.1
67.5°	12520.7	10150.6	2669.3	924.9	921.8	935.5	988.9	941.7	873.0	869.9	874.5
70°	11276.8	8775.5	1923.0	833.3	834.9	854.6	924.9	912.7	856.2	862.3	860.8
72.5°	9042.6	6690.7	1291.2	737.2	738.7	770.7	863.8	889.8	839.4	920.2	932.4
75°	6022.3	4172.6	830.2	634.9	636.4	677.6	810.4	845.5	793.7	917.3	924.9
77.5°	2893.6	1875.6	601.3	534.1	534.1	572.4	700.5	757.0	676.1	712.7	653.2
80°	999.7	705.1	473.1	430.4	421.2	447.2	590.6	656.2	583.0	537.2	503.7
82.5°	393.7	366.2	380.0	334.3	303.7	320.5	459.4	541.8	428.9	387.7	386.1
85°	225.9	238.1	268.7	221.3	175.5	196.9	337.3	389.2	323.6	285.4	291.5
87.5°	61.1	83.9	123.6	114.5	79.3	83.9	160.2	215.1	186.2	143.5	148.0
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)