

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: P971529

Luminaire Tested: **NAV-SB6D-827-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P971529
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6D-827-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 55937.3 lumens
Efficiency: N/A
Efficacy: 127.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

Input Watts (W): 440.1
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

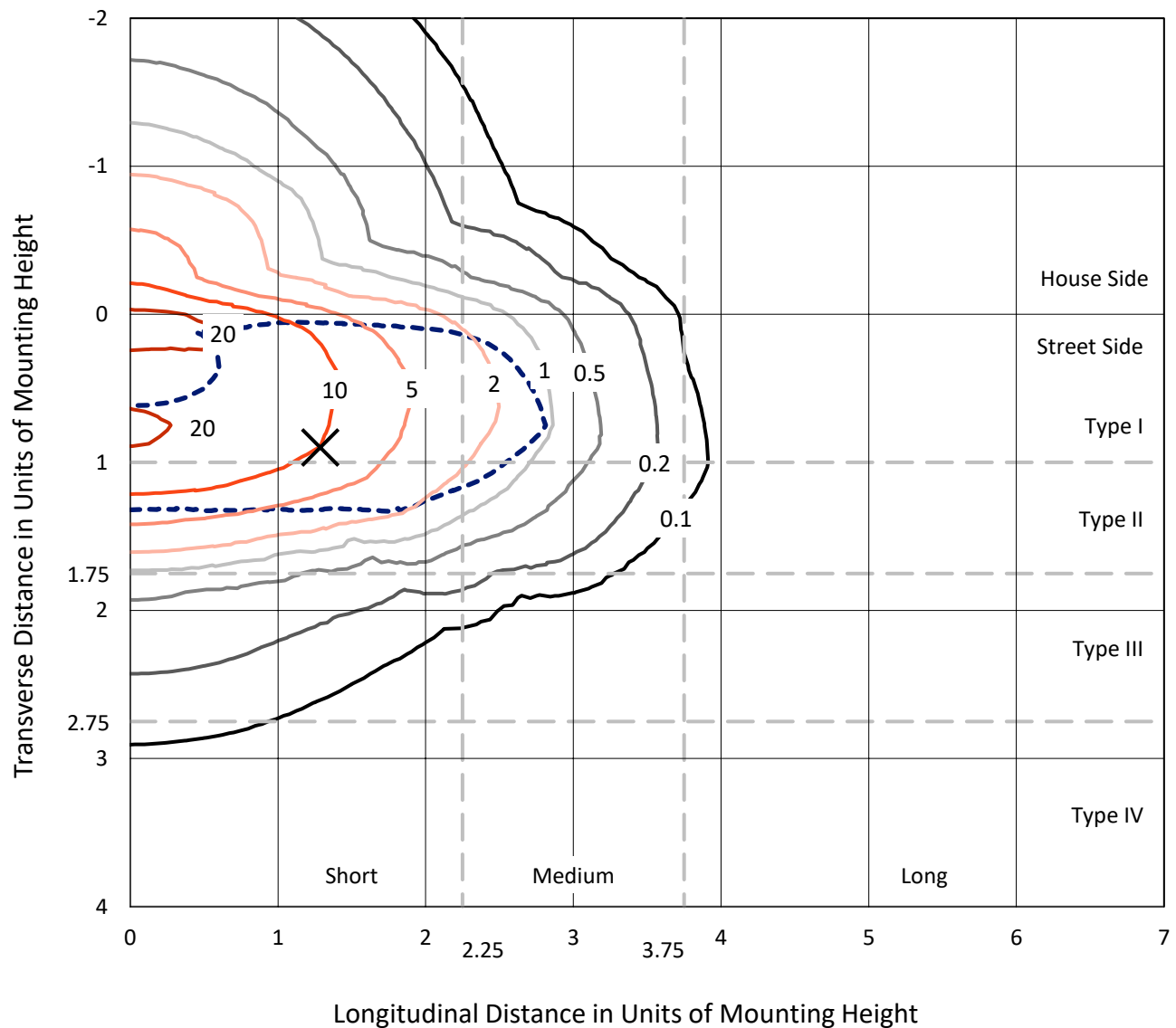


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

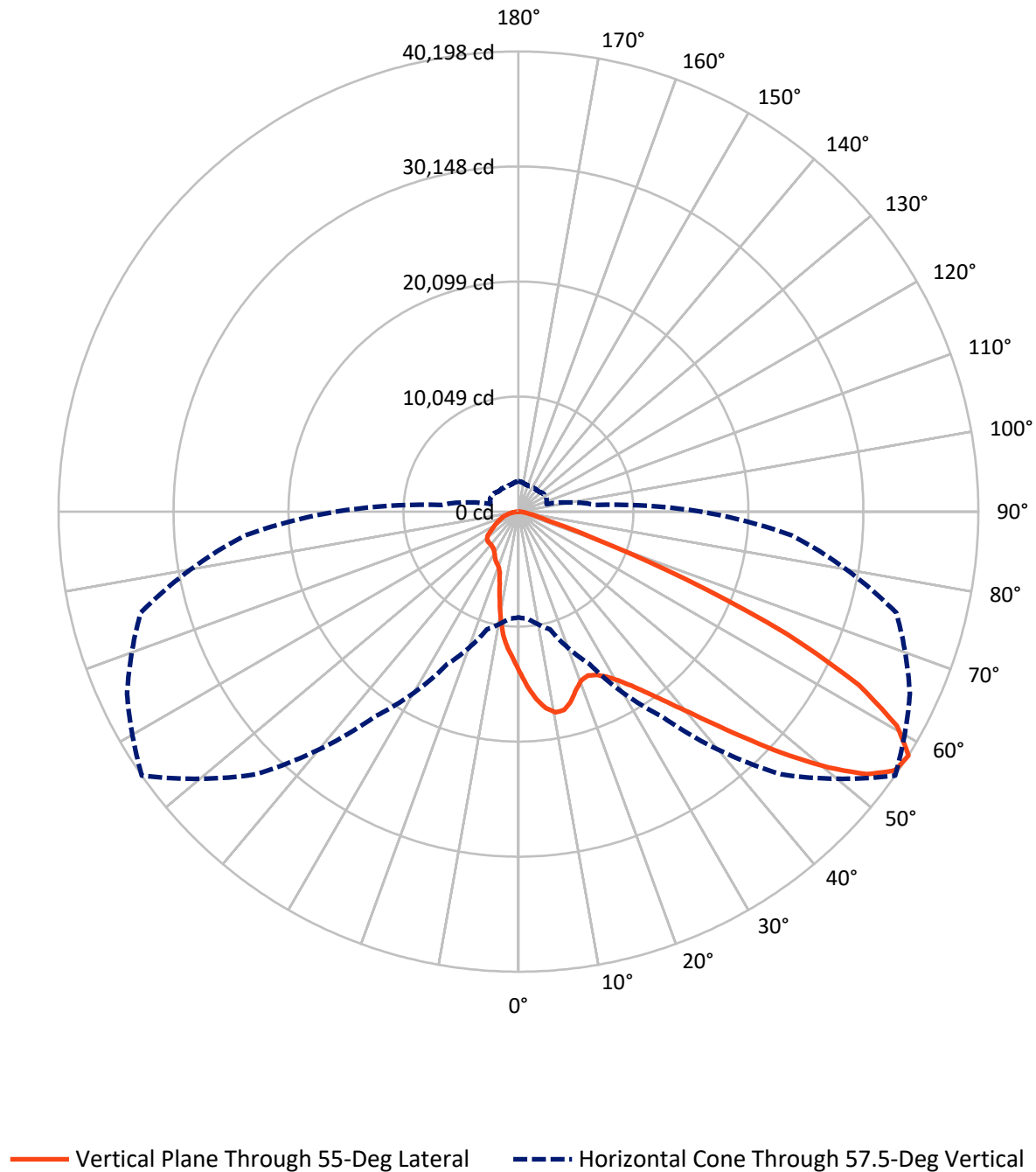


Based on 25 foot mounting height. Maximum calculated value = 27.1 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10121.6	0.0	10121.6
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	45815.7	0.0	45815.7
	% Fixture	81.9	0.0	81.9
Total	Lumens	55937.3	0.0	55937.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1300.6	2.3
10°-20°	3282.8	5.9
20°-30°	5238.4	9.4
30°-40°	8293.7	14.8
40°-50°	12694.3	22.7
50°-60°	13596.8	24.3
60°-70°	8553.8	15.3
70°-80°	2529.5	4.5
80°-90°	447.2	0.8
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°	55937.3	100.0
0°-180°	55937.3	100.0

Coefficient of Utilization



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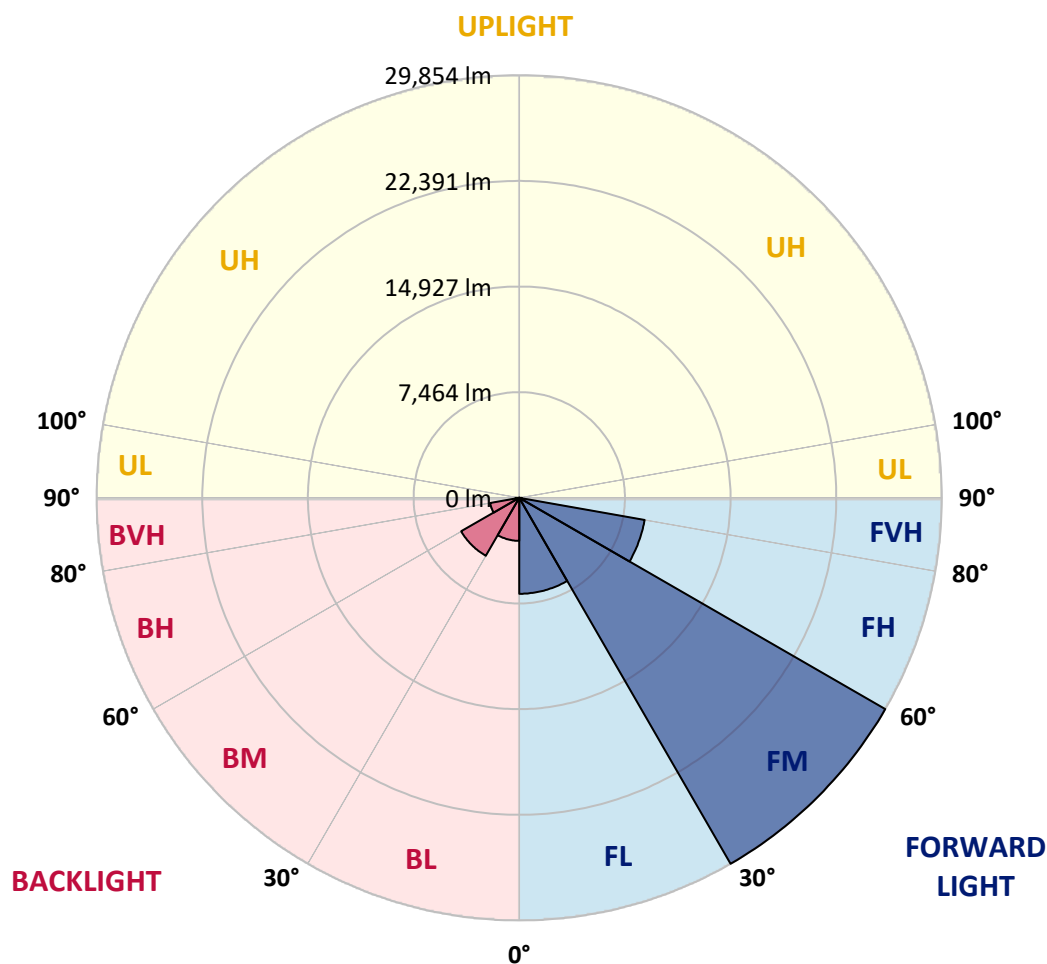
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	6779.6	12.1			
FM	(30°-60°)	29854.2	53.4			
FH	(60°-80°)	8993.0	16.1			G4/12000
FVH	(80°-90°)	189.0	0.3			G2/225
BL	(0°-30°)	3042.2	5.4	B4/5000		
BM	(30°-60°)	4730.7	8.5	B3/5000		
BH	(60°-80°)	2090.3	3.7	B3/2500		G3/2500
BVH	(80°-90°)	258.3	0.5			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	14016.1	14016.1	14016.1	14016.1	14016.1	14016.1	14016.1	14016.1	14016.1	14016.1	14016.1
2.5°	16080.7	16069.2	16132.8	15915.9	15768.5	15568.9	15305.8	14970.3	14608.9	14227.2	14062.4
5°	17529.4	17428.3	17494.8	17332.9	17170.9	16870.2	16479.8	15933.3	15265.3	14504.8	14099.9
7.5°	17301.1	17231.7	17402.2	17546.9	17668.3	17630.7	17344.4	16771.9	15910.2	14805.5	14218.5
10°	15459.0	15380.9	15621.0	16121.2	16855.7	17494.8	17841.8	17486.1	16569.4	15135.1	14334.2
12.5°	13833.9	13796.3	13955.4	14360.1	15175.6	16401.7	17778.2	18110.7	17254.7	15525.6	14490.3
15°	13139.9	13093.7	13194.8	13400.1	13920.6	15062.9	17199.8	18538.7	17928.6	15976.7	14739.0
17.5°	12986.6	12934.6	12977.9	13084.9	13420.4	14290.8	16326.5	18749.8	18631.2	16479.8	14947.2
20°	13270.1	13226.6	13232.4	13226.6	13460.9	14152.0	15719.3	18668.8	19244.3	16942.4	15149.6
22.5°	13955.4	13883.0	13886.0	13732.6	13859.9	14394.9	15560.2	18451.9	19790.8	17347.3	15302.8
25°	15071.6	14941.4	14967.5	14577.0	14542.4	14938.6	15808.9	18284.3	20334.5	17671.2	15331.8
27.5°	16598.3	16450.8	16372.8	15791.6	15514.0	15710.6	16315.0	18342.1	20849.2	17951.6	15259.5
30°	18506.9	18327.6	18168.5	17344.4	16841.3	16769.0	17101.5	18723.8	21456.4	18246.6	15135.1
32.5°	20846.2	20638.1	20348.9	19255.9	18547.4	18168.5	18119.4	19403.4	22167.8	18622.5	15071.6
35°	23631.0	23359.1	22948.5	21534.5	20638.1	19863.1	19461.2	20383.6	23142.2	19189.3	15143.9
37.5°	26499.5	26193.1	25817.1	24134.1	23032.4	21890.2	21097.9	21713.8	24440.6	19958.5	15334.7
40°	29145.5	28801.4	28451.4	26953.5	25770.9	24394.4	23101.8	23396.8	26028.2	20878.1	15658.5
42.5°	30707.0	30452.5	30319.5	29509.9	28596.1	27199.3	25594.5	25392.0	27812.4	21936.4	16028.7
45°	30637.6	30533.5	30944.1	31279.5	31062.6	30287.7	28515.1	27598.4	29602.3	22853.1	16370.0
47.5°	29000.8	29070.2	29987.0	31872.4	32702.2	33107.1	31840.5	29764.3	31158.1	23538.4	16523.2
50°	24547.6	24605.5	26728.0	30793.8	33124.4	35406.0	35140.0	31878.1	32364.0	23957.7	16488.5
52.5°	21022.6	21060.3	21971.2	27595.5	31730.6	36562.7	38112.7	33870.5	33245.9	24073.5	16294.7
55°	15834.9	15965.1	16985.9	21650.2	28104.5	35646.0	39922.8	35923.6	33804.0	24084.9	16092.3
57.5°	9250.5	9392.3	10653.0	14695.6	21843.9	32450.7	40197.5	37745.4	34182.8	23992.5	15970.8
60°	4531.3	4592.0	5141.4	7723.8	13469.5	26294.2	37988.2	38627.3	34393.9	23943.3	15965.1
62.5°	3053.7	3045.0	3068.1	3811.3	6636.5	16893.3	33384.7	37083.2	34281.1	23755.3	15907.3
65°	2625.6	2593.9	2507.1	2674.8	3438.3	7726.7	25794.0	32473.8	33422.3	23284.0	15511.1
67.5°	2270.0	2272.8	2275.8	2223.7	2455.1	3565.5	15762.7	25580.0	30339.7	21051.6	13984.3
70°	1879.6	1905.7	1917.2	1917.2	2001.1	2339.4	6729.0	17532.4	23931.7	16505.9	11263.2
72.5°	1711.9	1656.9	1662.8	1633.8	1633.8	1781.2	2709.5	9938.8	15077.3	9285.3	6873.5
75°	1396.7	1431.4	1437.2	1417.0	1350.4	1359.1	1607.8	4169.8	6451.3	3851.7	3397.8
77.5°	1205.8	1205.8	1217.4	1202.9	1150.9	1017.9	1072.9	1616.4	2194.8	1578.9	1697.4
80°	968.7	965.9	1015.0	1043.9	963.0	751.8	685.3	893.5	974.5	694.0	882.0
82.5°	471.4	500.3	696.9	795.2	731.6	543.7	419.3	555.2	520.5	306.5	396.2
85°	274.7	260.2	312.3	442.4	419.3	300.7	202.4	289.2	271.8	156.1	159.1
87.5°	86.7	81.0	63.7	150.4	121.5	83.8	54.9	83.8	75.2	34.7	34.7
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	14016.1	14016.1	14016.1	14016.1	14016.1	14016.1	14016.1	14016.1	14016.1	14016.1
2.5°	13857.1	13515.9	13177.5	12868.1	12680.1	12558.7	12437.2	12301.3	12249.3	12171.2
5°	13718.2	13058.9	12471.9	11965.8	11506.0	11144.6	10780.2	10485.3	10352.3	10442.0
7.5°	13637.2	12683.0	11777.9	10849.6	9956.1	9241.9	8620.1	8183.5	7986.9	8036.0
10°	13565.0	12257.9	10878.6	9412.5	8128.6	7243.7	6607.6	6274.9	6150.6	6176.6
12.5°	13498.4	11780.8	9794.2	7865.4	6500.5	5916.4	5734.3	5737.1	5760.3	5777.6
15°	13486.8	11205.3	8582.5	6512.1	5621.5	5583.9	5780.5	5904.8	5971.3	5991.6
17.5°	13469.5	10517.1	7347.8	5589.6	5407.5	5662.0	5844.1	5925.1	5977.2	5980.1
20°	13400.1	9643.8	6208.5	5150.1	5361.3	5581.0	5693.8	5757.4	5800.8	5815.2
22.5°	13186.1	8672.2	5320.8	4953.5	5176.1	5352.5	5485.6	5557.9	5583.9	5601.2
25°	12801.5	7584.9	4707.7	4765.5	4918.8	5141.4	5248.4	5262.9	5254.3	5280.3
27.5°	12298.4	6419.6	4326.0	4511.0	4707.7	4898.6	4956.4	4947.7	4930.4	4959.3
30°	11691.2	5372.7	4083.1	4224.7	4493.7	4667.2	4719.3	4699.0	4664.4	4696.1
32.5°	11049.2	4516.9	3883.5	4025.3	4317.3	4488.0	4539.9	4519.7	4493.7	4519.7
35°	10450.6	3918.3	3698.5	3892.2	4178.5	4346.2	4412.7	4415.6	4415.6	4447.5
37.5°	9901.2	3568.3	3545.3	3808.4	4083.1	4233.5	4328.9	4334.6	4210.3	4219.0
40°	9392.3	3420.8	3475.8	3753.4	3990.5	4135.2	4140.9	3817.0	3588.6	3582.8
42.5°	8975.8	3391.9	3496.1	3747.6	3924.0	3929.8	3522.1	3270.5	3206.9	3209.8
45°	8585.5	3383.3	3542.3	3747.6	3825.7	3394.9	3120.1	3053.7	3059.4	3082.6
47.5°	8148.9	3348.6	3551.0	3695.6	3542.3	3018.9	2938.0	2909.1	2897.5	2903.3
50°	7671.7	3224.2	3441.1	3591.5	3056.5	2857.0	2755.8	2747.1	2761.6	2770.3
52.5°	7168.5	3021.8	3253.1	3403.5	2833.8	2715.3	2602.6	2622.8	2686.4	2706.6
55°	6838.9	2784.7	3004.5	3027.6	2677.7	2582.3	2486.9	2533.1	2651.7	2689.3
57.5°	6752.1	2533.1	2721.1	2695.0	2478.1	2466.7	2408.8	2449.2	2599.6	2654.5
60°	6726.0	2307.6	2443.5	2423.2	2284.4	2339.4	2324.9	2345.2	2397.3	2414.6
62.5°	6523.7	2128.3	2194.8	2165.9	2111.0	2206.4	2241.1	2197.7	2238.2	2258.4
65°	6009.0	1983.7	1951.9	1931.6	1954.8	2041.5	2111.0	2024.2	2061.8	2119.6
67.5°	5158.8	1787.1	1700.3	1723.4	1795.7	1842.0	1931.6	1833.3	1865.2	1963.5
70°	4172.8	1538.4	1460.3	1526.8	1596.2	1691.7	1706.1	1639.6	1714.8	1824.7
72.5°	2952.4	1286.8	1231.8	1367.8	1390.9	1515.3	1483.5	1451.6	1555.7	1593.4
75°	2047.3	1038.1	1006.3	1110.4	1194.2	1301.2	1278.2	1315.7	1535.4	1552.9
77.5°	1295.5	806.8	786.6	853.0	968.7	1087.3	1124.8	1552.9	2622.8	2726.9
80°	751.8	601.5	578.3	630.4	731.6	841.5	1084.3	1905.7	1729.3	1709.0
82.5°	419.3	413.5	384.6	399.0	488.7	607.2	1532.6	1341.7	1090.2	1124.8
85°	196.6	242.9	208.2	199.6	274.7	711.3	1023.7	766.3	508.9	497.3
87.5°	52.1	46.2	46.2	52.1	115.6	613.1	407.7	326.8	193.7	188.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)