

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: P969351

Luminaire Tested: **NAV-SB5D-740-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969351
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-740-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42205.4 lumens
Efficiency: N/A
Efficacy: 115.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

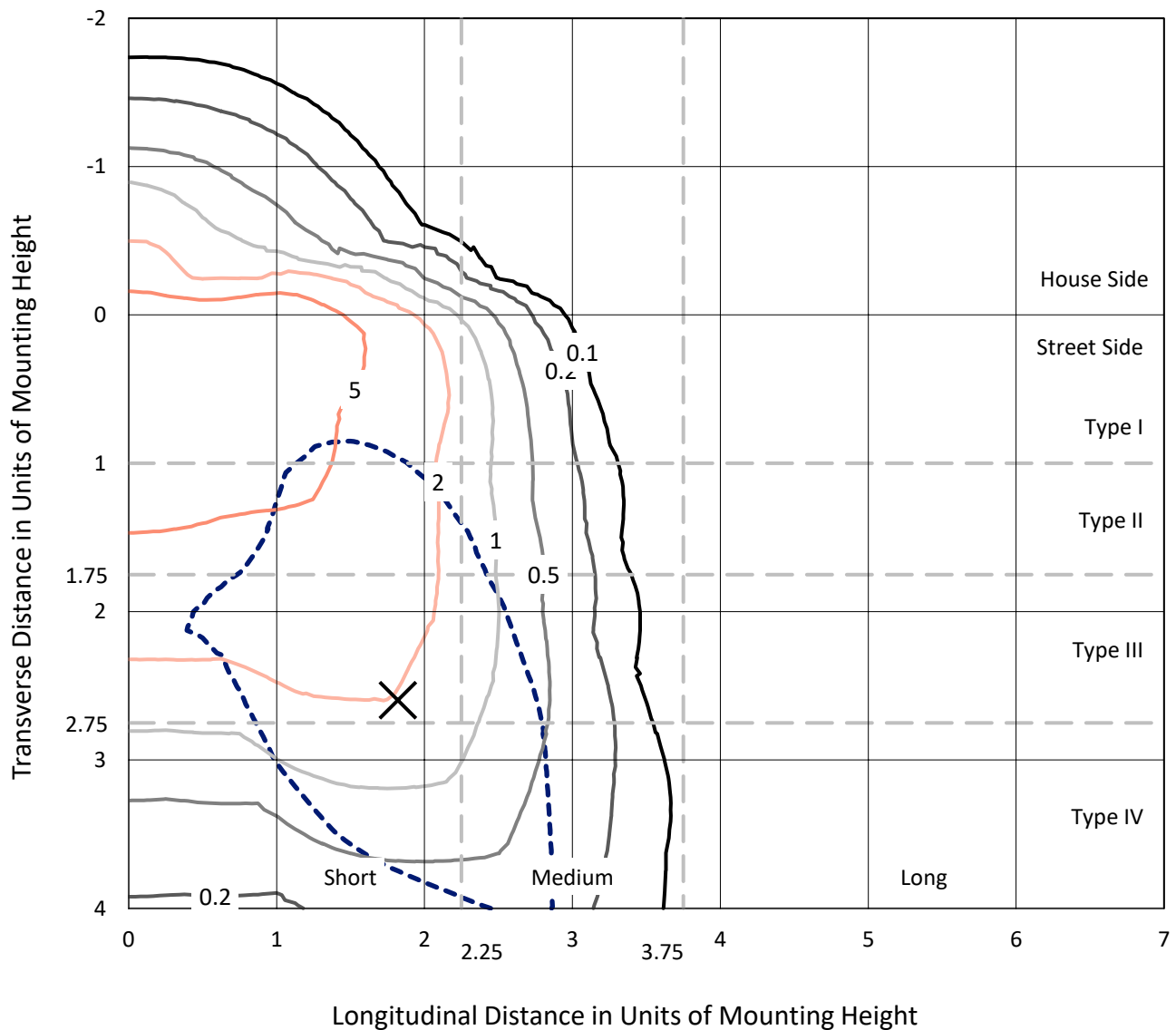
Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

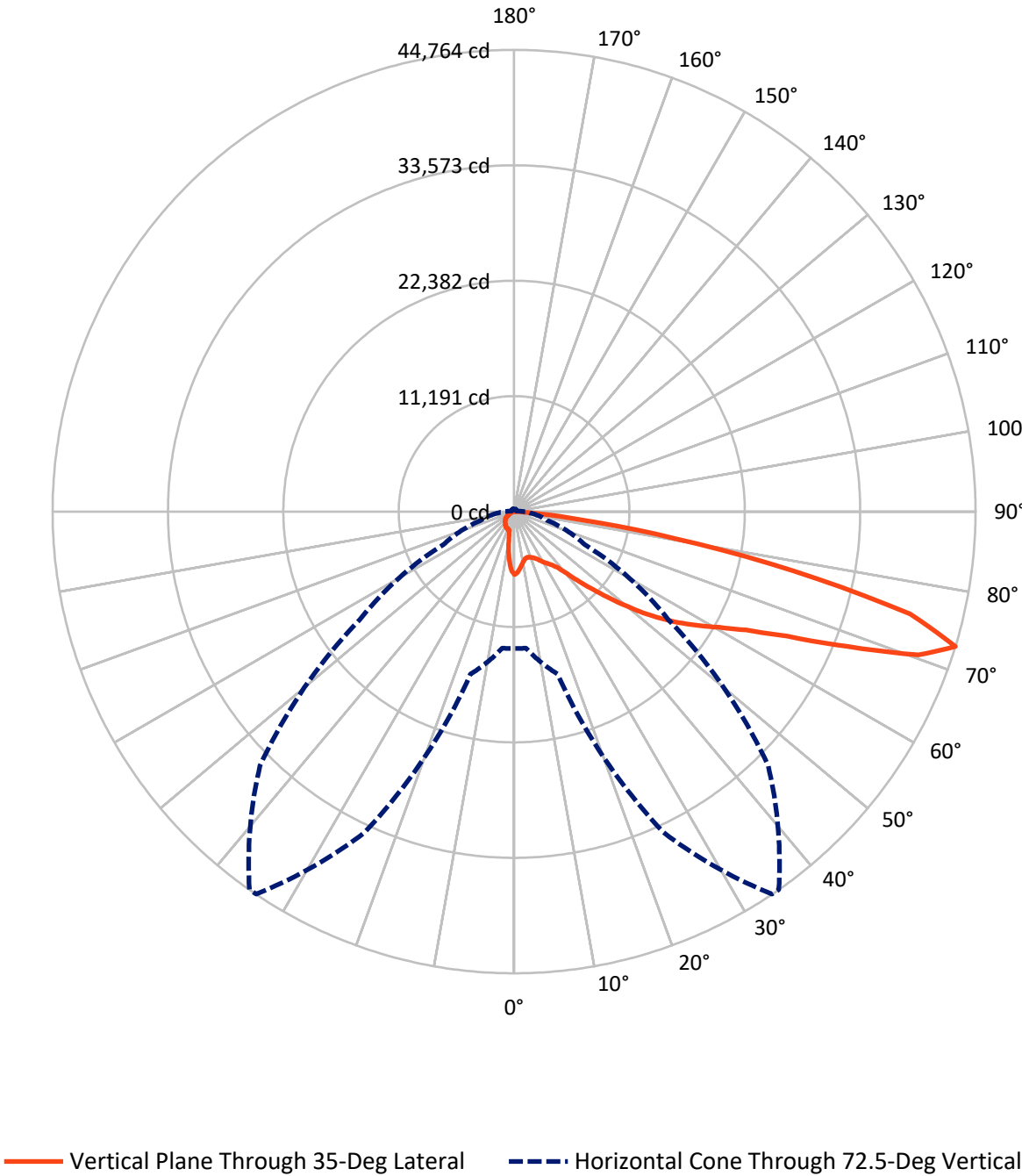
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.8 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4750.0	0.0	4750.0
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	37455.4	0.0	37455.4
	% Fixture	88.7	0.0	88.7
Total	Lumens	42205.4	0.0	42205.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	502.7	1.2
10°-20°	1175.9	2.8
20°-30°	1910.2	4.5
30°-40°	3187.2	7.6
40°-50°	6030.2	14.3
50°-60°	9582.0	22.7
60°-70°	11853.6	28.1
70°-80°	7368.2	17.5
80°-90°	595.5	1.4
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°	42205.4	100.0
0°-180°	42205.4	100.0

Coefficient of Utilization



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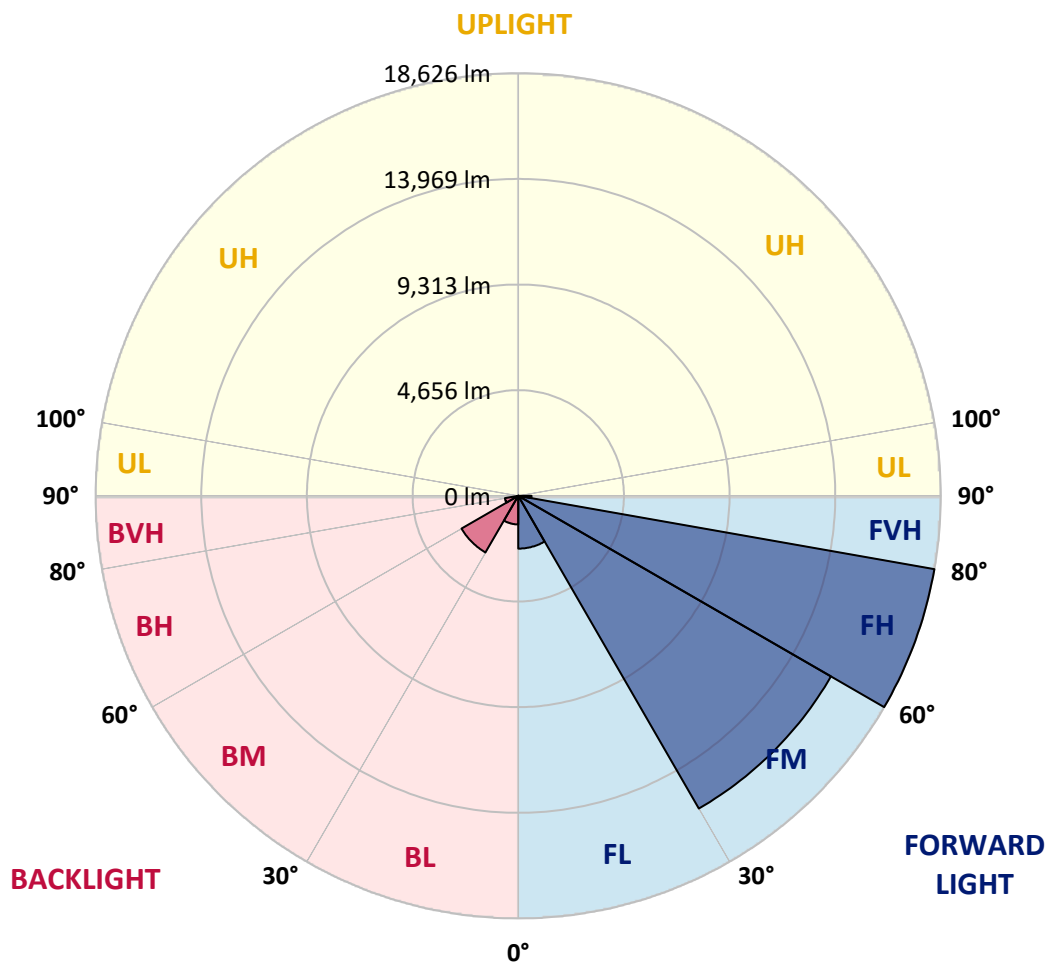
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2326.6	5.5			
FM	(30°-60°)	15915.7	37.7			
FH	(60°-80°)	18625.8	44.1			G5
FVH	(80°-90°)	587.4	1.4			G4/750
BL	(0°-30°)	1262.2	3.0	B3/2500		
BM	(30°-60°)	2883.7	6.8	B3/5000		
BH	(60°-80°)	596.1	1.4	B2/1000		G2/1000
BVH	(80°-90°)	8.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	6117.0	6117.0	6117.0	6117.0	6117.0	6117.0	6117.0	6117.0	6117.0	6117.0	6117.0
2.5°	5844.9	5894.4	5903.6	5919.1	5919.1	5937.6	5968.6	6011.8	6083.0	6120.1	6144.8
5°	5387.2	5424.3	5470.6	5507.7	5578.9	5588.2	5708.7	5826.3	5990.2	6113.9	6200.4
7.5°	4926.4	4969.6	5031.5	5121.2	5214.0	5241.7	5424.3	5622.2	5882.0	6113.9	6259.3
10°	4601.6	4604.7	4660.4	4750.1	4898.6	4932.5	5155.2	5436.6	5761.3	6076.8	6314.9
12.5°	4419.2	4440.8	4465.6	4533.6	4675.8	4697.5	4935.7	5266.6	5640.8	6055.1	6379.8
15°	4419.2	4434.7	4450.1	4484.2	4598.6	4617.1	4827.4	5158.3	5578.9	6064.4	6485.0
17.5°	4465.6	4490.3	4477.9	4518.2	4638.7	4651.1	4836.7	5127.4	5575.8	6123.1	6645.8
20°	4576.9	4595.5	4570.7	4595.5	4716.0	4740.8	4932.5	5186.1	5628.4	6225.2	6846.8
22.5°	4753.2	4762.5	4703.7	4722.3	4846.0	4876.8	5099.6	5353.2	5755.2	6389.1	7115.9
25°	4975.9	4994.4	4904.7	4926.4	5043.9	5081.0	5337.7	5603.6	5956.2	6614.8	7459.1
27.5°	5232.5	5241.7	5164.5	5161.4	5312.9	5365.5	5625.3	5912.9	6225.2	6899.4	7892.1
30°	5526.3	5554.2	5480.0	5467.6	5659.3	5702.6	5959.2	6293.3	6621.1	7326.2	8507.5
32.5°	5758.2	5779.9	5736.6	5767.6	5962.3	5996.4	6364.3	6831.3	7242.6	7932.3	9345.5
35°	6092.2	6104.6	6005.7	6061.3	6284.0	6370.6	6917.9	7585.9	8025.0	8693.0	10440.3
37.5°	7301.4	7301.4	6880.8	6605.6	6819.0	6896.3	7675.6	8535.3	8989.9	9713.5	11819.6
40°	8974.5	8946.6	8331.2	7768.4	7740.5	7892.1	8754.9	9732.1	10236.2	10938.2	13372.0
42.5°	10758.8	10715.6	9877.5	9320.8	9228.1	9280.7	10001.1	11207.2	11720.6	12431.9	15042.0
45°	12342.2	12329.8	11562.9	10814.5	10647.5	10814.5	11556.7	12932.8	13300.9	14049.3	16708.8
47.5°	13668.9	13668.9	13109.1	12620.5	12533.9	12632.9	13662.7	14847.1	14813.1	15771.8	18332.3
50°	15196.5	15184.2	14652.3	14442.0	14531.7	14670.8	16087.2	16863.4	16378.0	17463.3	19782.8
52.5°	16266.5	16340.8	16158.3	16124.4	16582.0	16823.2	18548.8	18836.4	17778.8	19068.4	20868.3
55°	17113.9	17200.5	17410.9	17649.0	18530.3	18845.8	20933.2	20707.5	18950.9	20460.0	21492.9
57.5°	18313.8	18190.2	18514.9	18984.9	20410.5	20790.9	23243.3	22473.2	19894.1	21588.8	21561.0
60°	19770.4	19789.0	19844.6	20438.4	22287.7	22776.3	25519.3	24143.2	20500.2	22281.6	20806.4
62.5°	21520.8	21548.6	21663.0	22575.3	24808.1	25268.9	27943.9	25510.1	20778.6	22086.7	18858.1
65°	21400.2	21517.6	22794.9	25915.2	28639.7	29094.3	30773.6	26468.8	20357.9	20305.4	15354.3
67.5°	19495.2	19686.9	21823.8	29904.6	34416.5	34923.7	34193.8	26657.4	18542.7	15790.3	10016.6
70°	16996.4	17064.4	19634.3	33491.9	41105.6	41619.0	37255.5	24582.4	14070.9	8807.4	4487.2
72.5°	13273.0	13288.5	16303.6	34323.8	44736.2	44764.0	34852.6	18248.9	7567.4	3383.2	1558.6
75°	9481.7	9388.9	10919.6	27835.6	39358.4	39673.8	26128.6	8560.1	2891.5	1598.8	776.2
77.5°	5084.1	5186.1	6178.8	16507.8	27189.4	27727.4	14256.4	2467.8	1472.0	1088.6	513.3
80°	1571.0	1657.6	2532.8	7558.0	15400.7	15725.3	5285.1	1097.9	1026.7	776.2	337.1
82.5°	494.8	513.3	1181.3	3176.0	6392.2	6540.6	1530.8	621.6	702.0	513.3	197.9
85°	142.3	145.3	525.7	1184.4	1580.2	1611.2	429.9	241.2	402.0	318.6	102.1
87.5°	15.5	49.5	197.9	197.9	139.2	136.1	46.4	52.6	114.4	40.2	18.6
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°	6117.0	6117.0	6117.0	6117.0	6117.0	6117.0	6117.0	6117.0	6117.0	6117.0	6117.0
2.5°	6129.4	6132.5	6092.2	6024.2	5950.0	5888.1	5810.8	5749.0	5705.7	5693.3	5715.0
5°	6172.7	6151.0	6036.5	5829.4	5581.9	5368.5	5130.4	4941.8	4818.1	4765.5	4784.1
7.5°	6237.5	6175.7	5925.2	5517.1	5043.9	4623.3	4196.6	3865.6	3655.4	3550.2	3565.7
10°	6293.3	6169.6	5739.7	5065.5	4341.9	3704.9	3129.6	2730.7	2508.1	2402.9	2406.0
12.5°	6345.8	6166.5	5498.5	4530.5	3550.2	2770.9	2235.8	2038.0	1976.1	1954.5	1948.3
15°	6444.8	6175.7	5195.4	3918.2	2761.7	2093.7	1898.8	1895.7	1908.0	1901.9	1898.8
17.5°	6580.8	6185.1	4852.1	3268.8	2130.8	1846.2	1836.9	1864.8	1883.3	1874.1	1870.9
20°	6757.1	6222.2	4487.2	2625.5	1830.8	1784.4	1806.0	1830.8	1846.2	1830.8	1827.7
22.5°	7004.5	6287.0	4088.3	2109.0	1734.9	1747.2	1765.9	1793.6	1809.1	1787.5	1784.4
25°	7307.6	6389.1	3695.5	1833.8	1688.5	1704.0	1731.8	1762.7	1781.2	1759.6	1756.5
27.5°	7700.3	6553.0	3333.7	1772.0	1642.2	1651.4	1691.6	1738.0	1762.7	1734.9	1734.9
30°	8269.4	6822.1	3021.4	1799.8	1614.3	1592.6	1648.3	1713.3	1741.1	1716.4	1713.3
32.5°	9023.9	7202.5	2829.6	1843.2	1601.9	1524.6	1577.2	1660.7	1707.0	1691.6	1691.6
35°	10013.5	7780.8	2755.4	1892.7	1592.6	1453.4	1490.6	1580.2	1660.7	1676.2	1676.2
37.5°	11213.4	8584.8	2777.0	1914.3	1564.8	1394.7	1413.3	1490.6	1595.7	1645.2	1657.6
40°	12577.3	9521.8	2900.7	1892.7	1533.9	1345.2	1348.3	1407.1	1499.9	1574.1	1598.8
42.5°	13984.3	10616.5	3129.6	1812.2	1506.0	1302.0	1292.6	1332.9	1394.7	1447.3	1468.9
45°	15323.3	11742.3	3355.3	1700.9	1472.0	1258.7	1237.0	1252.4	1264.8	1286.5	1298.9
47.5°	16492.4	12533.9	3290.5	1598.8	1425.7	1209.2	1172.1	1165.8	1128.7	1125.7	1122.6
50°	17299.4	12707.1	2922.4	1496.8	1357.6	1153.5	1094.7	1057.6	992.7	961.8	964.8
52.5°	17556.2	12023.7	2387.4	1394.7	1246.3	1079.3	995.8	937.1	856.6	828.8	825.7
55°	17216.0	10684.6	1908.0	1271.0	1091.6	980.3	887.5	810.3	745.3	711.2	711.2
57.5°	16384.1	8980.6	1509.1	1125.7	927.7	869.0	776.2	698.9	643.3	609.3	603.0
60°	15004.9	7131.3	1193.7	952.5	791.7	748.4	652.5	603.0	553.6	513.3	504.1
62.5°	12911.2	5090.3	937.1	754.6	661.8	612.3	556.7	519.6	460.7	405.1	395.9
65°	10075.3	3114.2	723.6	553.6	531.9	507.2	473.1	439.1	368.0	312.3	303.1
67.5°	6355.1	1475.1	516.5	417.5	420.6	408.3	392.8	364.9	312.3	262.9	256.7
70°	2798.8	714.3	340.2	318.6	312.3	312.3	324.7	315.4	266.0	219.6	210.3
72.5°	952.5	383.5	253.6	241.2	225.7	222.6	272.1	262.9	213.4	170.0	160.8
75°	497.8	256.7	185.5	173.2	136.1	163.9	216.5	204.1	151.5	111.3	102.1
77.5°	324.7	182.4	126.8	111.3	77.3	108.2	160.8	142.3	89.7	55.7	49.5
80°	204.1	120.6	74.2	52.6	37.1	58.7	86.6	61.8	34.0	12.4	9.3
82.5°	108.2	61.8	27.9	18.6	15.5	18.6	21.6	15.5	6.1	0.0	0.0
85°	43.3	21.6	9.3	6.1	3.1	0.0	6.1	3.1	0.0	0.0	0.0
87.5°	15.5	3.1	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)