

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: P962976

Luminaire Tested: **NAV-SB2D-735-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962976
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2D-735-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

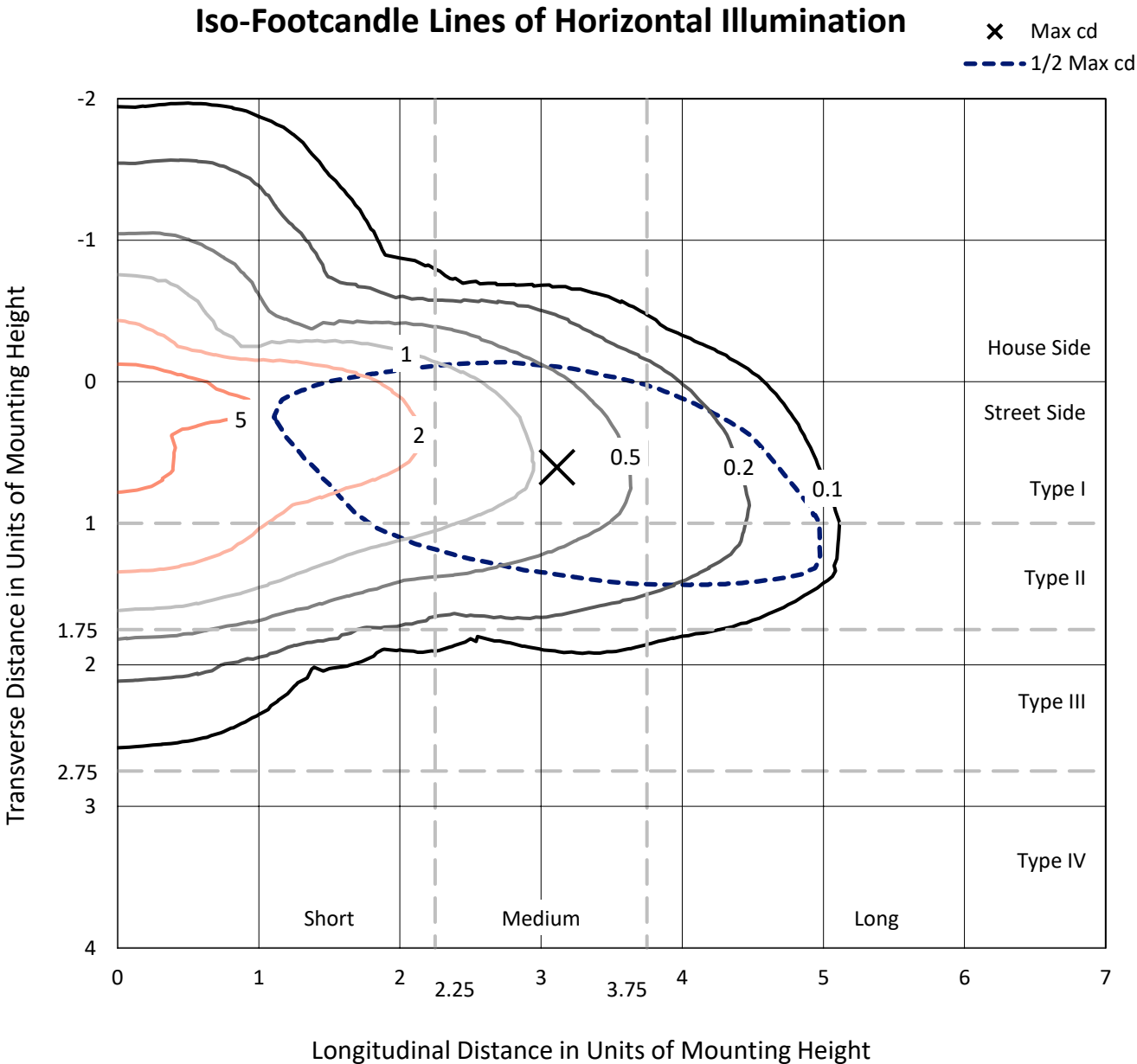
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20732.7 lumens
Efficiency: N/A
Efficacy: 140.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 147.6
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



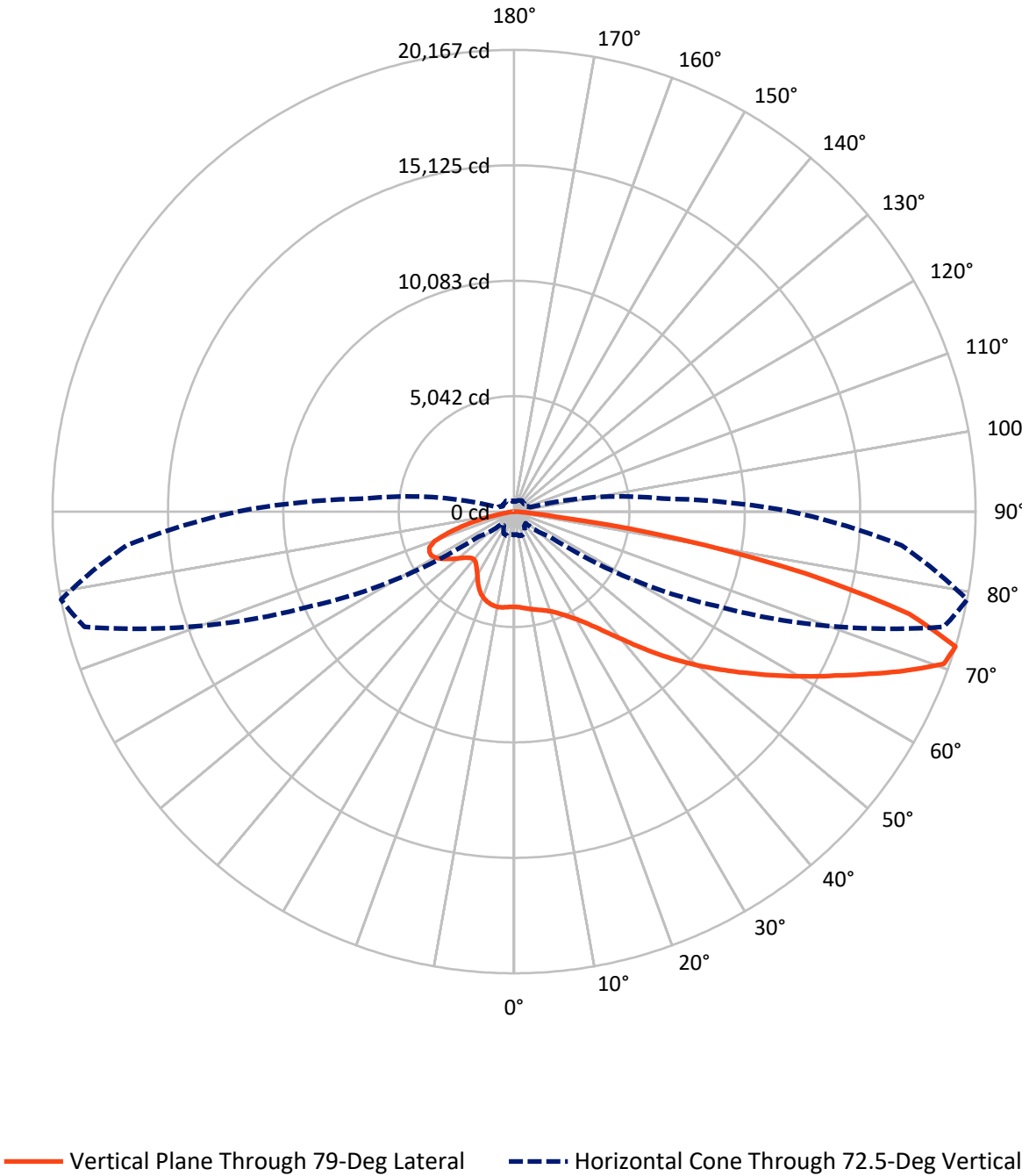
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Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4562.3	0.0	4562.3
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	16170.3	0.0	16170.3
	% Fixture	78.0	0.0	78.0
Total	Lumens	20732.7	0.0	20732.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	377.8	1.8
10°-20°	987.7	4.8
20°-30°	1593.7	7.7
30°-40°	2392.0	11.5
40°-50°	3393.2	16.4
50°-60°	4285.1	20.7
60°-70°	4352.1	21.0
70°-80°	2966.2	14.3
80°-90°	384.8	1.9
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°	20732.7	100.0
0°-180°	20732.7	100.0

Coefficient of Utilization



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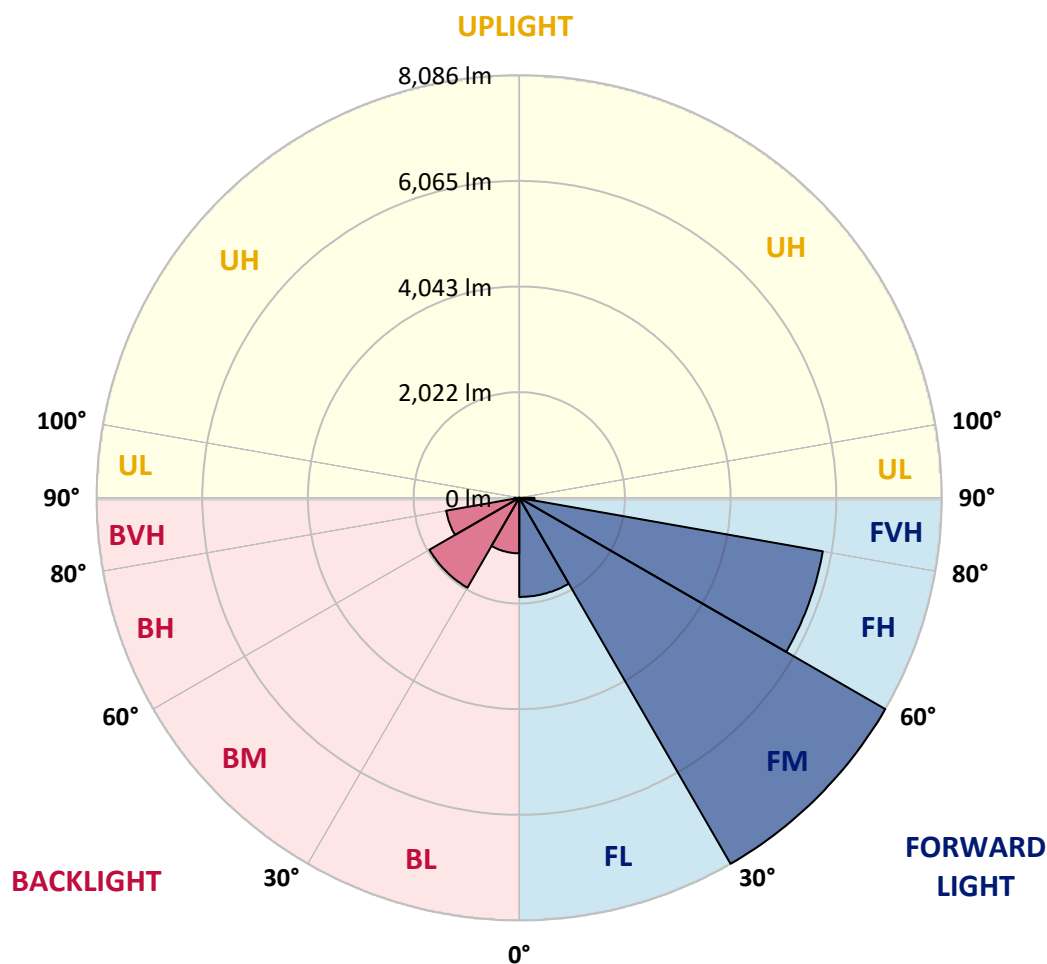
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1896.5	9.1			
FM	(30°-60°)	8086.2	39.0			
FH	(60°-80°)	5897.7	28.4			G3/7500
FVH	(80°-90°)	289.9	1.4			G3/500
BL	(0°-30°)	1062.7	5.1	B3/2500		
BM	(30°-60°)	1984.1	9.6	B2/2500		
BH	(60°-80°)	1420.6	6.9	B3/2500		G3/2500
BVH	(80°-90°)	94.9	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	4161.9	4161.9	4161.9	4161.9	4161.9	4161.9	4161.9	4161.9	4161.9	4161.9	4161.9
2.5°	4164.1	4144.4	4156.4	4152.0	4157.5	4164.1	4166.3	4169.6	4180.6	4179.4	4178.3
5°	4155.3	4135.6	4152.0	4146.5	4160.8	4176.2	4189.3	4201.4	4218.9	4226.6	4215.6
7.5°	4136.7	4123.5	4140.0	4156.4	4182.7	4205.8	4224.4	4251.8	4277.0	4281.4	4289.1
10°	4028.0	4018.2	4056.6	4099.4	4171.8	4234.3	4274.9	4306.6	4334.1	4338.4	4349.4
12.5°	3915.1	3903.1	3945.8	4004.0	4121.3	4234.3	4319.8	4361.5	4385.6	4399.9	4416.3
15°	3896.5	3886.6	3910.8	3961.2	4058.8	4204.7	4350.5	4427.3	4448.1	4464.6	4471.2
17.5°	3986.4	3967.8	3977.6	3995.1	4052.2	4177.3	4374.6	4501.9	4533.7	4551.2	4551.2
20°	4194.8	4168.5	4153.1	4118.0	4108.2	4181.6	4372.4	4591.8	4633.4	4655.3	4660.9
22.5°	4472.3	4454.6	4421.8	4333.0	4236.4	4235.4	4414.2	4706.9	4784.8	4805.6	4792.5
25°	4807.9	4781.5	4739.8	4619.2	4433.8	4341.7	4484.3	4853.9	4984.4	4989.9	4951.5
27.5°	5193.9	5154.4	5097.3	4938.3	4688.2	4508.5	4591.8	5022.8	5213.6	5211.4	5132.5
30°	5600.7	5561.2	5501.0	5308.0	4993.2	4733.2	4740.9	5204.8	5485.6	5473.5	5338.6
32.5°	5898.0	5868.3	5856.2	5707.1	5344.1	4998.6	4912.0	5406.6	5821.2	5810.2	5621.6
35°	6126.0	6087.7	6101.9	6026.3	5726.9	5295.9	5121.5	5646.8	6229.1	6228.0	5993.4
37.5°	6351.9	6318.0	6330.0	6279.6	6081.1	5673.1	5377.0	5940.7	6734.7	6758.8	6442.9
40°	6558.2	6522.0	6570.1	6523.0	6356.3	6074.5	5667.6	6273.0	7320.3	7366.4	6986.9
42.5°	6682.1	6653.6	6733.6	6734.7	6595.4	6413.3	5986.7	6639.2	7998.1	8101.2	7655.9
45°	6724.8	6715.0	6835.6	6860.8	6807.0	6609.7	6274.1	7038.5	8728.5	8912.7	8418.1
47.5°	6678.8	6660.1	6826.8	6920.0	6962.8	6701.8	6512.0	7470.6	9474.2	9744.0	9249.4
50°	6446.2	6410.0	6657.9	6854.3	7006.7	6762.1	6752.2	7969.6	10322.0	10616.9	10085.1
52.5°	6028.4	6001.0	6282.8	6624.0	6910.1	6791.8	7022.1	8514.6	11126.9	11508.5	10941.6
55°	5494.3	5458.1	5768.5	6213.8	6670.0	6781.8	7291.8	9124.3	12076.7	12463.7	11826.6
57.5°	4647.8	4575.3	4968.0	5494.3	6278.4	6769.8	7572.6	9730.8	13041.7	13505.6	12770.8
60°	3412.8	3305.4	3786.9	4410.9	5513.0	6652.5	7920.2	10410.7	14199.7	14617.6	13801.6
62.5°	1987.2	1924.6	2239.4	2821.7	4155.3	5961.5	8115.4	11201.4	15338.1	15776.8	14815.0
65°	1543.0	1525.5	1552.9	1597.9	2312.9	4463.5	7513.4	11972.4	16785.7	17092.8	15871.1
67.5°	1411.4	1398.3	1410.3	1325.8	1173.4	2486.1	5944.0	12167.7	18336.4	18522.9	16795.6
70°	1254.6	1239.2	1278.7	1206.3	923.4	1130.7	3840.6	11459.2	19570.2	19920.1	17498.6
72.5°	1022.1	1004.6	1096.6	1063.7	777.6	726.0	1929.0	9775.7	19440.8	20166.8	16995.2
75°	785.3	775.3	885.0	912.5	633.9	571.3	925.6	7266.5	17108.2	17839.6	14647.2
77.5°	609.8	602.1	658.0	757.8	511.1	443.1	569.2	4609.3	12892.6	13020.9	10093.8
80°	457.4	435.4	486.9	586.7	398.1	323.5	386.0	2688.0	8149.4	7387.2	4393.3
82.5°	286.3	275.3	318.1	391.5	280.7	222.6	251.1	1484.9	3265.9	1923.6	847.8
85°	163.4	159.0	173.2	223.8	152.4	128.3	143.7	655.8	596.6	410.2	255.5
87.5°	65.8	63.7	78.9	99.8	56.0	47.2	50.4	158.0	131.6	121.8	84.5
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°	4161.9	4161.9	4161.9	4161.9	4161.9	4161.9	4161.9	4161.9	4161.9	4161.9	4161.9
2.5°	4173.9	4173.9	4158.6	4134.4	4107.1	4089.5	4060.9	4053.4	4023.7	4014.9	4029.2
5°	4224.4	4215.6	4168.5	4100.5	4007.2	3921.8	3827.3	3768.2	3684.9	3655.3	3677.2
7.5°	4288.0	4263.9	4182.7	4033.6	3838.3	3646.4	3446.9	3295.5	3150.7	3099.2	3105.7
10°	4346.1	4312.2	4173.9	3912.9	3575.2	3242.9	2924.8	2702.2	2533.3	2464.2	2479.6
12.5°	4404.2	4341.7	4115.8	3712.2	3201.2	2750.5	2411.6	2238.3	2134.2	2050.8	2078.2
15°	4459.1	4371.3	4025.9	3443.6	2791.1	2333.7	2083.7	1945.6	1862.1	1807.3	1817.2
17.5°	4522.7	4396.5	3891.0	3102.5	2400.7	2045.3	1841.3	1758.0	1741.5	1734.9	1739.3
20°	4611.5	4419.6	3713.4	2720.9	2113.3	1815.0	1709.7	1702.0	1701.0	1697.6	1708.6
22.5°	4706.9	4447.1	3478.6	2374.3	1868.8	1671.4	1652.7	1637.3	1627.5	1626.4	1638.5
25°	4819.9	4455.8	3184.8	2090.3	1660.4	1603.3	1581.4	1558.4	1551.7	1551.7	1558.4
27.5°	4929.5	4426.2	2842.6	1843.5	1543.0	1540.8	1512.3	1504.6	1503.6	1506.9	1515.6
30°	5039.2	4370.3	2502.6	1615.4	1475.1	1475.1	1465.1	1470.7	1475.1	1486.0	1493.6
32.5°	5187.3	4311.0	2218.6	1446.5	1415.8	1404.9	1414.7	1425.7	1430.1	1444.3	1456.4
35°	5404.4	4269.3	1992.7	1354.4	1354.4	1340.2	1345.6	1343.5	1333.5	1327.0	1342.3
37.5°	5691.7	4267.2	1806.3	1311.6	1302.9	1300.6	1301.8	1287.5	1249.1	1203.0	1204.2
40°	6037.2	4326.4	1662.6	1282.0	1275.4	1288.6	1282.0	1243.6	1138.4	1058.3	1056.1
42.5°	6501.1	4495.2	1570.4	1245.8	1265.6	1282.0	1255.7	1123.0	1051.8	997.9	995.8
45°	7047.3	4769.4	1523.3	1207.4	1246.9	1266.7	1139.5	1081.3	1024.3	959.6	955.2
47.5°	7665.8	5114.9	1512.3	1171.3	1205.3	1217.3	1090.1	1063.7	999.1	928.9	923.4
50°	8339.1	5523.9	1541.9	1128.5	1144.9	1103.2	1073.7	1049.5	982.7	913.6	905.9
52.5°	9035.5	5974.7	1601.2	1070.4	1084.7	1038.5	1067.0	1046.2	972.7	879.6	873.0
55°	9719.9	6428.7	1658.1	1002.3	1023.2	980.4	1048.5	1033.1	927.8	822.5	817.0
57.5°	10415.1	6880.5	1714.1	942.1	964.0	924.4	1018.8	997.9	877.3	769.9	767.6
60°	11137.9	7319.2	1740.4	884.0	899.2	873.0	973.9	937.7	820.3	716.2	712.9
62.5°	11814.5	7684.4	1697.6	825.8	835.7	824.7	914.6	866.3	763.3	655.8	654.7
65°	12493.3	7901.5	1566.1	768.7	771.0	765.5	831.3	789.6	696.4	603.2	596.6
67.5°	13108.6	8023.3	1356.6	707.4	701.9	699.7	753.4	706.2	631.7	550.5	544.0
70°	13239.1	7714.0	1036.4	635.0	635.0	629.5	667.9	619.6	560.4	494.6	492.4
72.5°	12091.9	6489.1	735.8	552.7	561.5	550.5	582.3	541.7	488.0	444.1	431.0
75°	9750.5	4758.5	535.2	468.3	483.6	464.9	494.6	466.1	420.0	418.9	377.3
77.5°	6699.6	2942.4	388.3	386.0	397.0	372.9	406.8	391.5	349.8	331.2	310.4
80°	2859.0	1173.4	282.9	298.3	298.3	276.3	315.8	320.2	284.0	275.3	275.3
82.5°	569.2	333.4	198.5	205.1	193.0	186.4	223.8	247.8	342.1	380.6	381.6
85°	171.1	122.8	119.5	111.8	98.7	99.8	131.6	249.0	307.1	175.5	151.4
87.5°	47.2	30.7	31.8	25.2	20.8	27.4	45.0	188.6	103.1	43.9	37.3
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)