

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: P969229

Luminaire Tested: **NAV-SB5D-722-U-T4W-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P969229  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5D-722-U-T4W-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

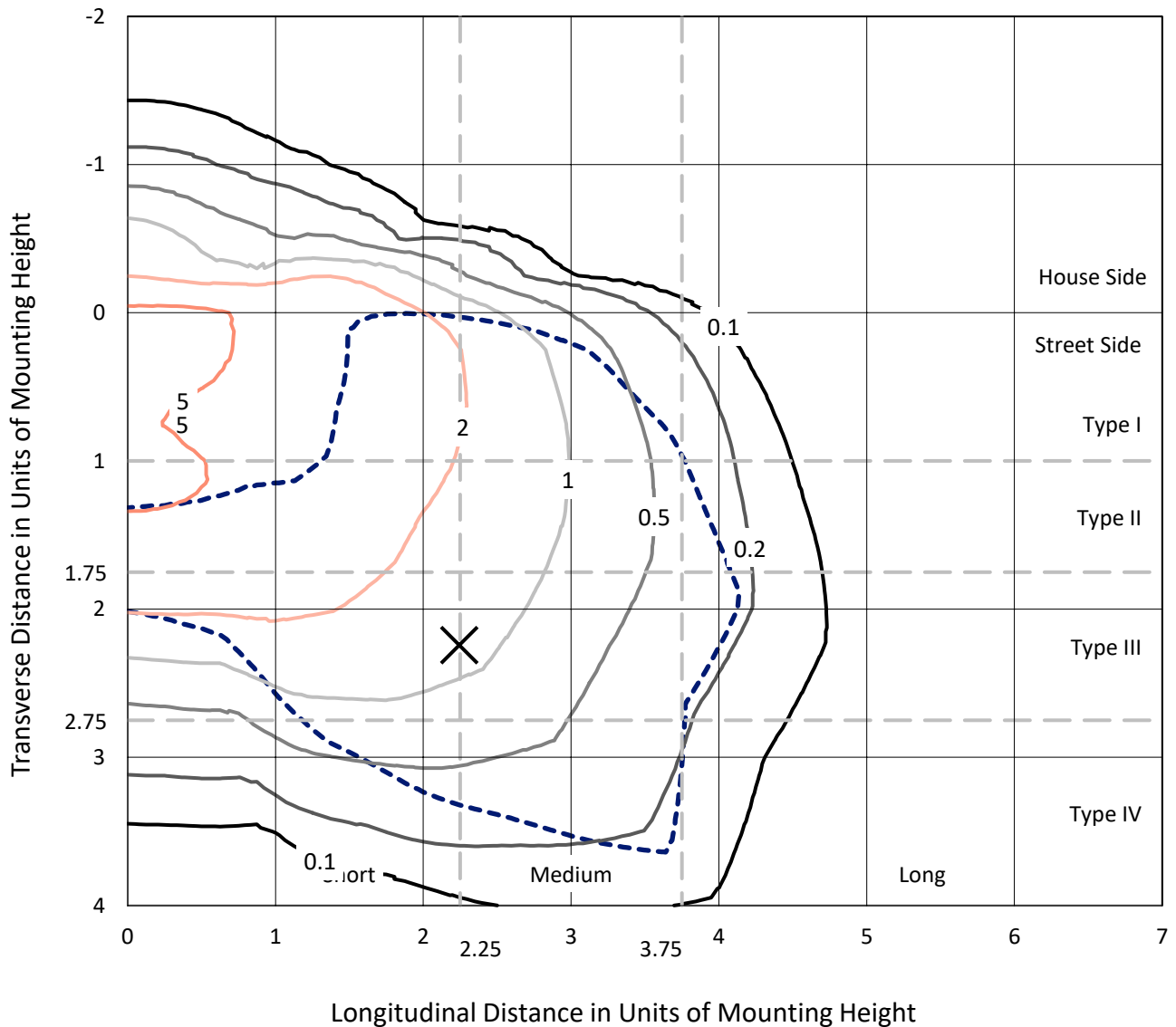
Lumens per Lamp: N/A  
Luminaire Lumens: 33526.7 lumens  
Efficiency: N/A  
Efficacy: 91.9 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G5  
  
Input Watts (W): 364.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

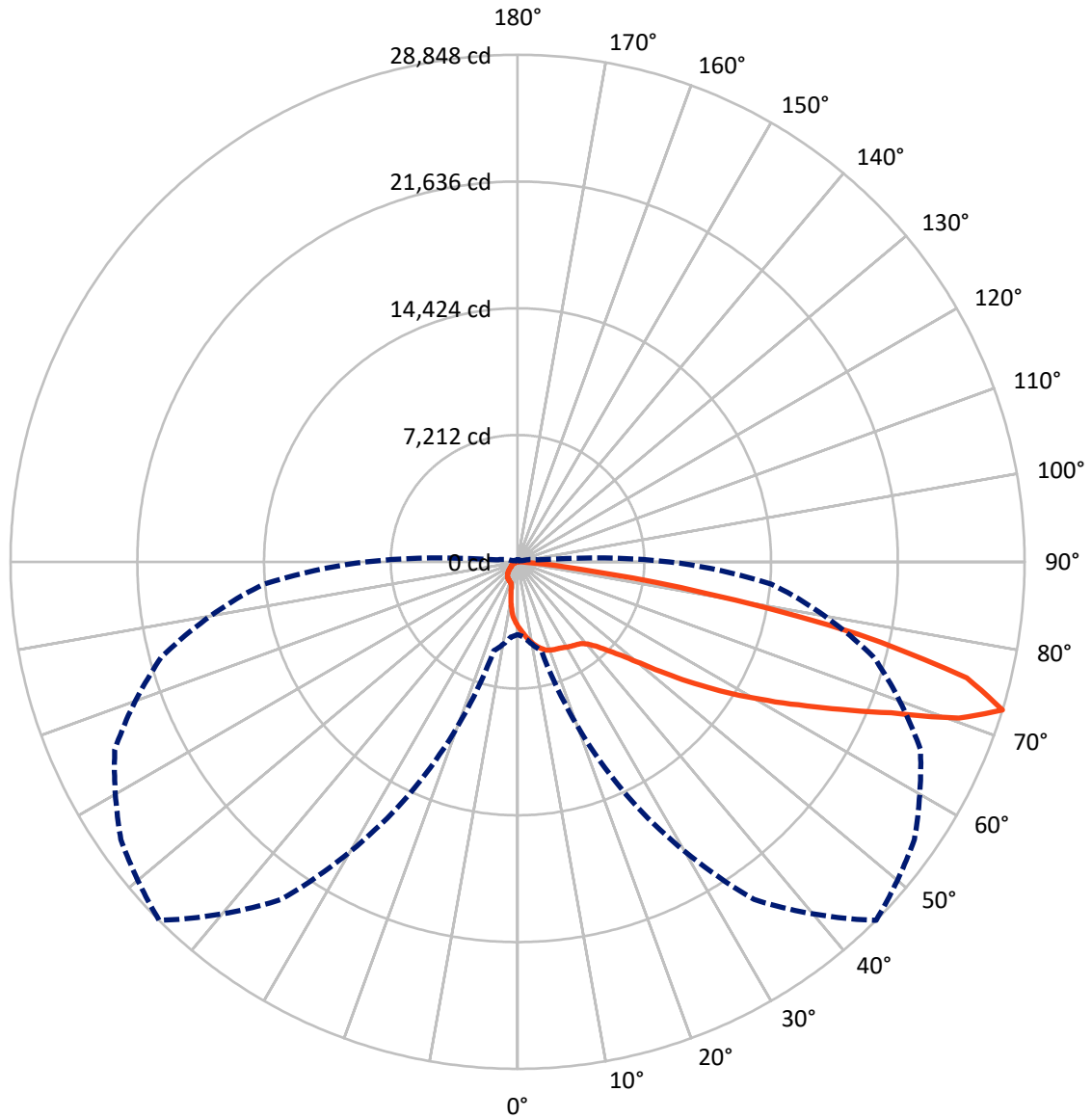
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3522.7	0.0	3522.7
	% Fixture	10.5	0.0	10.5
<b>Street Side</b>	Lumens	30004.0	0.0	30004.0
	% Fixture	89.5	0.0	89.5
<b>Total</b>	Lumens	33526.7	0.0	33526.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	346.1	1.0
10°-20°	1011.4	3.0
20°-30°	1660.9	5.0
30°-40°	2355.5	7.0
40°-50°	3893.4	11.6
50°-60°	6994.1	20.9
60°-70°	9711.6	29.0
70°-80°	7044.5	21.0
80°-90°	509.3	1.5
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°	33526.7	100.0
0°-180°	33526.7	100.0

**Coefficient of Utilization**

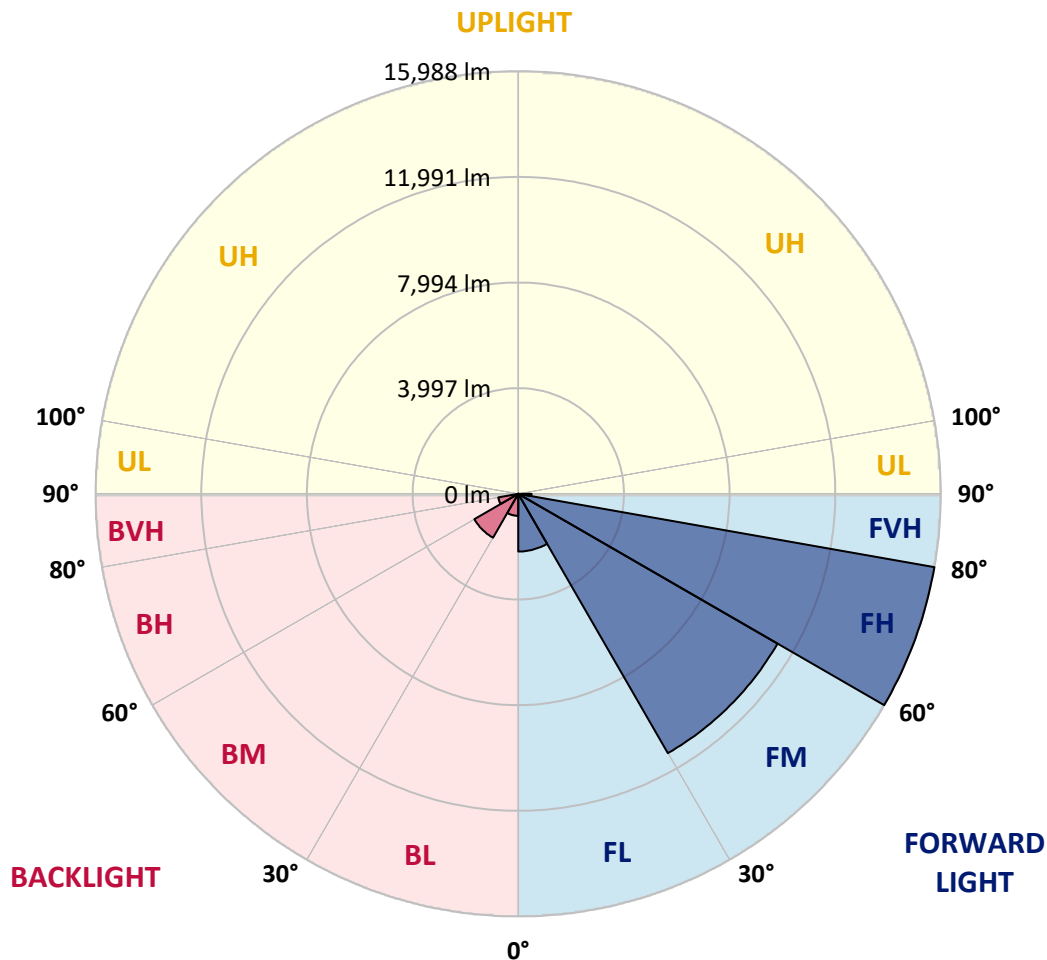


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2183.9	6.5			
FM (30°-60°)	11327.1	33.8			
FH (60°-80°)	15987.9	47.7			G5
FVH (80°-90°)	505.0	1.5			G4/750
BL (0°-30°)	834.4	2.5	B2/1000		
BM (30°-60°)	1915.9	5.7	B2/2500		
BH (60°-80°)	768.2	2.3	B2/1000		G2/1000
BVH (80°-90°)	4.3	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G5**  
 Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9
2.5°	4011.6	4018.5	4013.9	3986.4	3940.7	3915.5	3901.8	3855.9	3826.2	3773.6	3718.7
5°	4380.0	4407.5	4391.5	4336.6	4249.6	4187.8	4169.5	4075.7	3991.0	3892.6	3778.2
7.5°	4771.4	4785.1	4755.4	4684.5	4567.7	4462.4	4446.4	4316.0	4181.0	4029.9	3874.3
10°	5110.0	5126.0	5080.3	4977.3	4844.6	4714.2	4691.3	4547.1	4386.9	4201.6	4002.4
12.5°	5393.9	5409.8	5350.3	5226.8	5080.3	4945.3	4922.4	4771.4	4595.2	4389.2	4142.0
15°	5608.9	5638.7	5558.6	5425.8	5268.0	5132.9	5121.5	4972.8	4801.1	4572.3	4309.1
17.5°	5734.8	5764.5	5689.1	5528.8	5393.9	5279.4	5265.6	5142.1	4981.9	4762.3	4471.6
20°	5755.4	5782.8	5702.8	5563.2	5451.1	5359.5	5352.7	5263.4	5146.6	4936.1	4647.8
22.5°	5693.6	5727.9	5654.7	5542.6	5464.8	5416.7	5407.6	5357.2	5290.8	5112.4	4812.6
25°	5629.5	5657.0	5602.0	5503.6	5462.4	5457.9	5464.8	5455.6	5441.8	5290.8	5004.8
27.5°	5625.0	5654.7	5592.9	5499.1	5476.2	5524.2	5531.1	5574.6	5586.0	5453.3	5190.2
30°	5663.8	5684.4	5625.0	5526.6	5515.1	5625.0	5627.2	5705.0	5723.4	5590.7	5373.3
32.5°	5748.5	5771.4	5711.9	5567.7	5551.7	5705.0	5711.9	5814.9	5844.7	5737.1	5565.4
35°	5947.7	5975.0	5906.5	5682.2	5625.0	5780.6	5801.2	5922.4	5981.9	5892.7	5764.5
37.5°	6444.2	6364.1	6270.3	5913.3	5792.0	5899.6	5933.9	6075.8	6181.1	6078.0	6002.5
40°	7677.7	7425.9	7133.0	6306.9	6084.9	6153.6	6181.1	6322.9	6467.1	6366.4	6329.8
42.5°	9529.0	9231.6	8760.1	7213.1	6526.6	6560.9	6581.5	6705.1	6908.8	6828.7	6837.8
45°	11179.0	11071.4	10590.8	8760.1	7352.7	7183.4	7208.5	7272.6	7572.4	7542.7	7602.1
47.5°	12446.8	12385.0	12014.2	10535.9	8748.7	7945.4	8016.3	8046.1	8478.6	8583.9	8744.1
50°	13421.7	13398.7	13066.9	12114.9	10572.6	9069.0	9094.2	9030.1	9677.7	9938.6	10243.0
52.5°	14341.6	14419.4	14174.5	13581.8	12520.0	10540.5	10535.9	10233.8	11108.0	11501.6	12021.1
55°	15172.3	15199.7	15224.9	15078.5	14478.8	12215.6	12172.2	11677.8	12767.1	13174.4	13737.5
57.5°	15952.6	15964.1	16188.3	16488.1	16517.9	14014.3	13934.3	13341.5	14579.6	14870.2	15215.7
60°	16476.7	16529.3	17003.0	17836.0	18199.9	15870.3	15826.7	15222.6	16424.0	16559.1	16495.0
62.5°	15721.4	16041.9	17236.4	18888.7	19788.0	17927.6	17907.0	17339.4	18364.6	18254.7	17705.5
65°	12725.9	13268.3	15369.1	19600.4	21346.4	20225.1	20254.8	19650.7	20357.8	20000.8	18689.5
67.5°	8902.0	9474.1	11959.3	19657.6	23087.9	22923.2	23094.8	22147.4	22474.7	21673.7	18923.0
70°	6155.8	6451.0	8069.0	18426.4	24444.9	26639.5	26635.0	25213.9	24580.0	22435.7	17733.0
72.5°	4139.8	4293.1	5240.5	14618.4	23447.2	28847.9	28715.2	27557.2	25289.4	20982.6	14488.1
75°	1746.1	1858.2	2425.8	8215.5	18549.9	26392.4	26033.2	24353.4	22470.0	16522.5	9039.3
77.5°	553.8	601.9	956.5	2940.6	10217.8	19838.4	19458.5	15208.8	15060.1	8288.7	3304.5
80°	263.2	306.7	537.8	1180.8	4020.8	10790.0	10737.3	6899.6	6478.5	2238.1	663.7
82.5°	114.4	135.0	297.5	631.6	1798.7	3849.2	3927.0	2348.0	1942.9	849.0	203.7
85°	36.6	48.1	137.4	290.6	759.7	956.5	945.2	558.4	782.7	462.3	70.9
87.5°	0.0	0.0	45.8	66.3	77.8	54.9	61.8	48.1	217.4	128.1	25.2
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°	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9
2.5°	3691.2	3654.6	3590.6	3531.0	3478.4	3425.8	3393.8	3348.0	3343.3	3343.3	3354.8
5°	3716.4	3656.9	3542.5	3421.2	3281.6	3148.9	3016.2	2888.0	2846.8	2817.0	2830.7
7.5°	3789.6	3695.8	3515.0	3283.9	3018.4	2727.8	2524.2	2304.4	2219.7	2174.0	2180.9
10°	3894.9	3766.8	3492.2	3087.1	2656.9	2260.9	1970.4	1732.4	1640.8	1601.9	1601.9
12.5°	4011.6	3853.7	3451.0	2842.2	2260.9	1787.3	1503.5	1393.7	1380.0	1380.0	1380.0
15°	4151.2	3959.0	3380.0	2553.9	1846.7	1414.3	1313.5	1318.1	1331.9	1341.0	1341.0
17.5°	4295.4	4071.1	3267.9	2231.2	1480.6	1272.3	1274.7	1281.6	1292.9	1302.2	1302.2
20°	4451.0	4183.2	3119.1	1887.9	1270.1	1231.1	1238.0	1244.9	1254.1	1258.6	1261.0
22.5°	4618.0	4288.5	2942.9	1551.5	1199.1	1196.9	1199.1	1206.0	1217.4	1217.4	1222.0
25°	4796.6	4405.2	2741.6	1306.7	1162.6	1162.6	1167.1	1171.7	1180.8	1180.8	1183.2
27.5°	4979.7	4512.8	2528.7	1178.5	1130.5	1128.2	1128.2	1135.1	1139.6	1142.0	1144.2
30°	5181.0	4638.6	2315.9	1151.1	1105.4	1093.9	1087.0	1091.6	1096.1	1098.5	1103.0
32.5°	5387.0	4759.9	2126.0	1162.6	1080.1	1059.5	1036.7	1032.1	1032.1	1041.2	1048.1
35°	5615.8	4892.6	1979.5	1201.4	1066.4	1009.2	972.6	952.0	954.3	968.0	974.9
37.5°	5890.4	5052.8	1872.0	1235.7	1057.3	952.0	892.5	867.4	851.3	867.4	862.7
40°	6249.7	5288.6	1794.2	1263.2	1045.8	885.6	805.5	764.3	734.6	743.7	739.1
42.5°	6778.3	5659.2	1764.3	1265.5	1020.6	807.8	716.3	661.3	617.9	620.1	611.0
45°	7519.8	6245.1	1917.7	1235.7	965.8	723.1	622.5	549.2	521.7	514.9	505.7
47.5°	8535.8	7098.7	2272.4	1173.9	885.6	640.7	530.9	469.1	448.5	437.1	430.2
50°	9897.4	8194.9	2666.0	1105.4	805.5	562.9	455.4	416.5	402.7	391.3	389.0
52.5°	11476.4	9307.0	2988.7	1036.7	725.4	494.3	407.3	384.5	373.0	363.9	361.6
55°	12925.0	10073.7	2970.3	963.4	647.6	439.4	373.0	359.3	345.5	336.4	331.8
57.5°	13826.6	10181.2	2448.6	883.3	558.4	395.9	341.0	331.8	315.8	304.3	302.1
60°	14240.8	9567.9	1716.4	778.1	469.1	354.8	306.7	302.1	281.5	265.5	260.9
62.5°	14316.4	8428.3	1144.2	647.6	391.3	315.8	272.3	265.5	238.0	210.5	196.8
65°	14009.7	6798.9	791.8	505.7	334.2	274.6	233.4	219.7	189.9	162.5	153.3
67.5°	13039.4	4773.6	551.6	363.9	283.7	217.4	185.3	180.8	158.0	135.0	128.1
70°	11261.4	2721.0	368.5	272.3	224.3	148.7	146.5	151.1	128.1	109.9	100.7
72.5°	8634.2	1244.9	228.9	199.1	153.3	100.7	116.7	119.0	98.4	82.4	73.2
75°	5082.6	533.2	144.2	128.1	77.8	66.3	84.7	86.9	66.3	52.7	45.8
77.5°	1730.1	201.4	91.5	75.5	38.9	36.6	54.9	54.9	36.6	20.6	16.0
80°	393.6	75.5	45.8	29.7	18.3	16.0	18.3	16.0	9.1	2.3	0.0
82.5°	112.1	29.7	18.3	11.5	6.9	6.9	2.3	0.0	0.0	0.0	0.0
85°	32.1	13.7	4.6	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	13.7	2.3	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)