

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: P966078

Luminaire Tested: **NAV-SB4B-727-U-SL3**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P966078  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB4B-727-U-SL3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20969.4 lumens  
Efficiency: N/A  
Efficacy: 142.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4

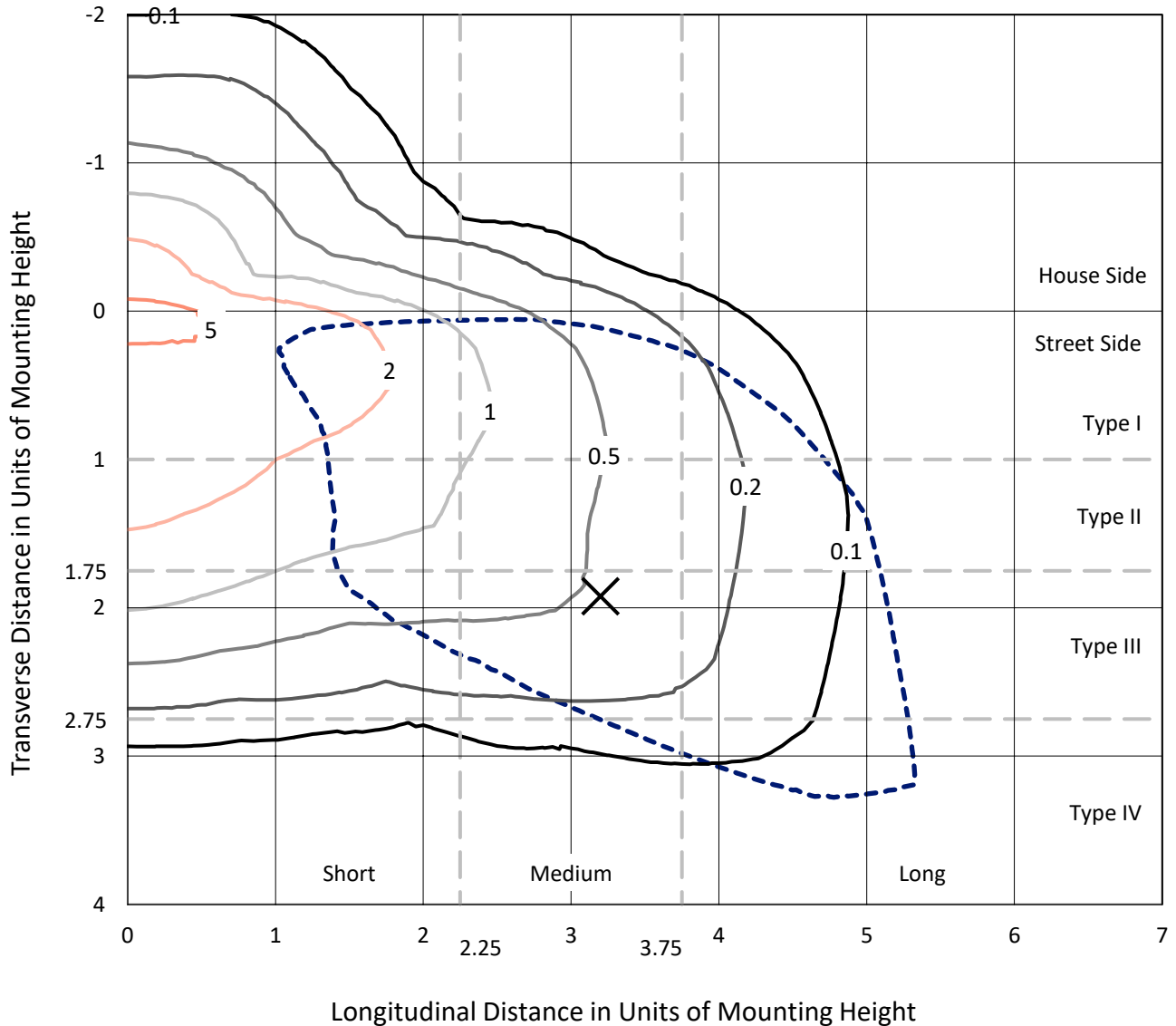
Input Watts (W): 147  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

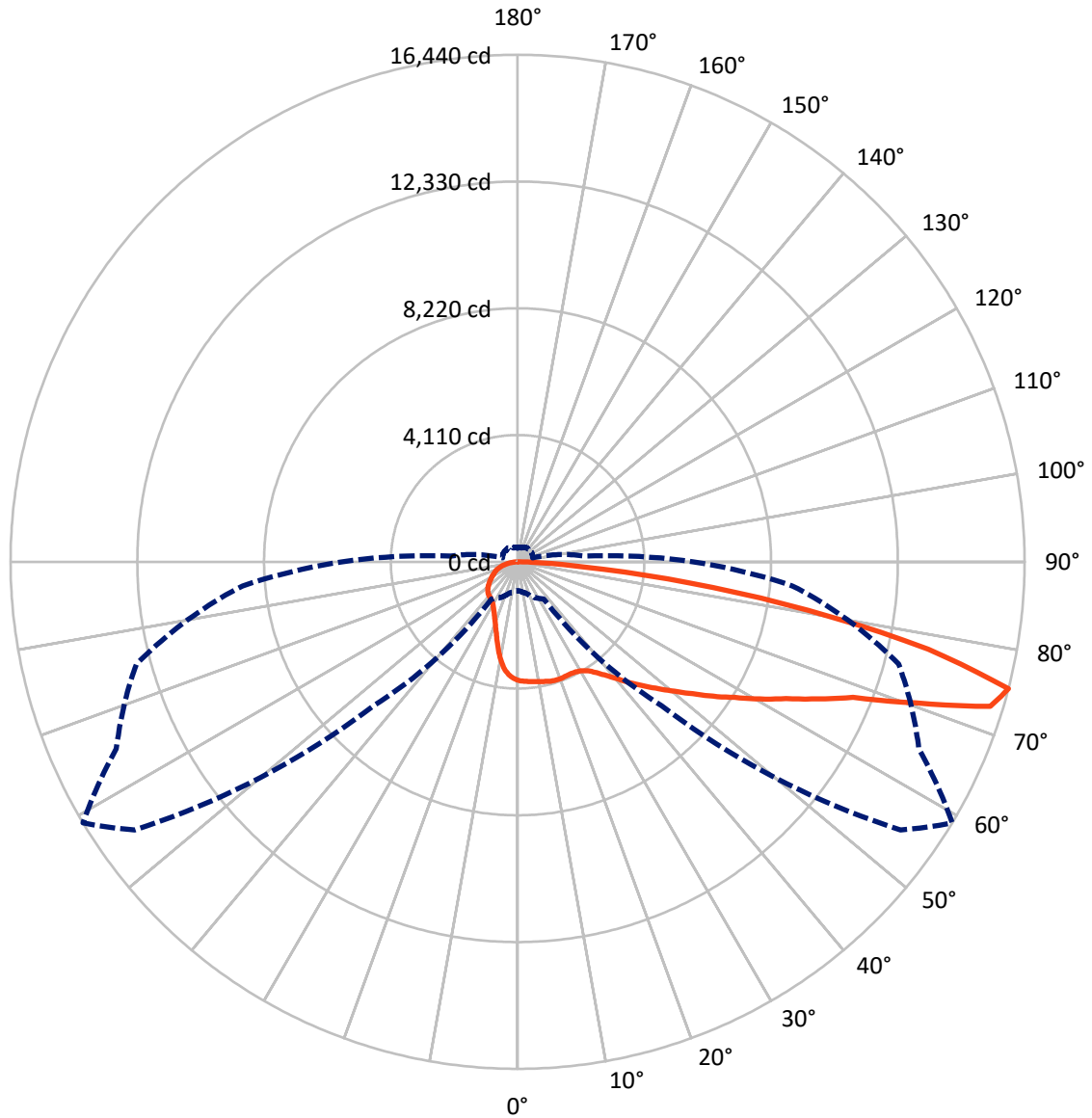
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3933.0	0.0	3933.0
	% Fixture	18.8	0.0	18.8
<b>Street Side</b>	Lumens	17036.5	0.0	17036.5
	% Fixture	81.2	0.0	81.2
<b>Total</b>	Lumens	20969.4	0.0	20969.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	345.1	1.6
10°-20°	882.1	4.2
20°-30°	1339.9	6.4
30°-40°	1991.7	9.5
40°-50°	2962.0	14.1
50°-60°	4020.6	19.2
60°-70°	4908.5	23.4
70°-80°	3852.1	18.4
80°-90°	667.3	3.2
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°	20969.4	100.0
0°-180°	20969.4	100.0

**Coefficient of Utilization**

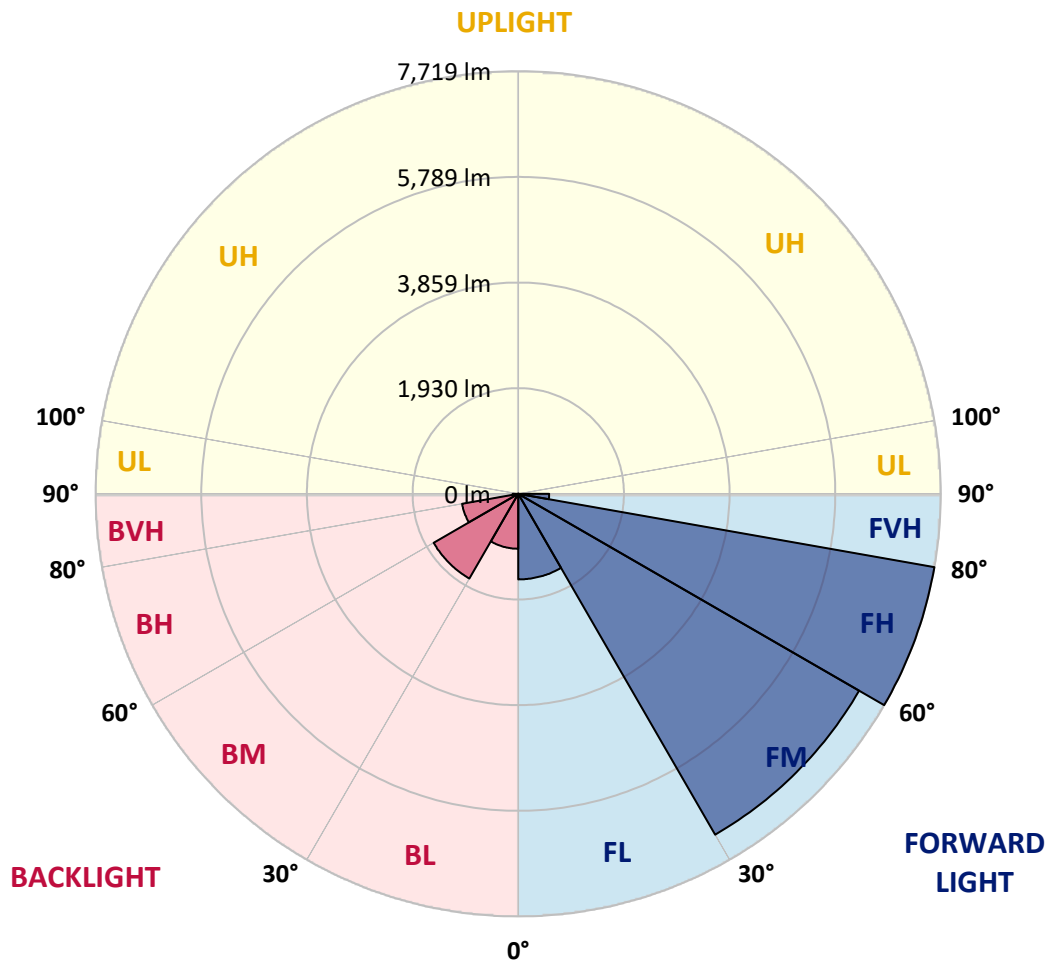


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1563.5	7.5			
FM (30°-60°)	7189.2	34.3			
FH (60°-80°)	7718.6	36.8			G4/12000
FVH (80°-90°)	565.1	2.7			G4/750
BL (0°-30°)	1003.6	4.8	B3/2500		
BM (30°-60°)	1785.2	8.5	B2/2500		
BH (60°-80°)	1042.0	5.0	B3/2500		G3/2500
BVH (80°-90°)	102.1	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 IV Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	3848.9	3848.9	3848.9	3848.9	3848.9	3848.9	3848.9	3848.9	3848.9	3848.9	3848.9
2.5°	3881.6	3868.0	3881.6	3875.9	3873.7	3869.2	3870.3	3878.2	3873.7	3879.3	3860.2
5°	3855.6	3847.7	3861.3	3857.9	3872.6	3874.8	3889.5	3898.5	3904.1	3905.2	3890.6
7.5°	3812.8	3804.9	3824.1	3839.9	3871.4	3880.4	3910.9	3925.6	3933.5	3947.1	3925.6
10°	3656.0	3652.6	3699.9	3759.8	3834.2	3880.4	3926.8	3951.6	3964.0	4000.1	3975.3
12.5°	3378.5	3383.0	3445.0	3560.1	3709.1	3857.9	3944.8	3980.9	4000.1	4045.2	4033.9
15°	3113.4	3112.3	3180.0	3303.0	3511.6	3758.7	3953.8	4015.8	4048.5	4115.1	4106.0
17.5°	2960.0	2955.5	3002.8	3096.5	3290.6	3606.4	3931.3	4035.0	4104.9	4188.5	4180.6
20°	2931.8	2922.8	2947.6	2993.8	3131.5	3439.4	3872.6	4035.0	4150.1	4258.4	4253.9
22.5°	3034.4	3019.8	3009.6	3004.0	3064.9	3301.8	3806.0	4021.5	4216.6	4358.8	4350.9
25°	3240.8	3218.3	3166.4	3115.7	3097.7	3239.7	3747.4	4018.1	4315.9	4494.1	4464.8
27.5°	3574.8	3546.6	3441.6	3319.9	3210.4	3271.3	3721.5	4038.4	4425.3	4637.4	4578.8
30°	3988.8	3958.3	3826.3	3639.1	3442.8	3388.6	3754.2	4098.2	4565.2	4828.1	4713.0
32.5°	4359.9	4326.0	4213.3	4022.6	3757.5	3591.7	3857.9	4212.1	4785.2	5093.1	4914.9
35°	4689.3	4649.8	4548.3	4372.3	4143.4	3877.1	4045.2	4414.1	5097.6	5524.0	5189.1
37.5°	5011.9	4965.6	4855.1	4669.0	4508.8	4257.2	4303.5	4673.5	5512.8	6047.5	5552.2
40°	5372.8	5306.3	5172.0	4988.3	4832.6	4702.8	4643.0	4991.6	5934.6	6631.7	6005.7
42.5°	5722.6	5659.4	5499.2	5342.4	5147.2	5110.0	5036.7	5363.8	6396.0	7273.6	6466.0
45°	6099.4	6023.7	5829.8	5631.2	5508.2	5380.7	5418.0	5736.1	6848.3	7927.9	6948.8
47.5°	6452.5	6367.8	6138.8	5917.7	5850.1	5608.7	5767.7	6145.6	7318.8	8591.2	7427.0
50°	6643.0	6559.6	6368.9	6169.3	6116.3	5889.5	6146.7	6595.7	7811.7	9252.3	7886.1
52.5°	6802.1	6711.9	6462.6	6352.0	6336.2	6195.2	6613.7	7110.1	8304.7	9836.6	8329.5
55°	6971.3	6870.9	6552.8	6453.6	6525.8	6538.2	7167.6	7693.2	8825.9	10406.2	8748.0
57.5°	7166.5	7039.0	6639.6	6539.3	6710.8	6939.8	7803.8	8297.9	9338.0	10934.2	9120.2
60°	7350.4	7221.7	6806.6	6675.8	6910.4	7405.6	8533.6	9030.0	9917.8	11404.6	9472.2
62.5°	7386.5	7280.4	6939.8	6938.6	7181.2	7949.4	9397.7	9768.9	10424.2	11869.3	9788.0
65°	6761.5	6695.0	6493.1	6928.5	7569.2	8732.2	10360.0	10714.2	11068.4	12275.4	10065.6
67.5°	5146.1	5155.1	5140.5	5980.9	7255.6	9856.9	11753.2	11726.0	11863.7	12731.1	10384.8
70°	2353.1	2406.1	2751.3	4128.7	5812.8	9986.6	14056.5	13705.8	12862.0	13321.1	10661.1
72.5°	1271.3	1311.9	1452.9	2000.0	3494.7	8878.9	15778.0	16027.3	14189.7	13718.2	10357.7
75°	932.9	955.5	1053.6	1271.3	1467.6	6599.1	15161.0	16440.2	14355.5	12792.0	8944.3
77.5°	698.2	708.4	788.5	1007.4	751.3	3478.8	12114.1	13615.5	12288.9	10510.0	6606.9
80°	506.5	517.7	577.6	755.8	526.7	1272.4	8318.2	9556.8	8416.4	6699.5	3292.8
82.5°	349.7	354.2	380.2	514.3	367.8	494.0	4719.7	5604.2	4698.3	2350.8	888.9
85°	210.9	216.6	227.9	300.0	208.7	234.6	2037.3	2107.2	1404.5	561.8	276.3
87.5°	86.8	92.5	101.5	126.4	82.3	65.4	336.2	421.9	262.8	164.7	85.7
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3848.9	3848.9	3848.9	3848.9	3848.9	3848.9	3848.9	3848.9	3848.9	3848.9	3848.9
2.5°	3854.5	3846.6	3825.2	3795.9	3768.8	3735.0	3720.3	3707.9	3696.6	3675.1	3665.0
5°	3878.2	3856.8	3799.3	3724.8	3640.2	3547.7	3457.4	3395.4	3342.4	3303.0	3270.2
7.5°	3914.4	3873.7	3768.8	3616.5	3422.5	3223.9	3044.6	2917.1	2821.2	2786.3	2725.4
10°	3951.6	3903.0	3720.3	3451.8	3116.8	2811.1	2573.1	2442.3	2365.5	2340.7	2302.4
12.5°	3995.6	3924.5	3644.7	3222.8	2775.0	2440.0	2232.4	2155.7	2116.2	2102.7	2106.1
15°	4059.8	3942.6	3530.8	2936.3	2449.0	2169.2	2035.0	1981.9	1961.6	1960.5	1965.0
17.5°	4108.3	3945.9	3353.7	2629.4	2198.5	2005.6	1895.1	1874.8	1888.4	1908.7	1916.5
20°	4162.5	3915.5	3121.3	2349.7	2022.6	1862.4	1816.2	1829.7	1862.4	1891.7	1901.9
22.5°	4200.9	3860.2	2840.4	2132.0	1870.3	1780.0	1777.8	1806.0	1824.1	1838.7	1846.6
25°	4234.7	3766.6	2542.6	1949.2	1745.1	1730.4	1755.2	1746.2	1733.8	1746.2	1754.1
27.5°	4259.5	3618.8	2276.4	1789.0	1657.1	1696.6	1681.9	1661.6	1660.5	1667.3	1678.5
30°	4251.6	3421.3	2057.6	1636.8	1595.1	1633.4	1598.5	1595.1	1591.7	1595.1	1607.5
32.5°	4251.6	3196.9	1889.5	1531.9	1555.5	1540.9	1537.5	1529.6	1516.1	1514.9	1529.6
35°	4275.3	2972.4	1745.1	1475.5	1522.8	1487.9	1490.1	1471.0	1442.8	1429.3	1442.8
37.5°	4323.8	2791.9	1601.9	1448.4	1465.3	1464.2	1455.2	1422.5	1372.8	1329.9	1344.6
40°	4441.1	2738.9	1503.7	1436.0	1438.3	1451.8	1428.1	1364.9	1252.1	1182.2	1191.3
42.5°	4625.0	2828.0	1482.3	1405.6	1420.2	1433.8	1387.5	1240.9	1160.7	1119.0	1119.0
45°	4858.5	2983.7	1528.5	1361.5	1377.4	1401.1	1263.4	1193.5	1157.3	1158.5	1164.2
47.5°	5154.0	3147.3	1614.3	1323.2	1315.3	1328.8	1181.1	1138.2	1088.6	1101.0	1132.5
50°	5495.8	3313.1	1695.5	1271.3	1246.5	1202.5	1128.0	1087.4	1024.3	995.0	1002.9
52.5°	5865.9	3473.2	1728.2	1208.2	1172.1	1121.2	1091.9	1042.3	965.7	917.1	915.9
55°	6216.6	3618.8	1692.1	1132.5	1097.6	1058.1	1053.6	1023.2	940.7	873.1	873.1
57.5°	6548.3	3740.6	1601.9	1055.9	1022.0	998.4	1028.8	1014.1	910.3	823.5	819.0
60°	6829.2	3824.1	1471.0	978.1	954.4	941.9	988.2	983.7	867.5	770.5	767.1
62.5°	7052.5	3856.8	1326.6	903.5	897.9	875.4	931.7	931.7	813.3	718.5	715.1
65°	7227.4	3825.2	1180.0	830.2	841.5	807.7	862.9	856.2	755.8	672.3	667.8
67.5°	7381.9	3721.5	1017.5	758.1	784.0	741.2	790.8	775.0	692.6	626.1	621.6
70°	7450.7	3480.0	832.5	685.8	717.4	675.7	718.5	689.2	621.6	576.5	567.4
72.5°	6898.0	2892.3	655.4	610.3	637.3	603.5	640.7	606.9	544.9	524.5	507.6
75°	5706.8	2170.3	504.2	527.9	548.3	522.2	547.1	522.2	465.9	480.5	438.8
77.5°	4144.5	1465.3	385.8	441.1	450.1	436.5	458.0	429.8	379.0	375.7	358.7
80°	2061.0	858.4	302.3	348.6	345.2	336.2	361.0	347.5	304.5	322.7	319.3
82.5°	596.8	367.8	220.0	244.8	238.0	240.3	258.3	265.1	397.1	393.7	402.7
85°	187.3	144.4	132.0	136.5	129.8	133.1	152.3	302.3	279.7	163.6	177.1
87.5°	48.5	49.6	32.7	35.0	36.1	42.8	48.5	183.9	87.9	57.5	60.9
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)