

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: P884600

Luminaire Tested: **NAV-SB5C-727-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884600  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5C-727-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

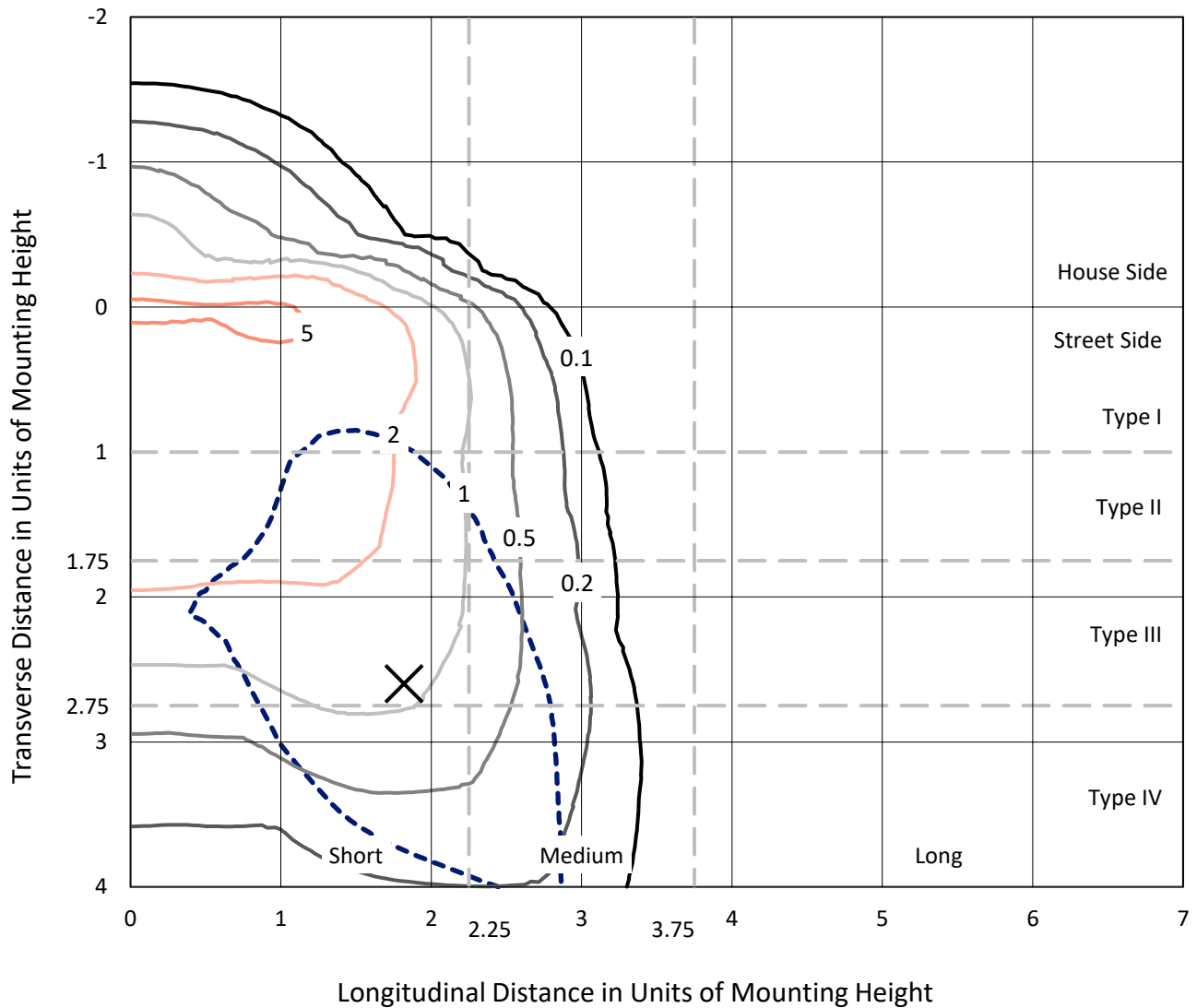
Lumens per Lamp: N/A  
Luminaire Lumens: 26076 lumens  
Efficiency: N/A  
Efficacy: 104.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G4  
  
Input Watts (W): 249.5  
Input Voltage (V): 120.0  
Input Current (Ain): 2.116  
Voltage Rise (V): NR  
Power Factor: 0.996  
Total Harmonic Distortion (THDi): 7.885  
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

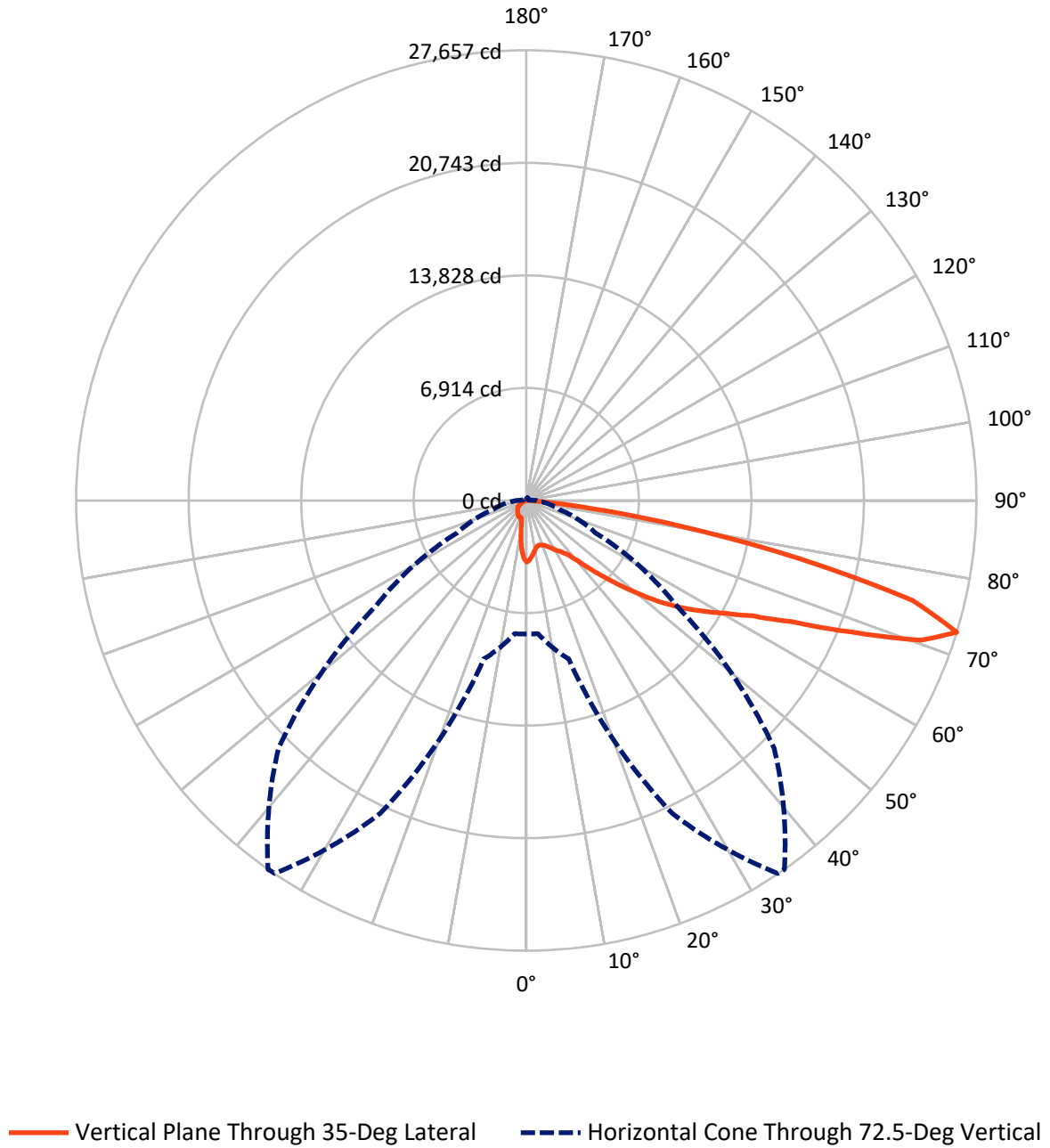
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2934.7	0.0	2934.7
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	23141.3	0.0	23141.3
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	26076.0	0.0	26076.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	310.6	1.2
10°-20°	726.5	2.8
20°-30°	1180.2	4.5
30°-40°	1969.1	7.6
40°-50°	3725.7	14.3
50°-60°	5920.1	22.7
60°-70°	7323.5	28.1
70°-80°	4552.4	17.5
80°-90°	367.9	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°	26076.0	100.0
0°-180°	26076.0	100.0

**Coefficient of Utilization**



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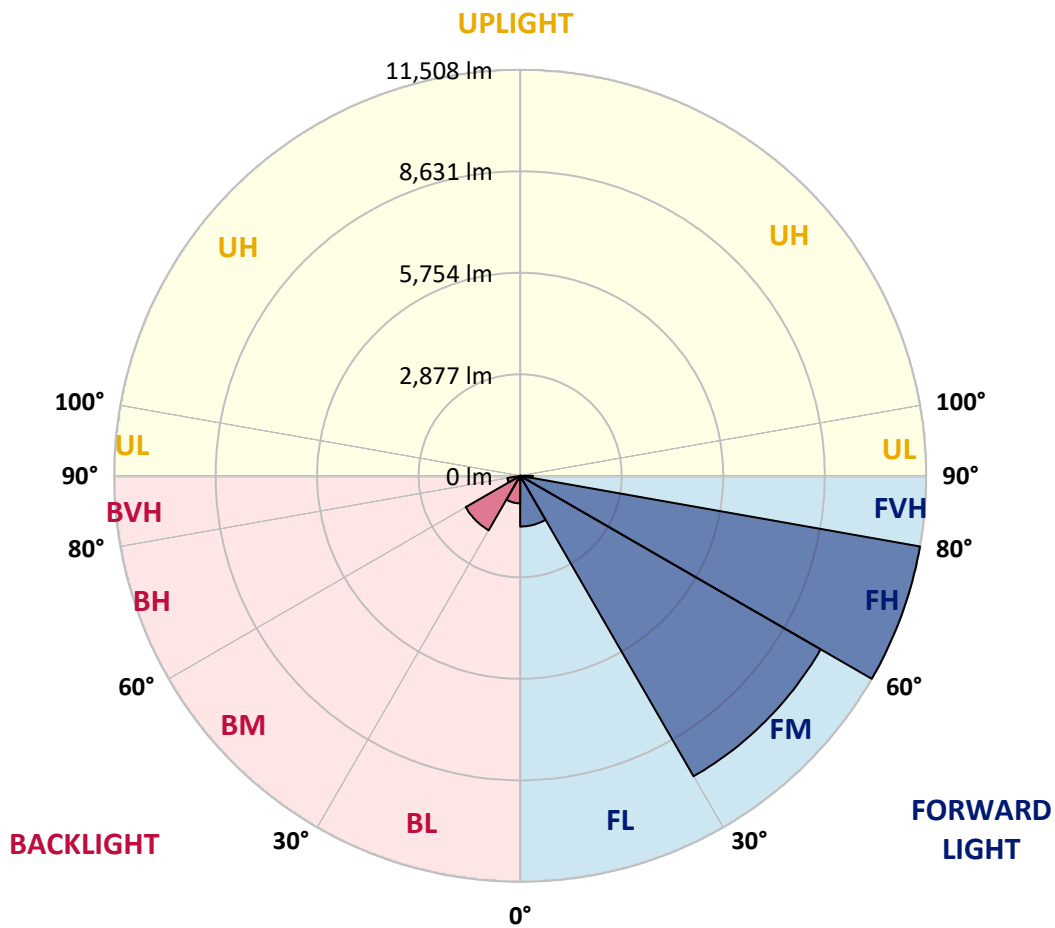
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1437.5	5.5			
FM (30°-60°)	9833.3	37.7			
FH (60°-80°)	11507.7	44.1			G4/12000
FVH (80°-90°)	362.9	1.4			G3/500
BL (0°-30°)	779.8	3.0	B2/1000		
BM (30°-60°)	1781.6	6.8	B2/2500		
BH (60°-80°)	368.3	1.4	B1/500		G1/500
BVH (80°-90°)	5.0	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-G4**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	3779.3	3779.3	3779.3	3779.3	3779.3	3779.3	3779.3	3779.3	3779.3	3779.3	3779.3
2.5°	3611.1	3641.7	3647.5	3657.0	3657.0	3668.5	3687.6	3714.3	3758.3	3781.2	3796.5
5°	3328.4	3351.3	3380.0	3402.9	3446.8	3452.6	3527.1	3599.7	3700.9	3777.4	3830.9
7.5°	3043.7	3070.4	3108.6	3164.1	3221.4	3238.6	3351.3	3473.6	3634.1	3777.4	3867.2
10°	2843.1	2845.0	2879.4	2934.8	3026.5	3047.5	3185.1	3358.9	3559.6	3754.4	3901.6
12.5°	2730.3	2743.7	2759.0	2801.0	2888.9	2902.3	3049.4	3253.9	3485.0	3741.1	3941.7
15°	2730.3	2739.9	2749.4	2770.5	2841.2	2852.6	2982.5	3187.0	3446.8	3746.8	4006.7
17.5°	2759.0	2774.3	2766.6	2791.5	2866.0	2873.6	2988.3	3167.9	3444.9	3783.1	4106.0
20°	2827.8	2839.2	2824.0	2839.2	2913.8	2929.0	3047.5	3204.2	3477.4	3846.2	4230.2
22.5°	2936.7	2942.4	2906.1	2917.6	2994.0	3013.1	3150.7	3307.4	3555.7	3947.4	4396.4
25°	3074.3	3085.7	3030.3	3043.7	3116.3	3139.2	3297.8	3462.1	3679.9	4086.9	4608.5
27.5°	3232.8	3238.6	3190.8	3188.9	3282.5	3315.0	3475.5	3653.2	3846.2	4262.7	4876.0
30°	3414.4	3431.5	3385.7	3378.0	3496.5	3523.3	3681.8	3888.2	4090.7	4526.4	5256.2
32.5°	3557.7	3571.0	3544.3	3563.4	3683.8	3704.8	3932.1	4220.6	4474.8	4900.8	5774.0
35°	3764.0	3771.6	3710.5	3744.9	3882.5	3936.0	4274.1	4686.9	4958.2	5370.9	6450.4
37.5°	4511.1	4511.1	4251.2	4081.2	4213.0	4260.8	4742.3	5273.4	5554.3	6001.4	7302.5
40°	5544.7	5527.5	5147.3	4799.6	4782.4	4876.0	5409.1	6012.8	6324.3	6758.0	8261.7
42.5°	6647.2	6620.4	6102.6	5758.7	5701.4	5733.9	6179.1	6924.2	7241.4	7680.9	9293.5
45°	7625.4	7617.8	7144.0	6681.6	6578.4	6681.6	7140.1	7990.4	8217.8	8680.1	10323.3
47.5°	8445.1	8445.1	8099.3	7797.4	7743.9	7805.0	8441.3	9173.1	9152.1	9744.4	11326.4
50°	9389.0	9381.3	9052.7	8922.8	8978.2	9064.2	9939.3	10418.8	10118.9	10789.5	12222.5
52.5°	10050.1	10095.9	9983.2	9962.2	10245.0	10394.0	11460.1	11637.8	10984.4	11781.1	12893.1
55°	10573.6	10627.1	10757.0	10904.1	11448.7	11643.6	12933.3	12793.8	11708.5	12640.9	13279.1
57.5°	11314.9	11238.5	11439.1	11729.5	12610.4	12845.4	14360.5	13884.8	12291.3	13338.3	13321.1
60°	12214.9	12226.3	12260.7	12627.6	13770.1	14072.0	15766.8	14916.5	12665.8	13766.3	12854.9
62.5°	13296.3	13313.5	13384.2	13947.8	15327.3	15612.0	17264.7	15761.0	12837.7	13645.9	11651.2
65°	13221.8	13294.4	14083.5	16011.3	17694.6	17975.5	19013.0	16353.3	12577.9	12545.4	9486.4
67.5°	12044.8	12163.3	13483.5	18476.1	21263.7	21577.1	21126.2	16469.9	11456.3	9755.8	6188.6
70°	10501.0	10543.0	12130.8	20692.5	25396.5	25713.7	23017.7	15187.8	8693.5	5441.6	2772.4
72.5°	8200.6	8210.1	10073.0	21206.4	27639.6	27656.8	21533.1	11274.8	4675.4	2090.3	963.0
75°	5858.1	5800.8	6746.5	17197.9	24317.0	24511.9	16143.2	5288.7	1786.5	987.8	479.6
77.5°	3141.1	3204.2	3817.5	10199.1	16798.5	17131.0	8808.1	1524.7	909.5	672.6	317.2
80°	970.6	1024.1	1564.8	4669.7	9515.1	9715.7	3265.3	678.3	634.3	479.6	208.3
82.5°	305.7	317.2	729.9	1962.2	3949.3	4041.0	945.8	384.0	433.7	317.2	122.3
85°	87.9	89.8	324.8	731.8	976.3	995.5	265.6	149.0	248.4	196.8	63.1
87.5°	9.6	30.6	122.3	122.3	86.0	84.1	28.7	32.5	70.7	24.8	11.5
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°	3779.3	3779.3	3779.3	3779.3	3779.3	3779.3	3779.3	3779.3	3779.3	3779.3	3779.3
2.5°	3786.9	3788.8	3764.0	3722.0	3676.1	3637.9	3590.1	3551.9	3525.2	3517.5	3530.9
5°	3813.7	3800.3	3729.6	3601.6	3448.7	3316.9	3169.8	3053.2	2976.8	2944.3	2955.8
7.5°	3853.8	3815.6	3660.8	3408.6	3116.3	2856.4	2592.8	2388.3	2258.4	2193.4	2203.0
10°	3888.2	3811.8	3546.2	3129.7	2682.6	2289.0	1933.6	1687.1	1549.5	1484.6	1486.5
12.5°	3920.7	3809.9	3397.2	2799.1	2193.4	1712.0	1381.4	1259.1	1220.9	1207.5	1203.7
15°	3981.8	3815.6	3209.9	2420.8	1706.2	1293.5	1173.1	1171.2	1178.9	1175.1	1173.1
17.5°	4065.9	3821.3	2997.8	2019.6	1316.4	1140.7	1134.9	1152.1	1163.6	1157.9	1155.9
20°	4174.8	3844.2	2772.4	1622.2	1131.1	1102.5	1115.8	1131.1	1140.7	1131.1	1129.2
22.5°	4327.6	3884.4	2525.9	1303.1	1071.9	1079.5	1091.0	1108.2	1117.7	1104.4	1102.5
25°	4514.9	3947.4	2283.2	1133.0	1043.2	1052.8	1070.0	1089.1	1100.5	1087.2	1085.3
27.5°	4757.5	4048.7	2059.7	1094.8	1014.6	1020.3	1045.1	1073.8	1089.1	1071.9	1071.9
30°	5109.1	4214.9	1866.7	1112.0	997.4	984.0	1018.4	1058.5	1075.7	1060.4	1058.5
32.5°	5575.3	4449.9	1748.3	1138.8	989.7	942.0	974.4	1026.0	1054.7	1045.1	1045.1
35°	6186.7	4807.2	1702.4	1169.3	984.0	898.0	920.9	976.3	1026.0	1035.6	1035.6
37.5°	6928.1	5304.0	1715.8	1182.7	966.8	861.7	873.2	920.9	985.9	1016.5	1024.1
40°	7770.7	5882.9	1792.2	1169.3	947.7	831.1	833.0	869.4	926.7	972.5	987.8
42.5°	8640.0	6559.3	1933.6	1119.6	930.5	804.4	798.7	823.5	861.7	894.2	907.6
45°	9467.3	7254.8	2073.1	1050.9	909.5	777.6	764.3	773.8	781.5	794.8	802.5
47.5°	10189.6	7743.9	2032.9	987.8	880.8	747.1	724.1	720.3	697.4	695.5	693.6
50°	10688.2	7850.9	1805.6	924.8	838.8	712.7	676.4	653.4	613.3	594.2	596.1
52.5°	10846.8	7428.6	1475.0	861.7	770.0	666.8	615.2	578.9	529.3	512.1	510.1
55°	10636.6	6601.3	1178.9	785.3	674.5	605.7	548.4	500.6	460.5	439.5	439.5
57.5°	10122.7	5548.6	932.4	695.5	573.2	536.9	479.6	431.8	397.4	376.4	372.6
60°	9270.5	4406.0	737.5	588.5	489.1	462.4	403.1	372.6	342.0	317.2	311.4
62.5°	7977.0	3144.9	578.9	466.2	408.9	378.3	343.9	321.0	284.7	250.3	244.6
65°	6224.9	1924.0	447.1	342.0	328.6	313.3	292.3	271.3	227.4	193.0	187.2
67.5°	3926.4	911.4	319.1	257.9	259.8	252.2	242.7	225.5	193.0	162.4	158.6
70°	1729.1	441.4	210.2	196.8	193.0	193.0	200.6	194.9	164.3	135.7	129.9
72.5°	588.5	236.9	156.7	149.0	139.5	137.6	168.1	162.4	131.8	105.1	99.4
75°	307.6	158.6	114.6	107.0	84.1	101.3	133.7	126.1	93.6	68.8	63.1
77.5°	200.6	112.7	78.3	68.8	47.8	66.9	99.4	87.9	55.4	34.4	30.6
80°	126.1	74.5	45.9	32.5	22.9	36.3	53.5	38.2	21.0	7.6	5.7
82.5°	66.9	38.2	17.2	11.5	9.6	11.5	13.4	9.6	3.8	0.0	0.0
85°	26.7	13.4	5.7	3.8	1.9	0.0	3.8	1.9	0.0	0.0	0.0
87.5°	9.6	1.9	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)