

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: P969317

Luminaire Tested: **NAV-SB5D-735-U-T3R-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P969317  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5D-735-U-T3R-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

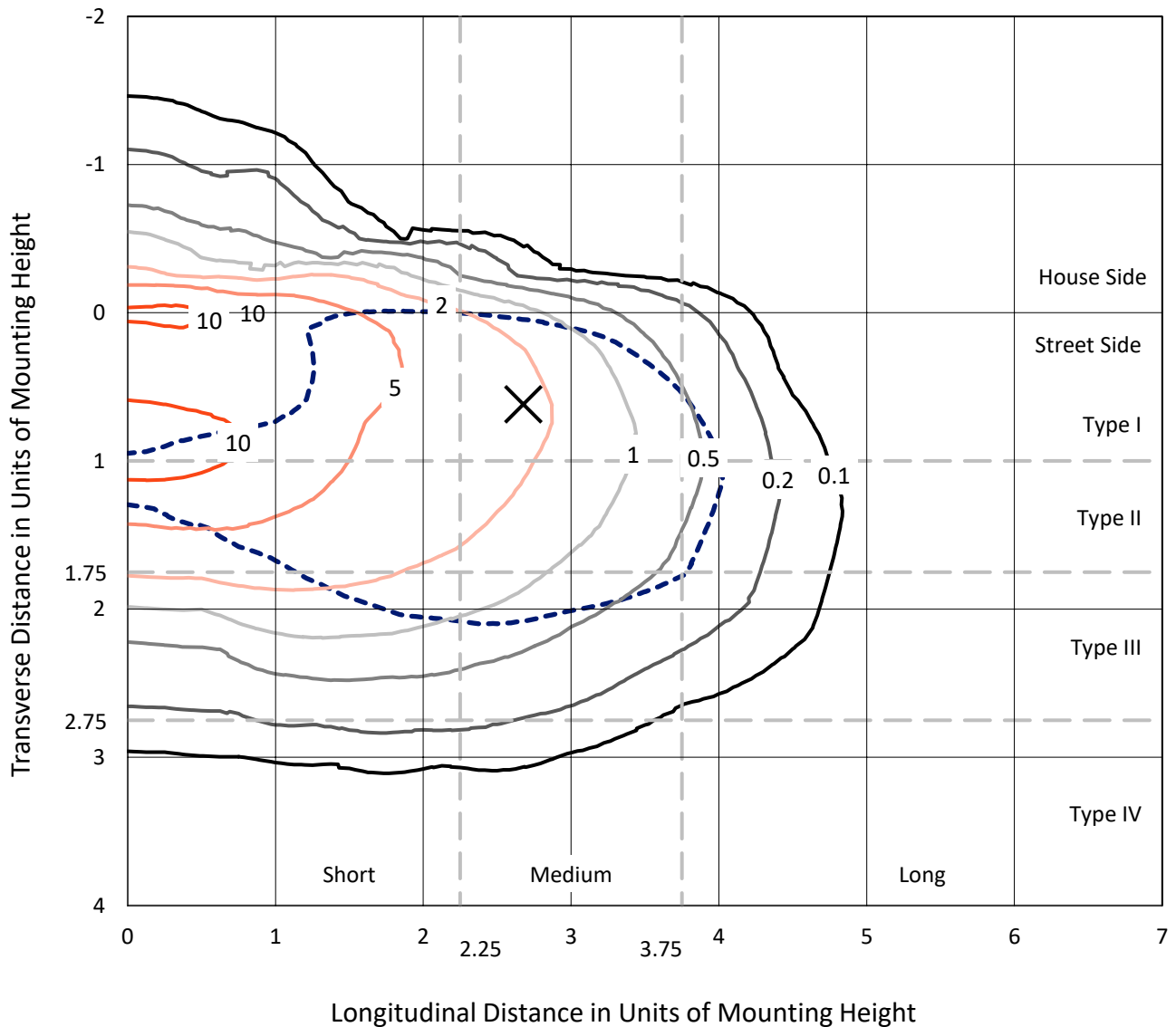
Lumens per Lamp: N/A  
Luminaire Lumens: 43864.9 lumens  
Efficiency: N/A  
Efficacy: 120.2 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G5  
  
Input Watts (W): 364.9  
Input Voltage (V): NR  
Input Current (Ain): 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

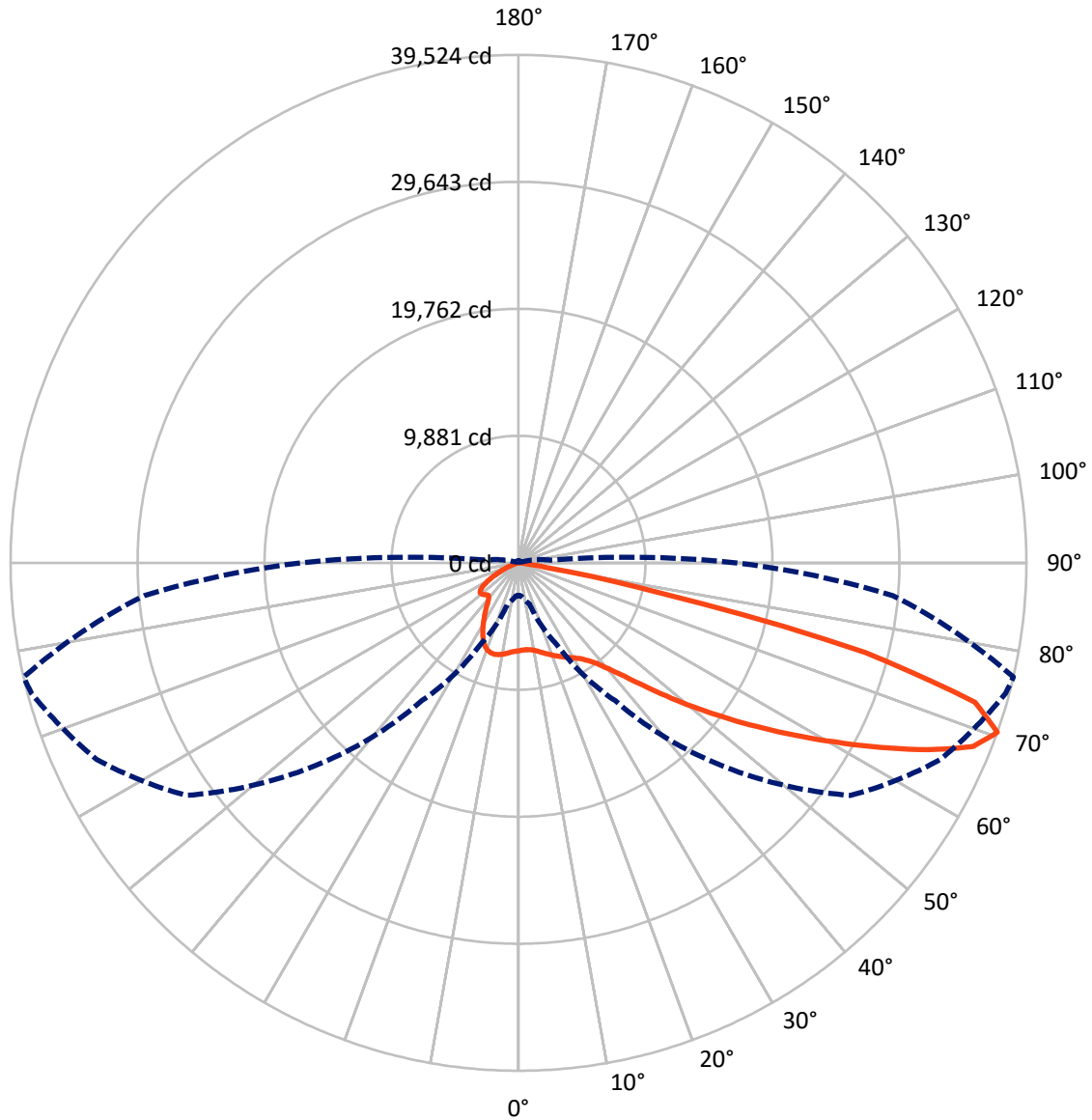
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.9 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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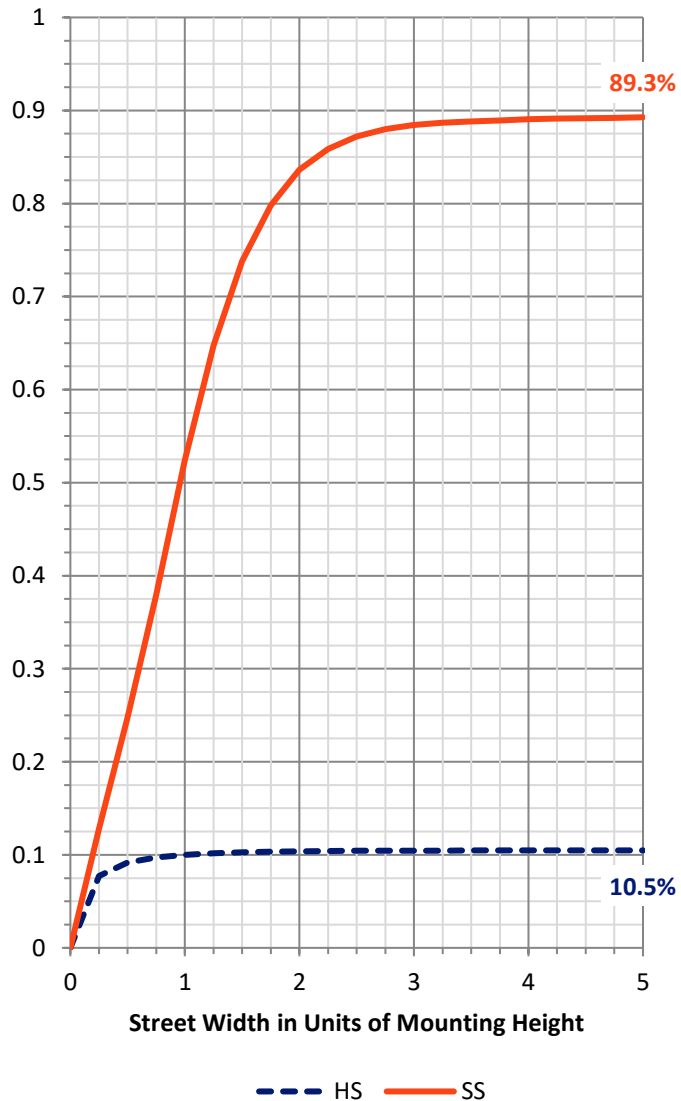
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4624.0	0.0	4624.0
	% Fixture	10.5	0.0	10.5
<b>Street Side</b>	Lumens	39240.9	0.0	39240.9
	% Fixture	89.5	0.0	89.5
<b>Total</b>	Lumens	43864.9	0.0	43864.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	589.7	1.3
10°-20°	1399.8	3.2
20°-30°	2165.2	4.9
30°-40°	3928.8	9.0
40°-50°	7416.1	16.9
50°-60°	10715.6	24.4
60°-70°	11406.5	26.0
70°-80°	6044.7	13.8
80°-90°	198.5	0.5
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°	43864.9	100.0
0°-180°	43864.9	100.0

**Coefficient of Utilization**

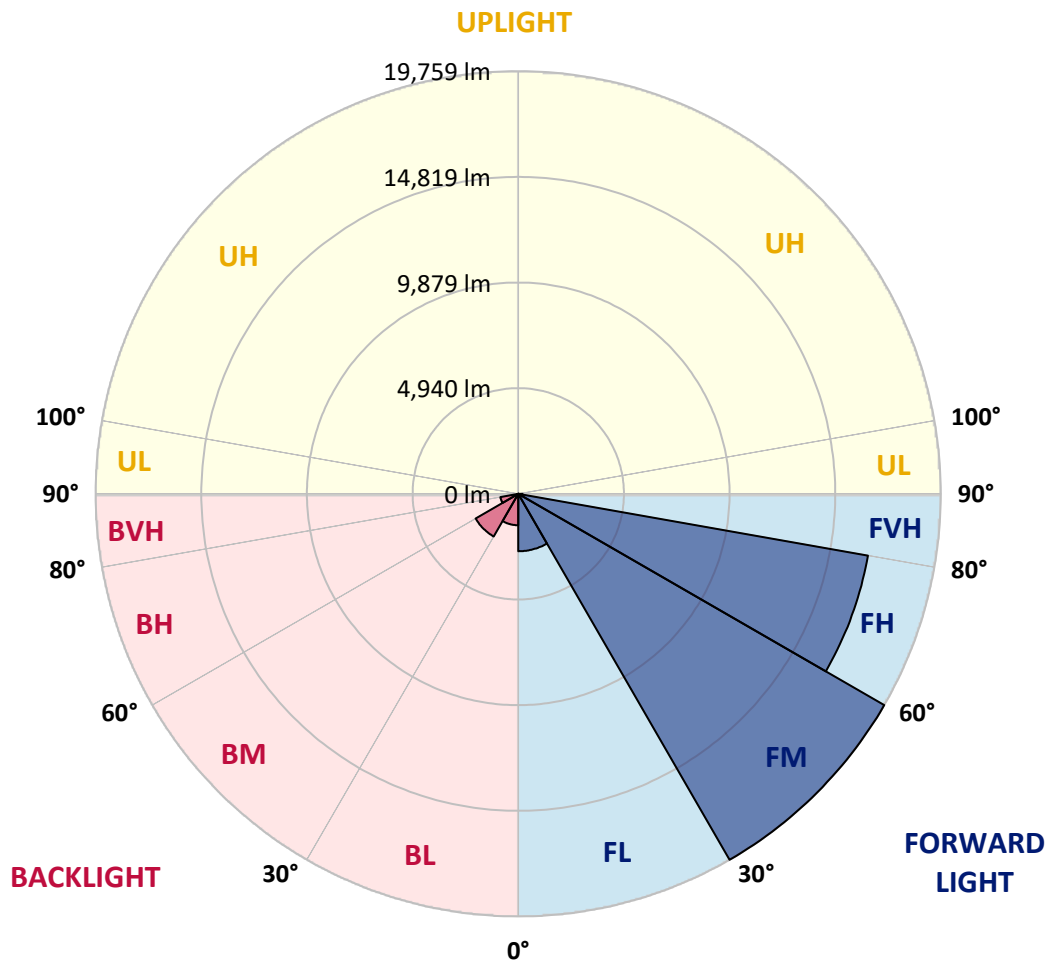


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2685.6	6.1			
FM (30°-60°)	19758.7	45.0			
FH (60°-80°)	16603.5	37.9			G5
FVH (80°-90°)	193.1	0.4			G2/225
BL (0°-30°)	1469.1	3.3	B3/2500		
BM (30°-60°)	2301.8	5.2	B2/2500		
BH (60°-80°)	847.7	1.9	B2/1000		G2/1000
BVH (80°-90°)	5.3	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**  
 Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	6842.1	6842.1	6842.1	6842.1	6842.1	6842.1	6842.1	6842.1	6842.1	6842.1	6842.1
2.5°	6423.9	6482.0	6473.7	6512.4	6526.4	6581.7	6637.2	6711.9	6795.0	6792.3	6847.7
5°	6060.9	6119.1	6133.0	6185.6	6252.1	6338.0	6451.6	6601.1	6756.3	6781.2	6892.0
7.5°	5631.6	5692.5	5728.5	5833.8	5955.7	6133.0	6318.6	6537.4	6795.0	6831.0	7044.3
10°	5202.2	5257.6	5304.7	5454.3	5648.3	5911.4	6213.3	6529.1	6875.4	6928.0	7229.9
12.5°	4936.3	4989.0	5041.6	5171.7	5412.7	5734.1	6144.1	6567.9	7008.3	7083.2	7482.0
15°	4842.1	4889.2	4930.8	5047.1	5271.5	5637.1	6130.2	6648.3	7177.4	7277.0	7786.7
17.5°	4855.9	4880.9	4908.6	4997.3	5216.1	5592.8	6155.1	6786.7	7376.7	7465.4	8091.5
20°	4936.3	4950.1	4952.9	5013.9	5207.8	5587.3	6205.0	6919.7	7565.1	7684.2	8393.4
22.5°	5038.8	5044.3	5038.8	5080.3	5260.4	5628.8	6271.5	7080.4	7775.6	7886.5	8698.0
25°	5518.0	5412.7	5279.8	5199.4	5349.1	5709.1	6371.2	7296.5	8005.6	8113.6	8994.5
27.5°	7005.6	6703.6	6227.2	5692.5	5531.9	5825.5	6509.7	7515.3	8238.2	8335.2	9313.0
30°	9421.1	9024.9	8216.1	7011.1	6119.1	6069.2	6689.8	7734.1	8484.7	8590.0	9653.8
32.5°	11842.1	11745.2	10811.7	9144.0	7440.5	6612.2	6989.0	8030.5	8811.6	8894.7	10113.6
35°	14290.9	14094.3	13329.7	11681.5	9476.5	7717.4	7487.5	8418.3	9241.0	9335.2	10783.9
37.5°	16166.3	16047.2	15573.4	14216.1	11892.0	9423.8	8340.7	9019.4	9864.3	9969.6	11642.7
40°	17822.8	17767.4	17606.7	16712.0	14592.8	11656.5	9667.6	9950.2	10728.6	10853.2	12695.3
42.5°	19124.8	19254.9	19346.4	19097.0	17376.8	14205.1	11451.6	11257.7	11933.6	12061.0	14036.0
45°	20457.2	20501.4	20869.9	21230.0	20141.4	16869.9	13462.7	12789.5	13432.2	13590.1	15642.7
47.5°	21313.1	21490.4	22138.6	22772.9	22465.4	19512.5	15623.4	14598.4	15169.0	15465.4	17443.2
50°	21376.8	21712.0	22603.9	23709.2	24158.0	22027.8	17972.4	16659.3	17266.0	17592.9	19365.7
52.5°	20315.8	20836.6	22218.9	23836.7	25072.1	24158.0	20401.7	18720.3	19498.7	19925.3	21360.2
55°	15576.2	16257.6	20770.2	23144.1	25108.1	25772.9	22767.4	20867.2	21986.2	22468.2	23515.3
57.5°	13570.7	13914.2	16329.7	21941.9	24440.5	26423.9	24905.9	22911.4	24692.6	25291.0	25551.3
60°	11290.9	11742.4	13695.3	19975.1	23534.7	26487.6	26795.1	25548.5	27626.1	28299.2	27418.3
62.5°	7673.2	8163.5	10105.3	16595.7	22296.5	26457.2	28343.6	28263.2	30886.5	31609.6	29000.1
65°	4753.4	5060.9	6340.8	13551.3	20565.2	26490.4	29964.1	31559.6	34326.9	35061.0	30224.5
67.5°	3756.2	3897.6	4565.1	10404.5	17581.8	25742.5	31581.8	34659.4	37565.2	38146.9	30598.4
70°	2523.5	2609.4	3321.3	6975.1	13080.3	22291.0	31551.3	36216.2	39232.8	39523.7	29235.6
72.5°	1329.6	1396.2	1941.9	3229.9	7900.3	15845.0	26595.7	34354.7	37573.5	37135.9	24989.0
75°	664.8	775.6	1307.5	1639.9	3374.0	8836.6	16515.3	27085.9	29573.5	27878.3	16033.3
77.5°	504.2	609.5	1080.4	1080.4	1174.5	2975.1	6994.5	14772.9	13626.0	11346.3	4706.4
80°	321.3	415.5	944.6	817.1	490.3	756.2	1822.8	4138.5	2894.7	2202.2	856.0
82.5°	188.4	271.4	786.7	540.2	274.3	279.8	515.3	880.9	750.7	584.5	263.1
85°	74.8	177.3	540.2	213.3	108.0	69.3	155.1	188.4	155.1	116.3	66.5
87.5°	0.0	41.5	94.2	0.0	8.3	5.5	11.1	13.8	13.8	11.1	22.1
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°	6842.1	6842.1	6842.1	6842.1	6842.1	6842.1	6842.1	6842.1	6842.1	6842.1	6842.1
2.5°	6872.6	6878.2	6894.8	6897.5	6858.8	6808.9	6789.5	6781.2	6748.0	6745.2	6750.8
5°	6955.8	6980.7	6955.8	6883.7	6711.9	6470.9	6288.1	6138.5	6002.8	5961.2	5936.3
7.5°	7121.9	7146.8	7072.1	6789.5	6357.4	5878.2	5446.0	5141.3	4867.0	4764.6	4723.0
10°	7360.1	7393.4	7157.9	6587.3	5822.7	5052.6	4321.3	3806.1	3404.4	3241.0	3171.8
12.5°	7659.3	7673.2	7205.0	6279.8	5127.5	4027.7	2991.7	2440.4	2083.1	1950.2	1908.5
15°	7989.0	7969.6	7210.6	5861.6	4180.1	2847.7	1952.9	1603.9	1459.8	1415.5	1415.5
17.5°	8335.2	8254.8	7099.8	5257.6	3141.3	1947.4	1448.7	1365.6	1340.7	1329.6	1326.9
20°	8675.9	8495.9	6897.5	4468.2	2254.9	1454.3	1315.8	1290.9	1277.0	1271.5	1266.0
22.5°	8986.2	8678.7	6551.3	3551.2	1637.1	1285.4	1243.7	1221.6	1196.7	1185.6	1182.8
25°	9288.1	8783.9	6063.7	2695.3	1310.3	1202.2	1169.0	1127.4	1094.2	1080.4	1074.8
27.5°	9581.7	8850.5	5454.3	1994.4	1169.0	1124.6	1063.7	1005.5	980.6	975.1	969.5
30°	9894.7	8872.6	4761.7	1487.6	1083.1	1027.7	939.1	872.6	858.7	861.5	861.5
32.5°	10277.1	8905.8	4063.7	1218.8	1011.1	911.3	806.1	736.9	725.8	736.9	734.1
35°	10734.1	8972.3	3390.6	1121.9	947.4	792.2	678.7	620.5	609.5	617.8	615.0
37.5°	11354.6	9080.4	2761.8	1102.5	894.7	692.5	570.6	523.6	523.6	526.3	523.6
40°	12180.1	9368.5	2199.4	1088.7	867.0	617.8	482.0	462.6	470.9	476.4	476.4
42.5°	13185.6	9980.6	1820.0	1072.0	836.6	584.5	437.7	429.4	443.2	448.7	448.7
45°	14313.1	10756.2	1686.9	1044.4	808.8	606.7	418.3	407.2	423.8	426.6	429.4
47.5°	15479.2	11515.3	1670.3	1013.8	781.2	639.9	412.8	387.9	407.2	410.0	412.8
50°	16659.3	12011.2	1686.9	966.8	736.9	639.9	415.5	368.4	385.1	393.4	396.2
52.5°	17847.7	12238.3	1675.9	864.3	659.3	601.1	415.5	351.8	368.4	373.9	373.9
55°	19000.0	12193.9	1507.0	712.0	559.5	531.9	404.5	337.9	349.0	351.8	351.8
57.5°	19911.4	11576.2	1193.9	554.0	454.3	443.2	368.4	321.3	329.6	326.9	326.9
60°	20387.9	10218.8	853.2	426.6	357.3	349.0	324.1	299.2	304.7	290.9	288.1
62.5°	20393.4	8423.9	570.6	337.9	285.4	277.1	277.1	268.7	263.1	235.4	227.1
65°	19958.5	6432.2	379.5	268.7	229.9	216.1	232.7	229.9	210.5	171.8	166.3
67.5°	18972.3	4216.0	288.1	210.5	177.3	169.0	185.6	193.9	180.1	144.0	141.2
70°	16944.7	2454.3	238.2	163.4	132.9	124.6	149.5	166.3	149.5	116.3	110.8
72.5°	14074.9	1324.1	193.9	121.9	91.4	83.1	119.1	135.7	119.1	85.9	83.1
75°	9133.0	709.1	149.5	80.4	47.0	52.6	88.7	99.7	83.1	55.5	49.8
77.5°	3066.5	313.0	94.2	38.7	22.1	22.1	52.6	61.0	38.7	19.4	16.6
80°	684.2	130.2	38.7	16.6	8.3	8.3	11.1	11.1	5.5	0.0	0.0
82.5°	224.4	52.6	16.6	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	85.9	19.4	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	33.2	2.8	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)