

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: P883427

Luminaire Tested: **NAV-SB3D-735-U-T2**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883427  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3D-735-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

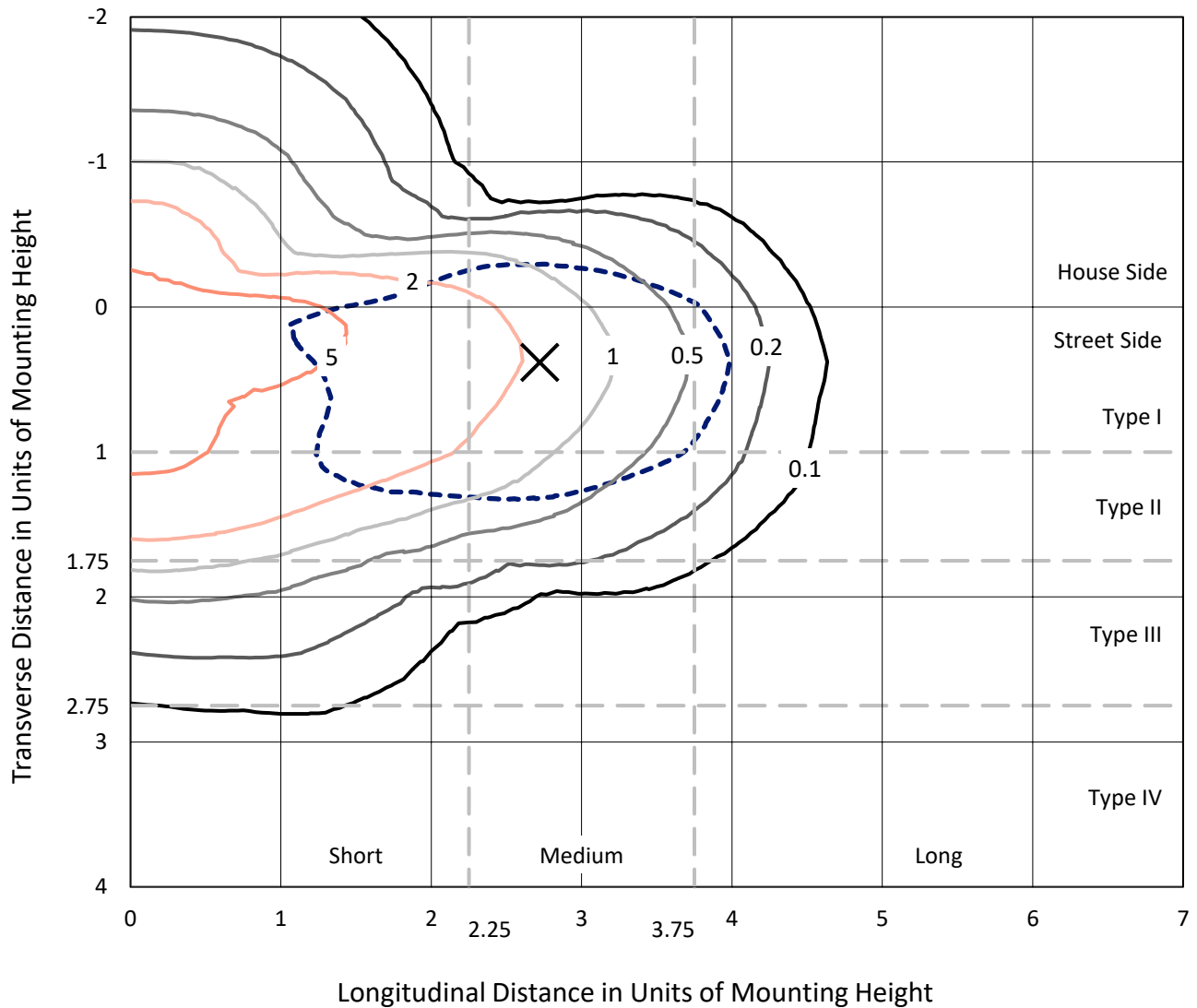
Lumens per Lamp: N/A  
Luminaire Lumens: 30243 lumens  
Efficiency: N/A  
Efficacy: 138.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 218.1  
Input Voltage (V): 120.0  
Input Current (Ain): 1.84  
Voltage Rise (V): NR  
Power Factor: 0.998  
Total Harmonic Distortion (THDi): 2.542  
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

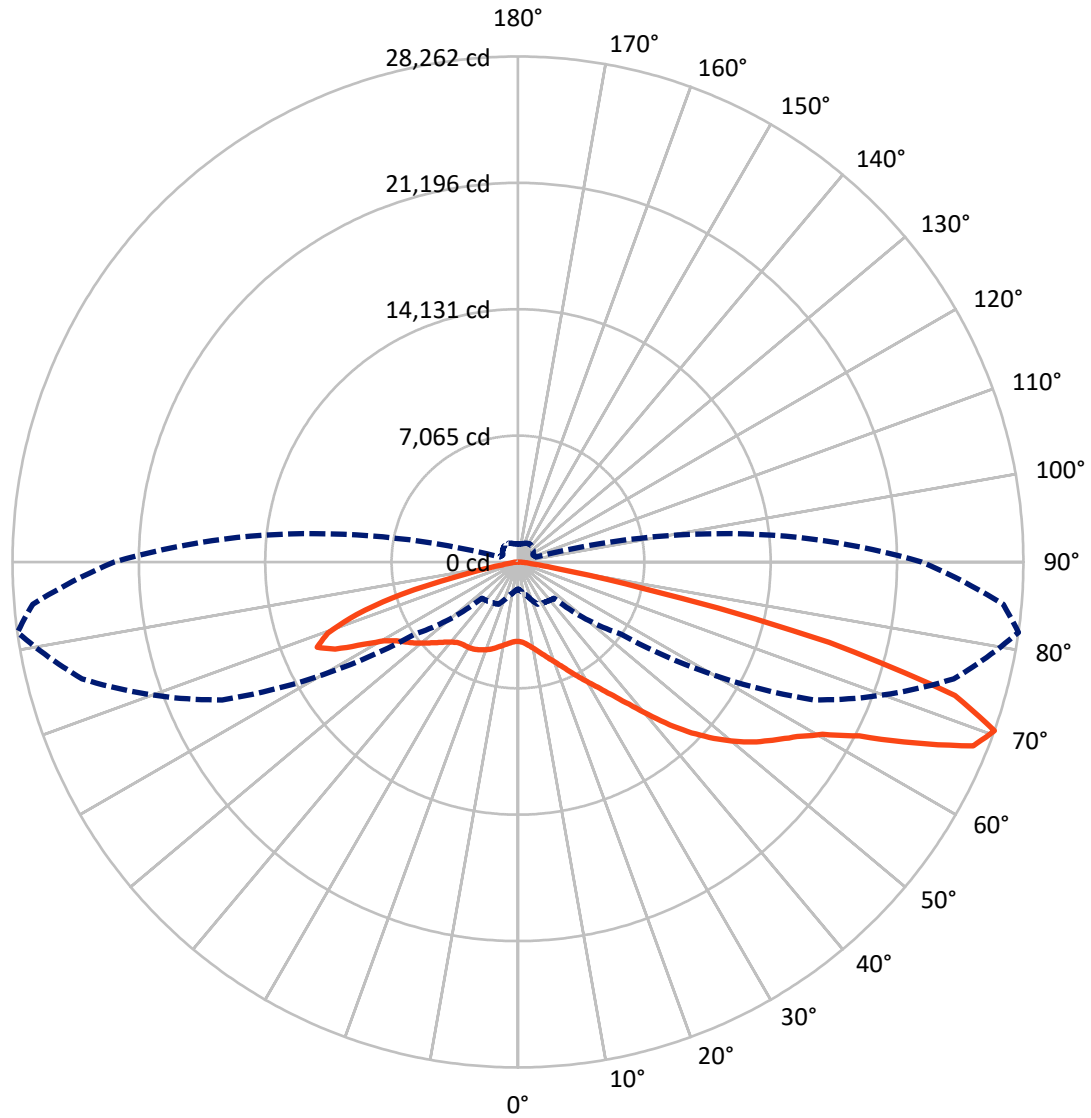
✕ Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7455.6	0.0	7455.6
	% Fixture	24.7	0.0	24.7
<b>Street Side</b>	Lumens	22787.4	0.0	22787.4
	% Fixture	75.3	0.0	75.3
<b>Total</b>	Lumens	30243.0	0.0	30243.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	418.6	1.4
10°-20°	1202.8	4.0
20°-30°	2012.2	6.7
30°-40°	3143.5	10.4
40°-50°	5006.4	16.6
50°-60°	6967.1	23.0
60°-70°	7287.8	24.1
70°-80°	3809.0	12.6
80°-90°	395.5	1.3
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°	30243.0	100.0
0°-180°	30243.0	100.0

**Coefficient of Utilization**

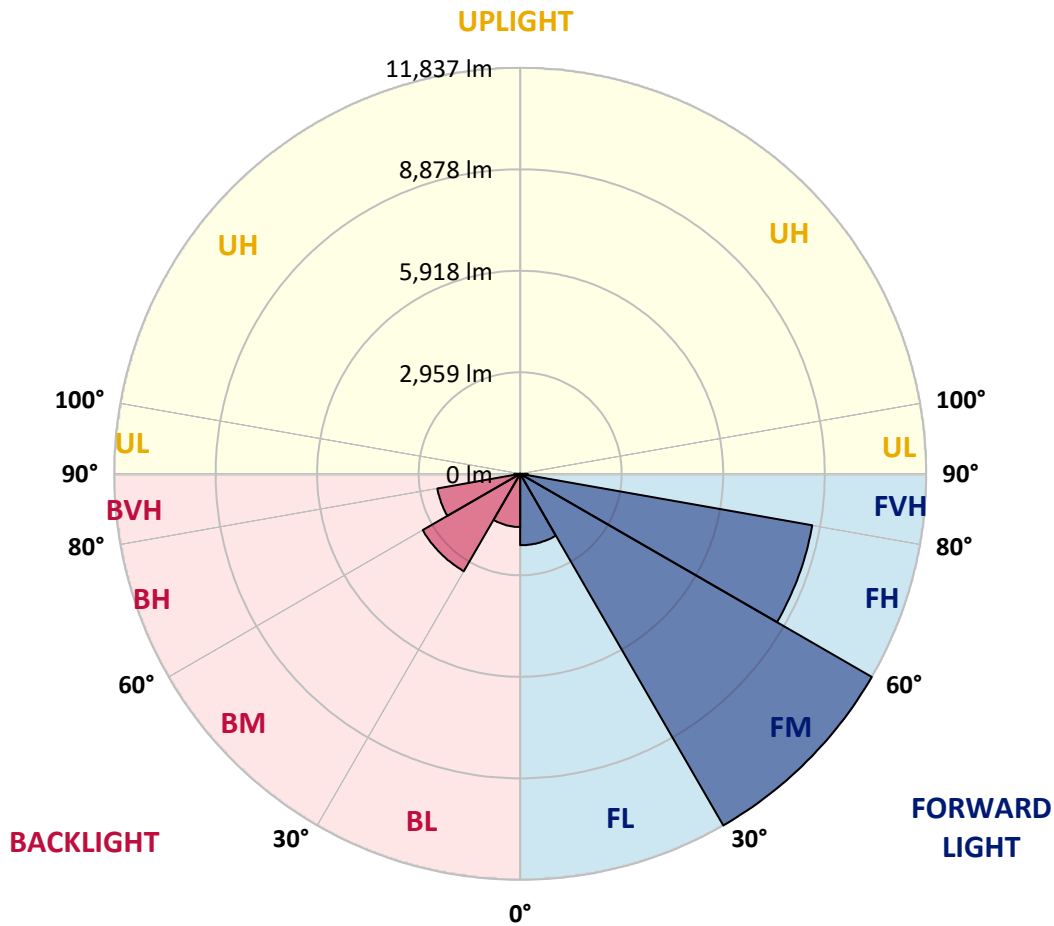


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2082.6	6.9			
FM (30°-60°)	11836.8	39.1			
FH (60°-80°)	8646.6	28.6			G4/12000
FVH (80°-90°)	221.4	0.7			G2/225
BL (0°-30°)	1551.0	5.1	B3/2500		
BM (30°-60°)	3280.2	10.8	B3/5000		
BH (60°-80°)	2450.3	8.1	B3/2500		G3/2500
BVH (80°-90°)	174.1	0.6			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 II Medium



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CATALOG NUMBER: NAV-SB3D-735-U-T2

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4434.0	4434.0	4434.0	4434.0	4434.0	4434.0	4434.0	4434.0	4434.0	4434.0	4434.0
2.5°	4539.9	4565.6	4557.6	4549.5	4549.5	4538.3	4536.7	4520.7	4507.8	4487.0	4482.1
5°	4597.7	4625.0	4621.8	4628.2	4649.0	4653.9	4658.7	4649.0	4623.4	4597.7	4586.5
7.5°	4546.3	4576.8	4586.5	4625.0	4689.2	4746.9	4790.3	4807.9	4783.8	4746.9	4729.3
10°	4373.0	4406.7	4440.4	4531.9	4645.8	4782.2	4897.8	4966.8	4962.0	4926.7	4896.2
12.5°	4021.6	4056.9	4129.1	4307.2	4515.8	4756.6	4971.6	5116.0	5165.8	5140.1	5087.1
15°	3740.7	3771.2	3825.8	4008.7	4279.9	4645.8	4998.9	5279.7	5406.5	5392.1	5327.9
17.5°	3732.7	3745.6	3779.3	3865.9	4074.5	4472.5	4970.0	5440.2	5682.5	5680.9	5600.7
20°	3873.9	3878.7	3898.0	3915.7	4034.4	4340.9	4896.2	5573.4	5992.2	5992.2	5905.6
22.5°	4069.7	4066.5	4085.8	4069.7	4127.5	4329.7	4849.6	5690.5	6337.3	6362.9	6253.8
25°	4363.4	4347.3	4342.5	4305.6	4316.9	4434.0	4901.0	5823.7	6746.5	6799.4	6663.0
27.5°	4755.0	4729.3	4711.6	4626.6	4597.7	4649.0	5058.3	5984.2	7202.2	7293.7	7120.4
30°	5265.3	5218.7	5193.1	5045.4	4941.1	4949.1	5295.8	6197.7	7678.9	7826.5	7606.6
32.5°	5961.8	5889.5	5820.5	5578.2	5387.2	5324.7	5602.3	6492.9	8195.6	8431.5	8149.1
35°	6741.7	6683.9	6610.1	6236.2	5942.5	5798.1	6016.3	6905.4	8800.6	9174.5	8807.0
37.5°	7492.7	7443.0	7478.3	6974.4	6595.6	6385.4	6558.7	7459.0	9546.8	10098.9	9631.9
40°	8269.4	8230.9	8235.7	7754.3	7313.0	7077.1	7216.7	8153.9	10402.2	11198.1	10623.6
42.5°	9113.5	9084.6	8988.4	8561.5	8065.6	7845.8	7974.1	8956.3	11320.1	12449.9	11711.7
45°	10058.7	10041.1	9951.2	9461.8	8893.7	8646.5	8819.9	9842.1	12242.9	13627.8	12804.5
47.5°	10875.6	10890.0	10878.8	10466.4	9877.4	9514.7	9721.7	10766.5	13101.4	14735.1	13852.4
50°	11268.8	11344.2	11454.9	11326.5	10960.6	10591.5	10631.7	11658.7	13919.8	15773.4	14857.0
52.5°	11063.3	11206.2	11507.9	11713.3	11854.5	11777.5	11669.9	12544.6	14690.1	16710.6	15807.1
55°	10297.9	10498.5	10999.1	11495.0	12215.6	12775.6	12916.9	13526.7	15441.2	17535.4	16705.7
57.5°	8903.3	9229.1	9678.4	10681.4	11894.6	13258.7	14370.8	14889.1	16237.1	18416.4	17646.1
60°	6512.2	6948.7	7507.2	8999.6	10771.3	13000.3	15608.1	16981.8	17368.5	19557.4	18870.6
62.5°	4167.6	4437.2	4950.7	6356.5	8393.0	11676.4	15986.8	19597.6	19286.2	21428.6	20706.5
65°	2853.3	3026.6	3496.8	4286.4	5425.8	8691.5	14972.6	21558.6	22332.1	24394.2	23845.4
67.5°	2073.4	2205.0	2606.2	3297.8	3535.3	5143.3	11618.6	21468.7	25292.9	27449.7	26596.0
70°	1511.7	1604.8	1941.8	2606.2	2720.1	2861.3	7038.6	18249.5	25228.7	28261.7	27239.5
72.5°	1120.1	1184.3	1410.6	2022.0	2201.8	1932.2	3484.0	13263.5	21678.9	25562.5	24742.5
75°	810.4	858.6	1025.5	1547.0	1762.0	1471.6	1738.0	7751.1	15121.8	17981.5	18126.0
77.5°	619.4	656.4	765.5	1133.0	1410.6	1104.1	1078.4	3565.8	7170.1	7205.5	7609.9
80°	497.5	521.6	580.9	797.6	1081.6	826.5	702.9	1439.5	2265.9	1917.7	2012.4
82.5°	365.9	406.0	491.1	560.1	773.5	569.7	428.5	727.0	861.8	741.4	747.8
85°	208.6	235.9	296.9	401.2	494.3	348.2	245.5	322.6	401.2	329.0	293.7
87.5°	73.8	96.3	104.3	157.3	215.0	144.4	94.7	93.1	131.6	97.9	81.8
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°	4434.0	4434.0	4434.0	4434.0	4434.0	4434.0	4434.0	4434.0	4434.0	4434.0	4434.0
2.5°	4466.1	4458.1	4426.0	4382.6	4337.7	4294.4	4279.9	4249.5	4228.6	4217.4	4230.2
5°	4556.0	4530.3	4454.9	4358.6	4257.5	4148.4	4071.3	4000.7	3949.4	3901.2	3920.5
7.5°	4684.3	4639.4	4509.4	4340.9	4161.2	3979.8	3845.0	3742.3	3673.3	3628.4	3638.0
10°	4833.6	4764.6	4565.6	4313.6	4036.0	3776.0	3617.2	3528.9	3485.6	3461.5	3467.9
12.5°	5005.3	4907.4	4623.4	4251.1	3845.0	3548.2	3439.0	3413.4	3415.0	3416.6	3419.8
15°	5217.1	5080.7	4669.9	4114.7	3596.3	3373.2	3354.0	3395.7	3439.0	3459.9	3458.3
17.5°	5456.2	5263.7	4677.9	3890.0	3352.4	3260.9	3321.9	3411.8	3477.6	3506.4	3512.9
20°	5713.0	5449.8	4620.2	3572.2	3151.8	3169.4	3278.6	3394.1	3466.3	3503.2	3512.9
22.5°	6006.7	5648.8	4482.1	3238.4	2988.1	3069.9	3198.3	3310.7	3386.1	3423.0	3432.6
25°	6342.1	5871.9	4265.5	2957.6	2846.9	2957.6	3086.0	3179.1	3240.0	3273.7	3283.4
27.5°	6714.4	6104.6	3976.6	2734.5	2723.3	2842.1	2948.0	3020.2	3052.3	3078.0	3087.6
30°	7088.3	6316.4	3626.8	2566.0	2615.8	2728.1	2803.5	2835.6	2845.3	2850.1	2861.3
32.5°	7492.7	6499.4	3259.3	2426.4	2513.1	2617.4	2662.3	2676.8	2631.8	2601.3	2611.0
35°	7982.2	6695.1	2899.8	2315.7	2412.0	2501.8	2516.3	2503.5	2450.5	2387.9	2391.1
37.5°	8587.2	6939.1	2612.6	2237.1	2317.3	2376.7	2359.0	2355.8	2360.6	2286.8	2291.6
40°	9328.6	7256.8	2402.4	2176.1	2240.3	2253.1	2203.4	2230.6	2254.7	2142.4	2145.6
42.5°	10151.8	7640.3	2269.2	2134.4	2176.1	2145.6	2068.6	2099.0	2095.8	1948.2	1946.6
45°	10991.1	8057.6	2222.6	2103.9	2116.7	2055.7	1970.7	1978.7	1911.3	1778.1	1782.9
47.5°	11825.6	8505.3	2251.5	2078.2	2042.9	1973.9	1908.1	1872.8	1773.3	1673.8	1673.8
50°	12644.0	8975.5	2357.4	2026.8	1941.8	1901.7	1853.5	1790.9	1685.0	1600.0	1593.5
52.5°	13403.1	9448.9	2476.2	1941.8	1815.0	1839.1	1808.6	1736.4	1632.1	1545.4	1547.0
55°	14122.0	9922.3	2522.7	1824.6	1696.3	1784.5	1766.9	1633.7	1508.5	1437.9	1431.5
57.5°	14905.2	10492.0	2471.4	1675.4	1600.0	1721.9	1654.5	1506.9	1434.7	1381.7	1376.9
60°	15990.0	11385.9	2360.6	1490.8	1508.5	1628.8	1513.3	1452.3	1373.7	1314.3	1311.1
62.5°	17792.2	13053.3	2182.5	1307.9	1401.0	1490.8	1445.9	1384.9	1304.7	1246.9	1246.9
65°	20456.1	15370.6	1847.1	1165.1	1280.6	1356.0	1373.7	1312.7	1229.3	1168.3	1171.5
67.5°	22702.8	16824.5	1397.8	1046.3	1157.0	1246.9	1296.7	1237.3	1149.0	1089.6	1091.2
70°	22579.2	15768.5	1067.2	929.2	1047.9	1139.4	1203.6	1157.0	1062.4	1006.2	1011.0
72.5°	20054.9	13191.3	863.4	810.4	937.2	1027.1	1104.1	1068.8	972.5	917.9	917.9
75°	14733.5	9363.9	690.1	690.1	799.2	909.9	995.0	972.5	884.2	845.7	834.5
77.5°	6210.5	3928.5	540.8	572.9	664.4	781.5	887.4	895.5	818.4	866.6	786.3
80°	1651.3	1083.2	412.4	450.9	521.6	645.1	771.9	768.7	685.2	640.3	595.4
82.5°	629.1	426.9	293.7	317.7	377.1	494.3	611.4	630.7	547.2	473.4	473.4
85°	242.3	182.9	181.3	191.0	219.9	327.4	462.2	478.2	412.4	349.8	361.1
87.5°	62.6	54.6	67.4	64.2	101.1	174.9	264.8	274.4	252.0	146.0	208.6
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)