

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: P883417

Luminaire Tested: **NAV-SB3D-730-U-T2**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883417  
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-730-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

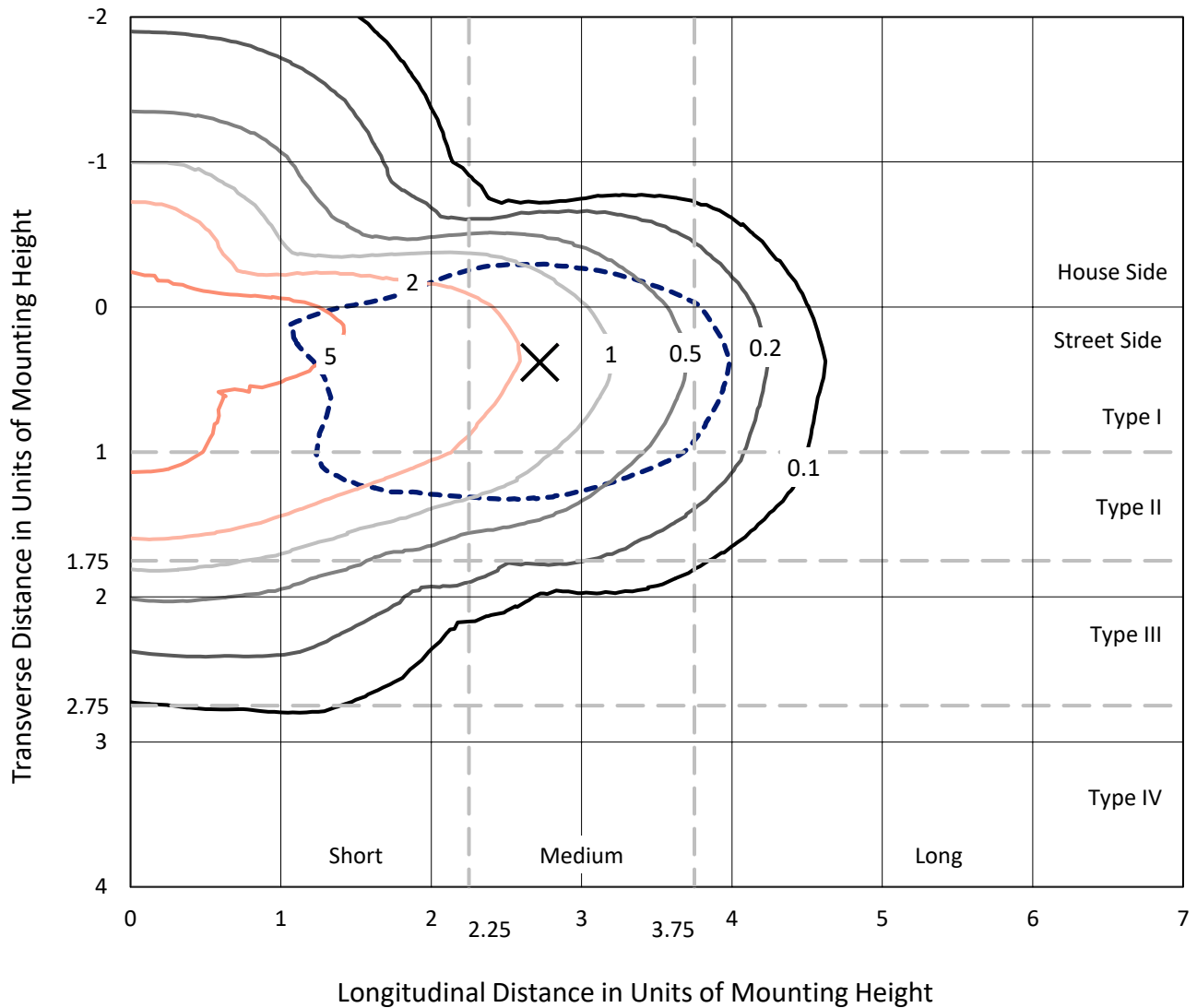
Lumens per Lamp: N/A  
Luminaire Lumens: 29771 lumens  
Efficiency: N/A  
Efficacy: 136.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 218.1  
Input Voltage (V): 120.0  
Input Current (Ain): 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

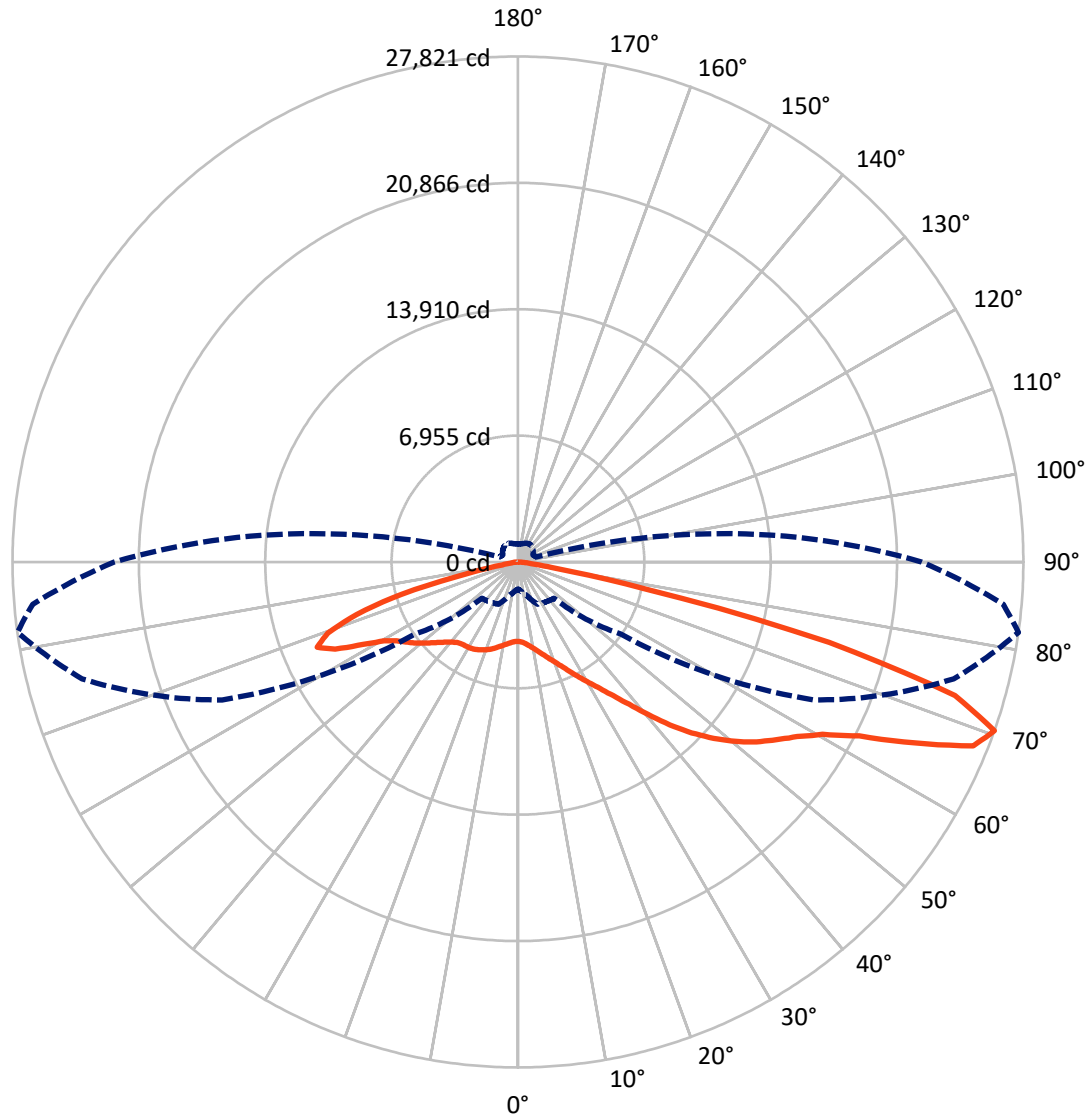
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 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	7339.3	0.0	7339.3
	% Fixture	24.7	0.0	24.7
<b>Street Side</b>	Lumens	22431.7	0.0	22431.7
	% Fixture	75.3	0.0	75.3
<b>Total</b>	Lumens	29771.0	0.0	29771.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	412.1	1.4
10°-20°	1184.0	4.0
20°-30°	1980.8	6.7
30°-40°	3094.5	10.4
40°-50°	4928.3	16.6
50°-60°	6858.3	23.0
60°-70°	7174.1	24.1
70°-80°	3749.6	12.6
80°-90°	389.4	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°	29771.0	100.0
0°-180°	29771.0	100.0

**Coefficient of Utilization**

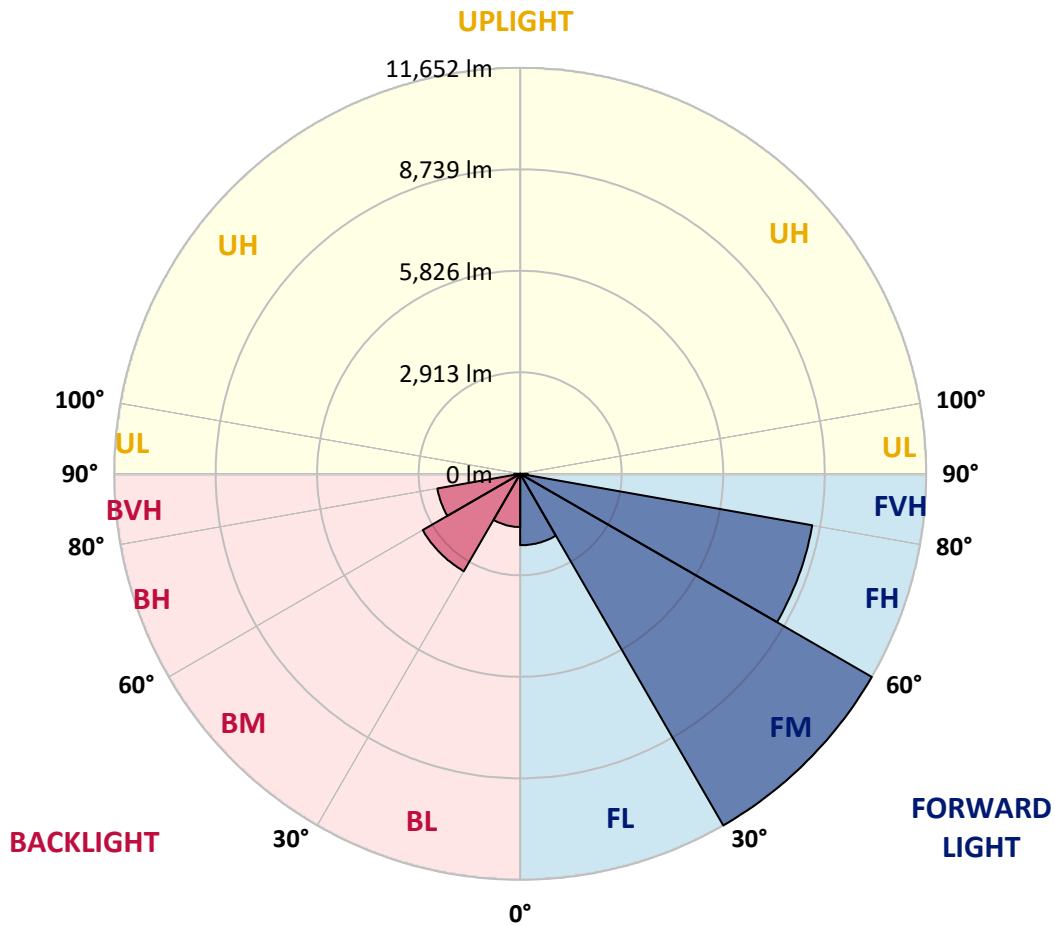


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2050.1	6.9			
FM (30°-60°)	11652.1	39.1			
FH (60°-80°)	8511.6	28.6			G4/12000
FVH (80°-90°)	218.0	0.7			G2/225
BL (0°-30°)	1526.8	5.1	B3/2500		
BM (30°-60°)	3229.0	10.8	B3/5000		
BH (60°-80°)	2412.1	8.1	B3/2500		G3/2500
BVH (80°-90°)	171.4	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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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4364.8	4364.8	4364.8	4364.8	4364.8	4364.8	4364.8	4364.8	4364.8	4364.8	4364.8
2.5°	4469.1	4494.3	4486.4	4478.5	4478.5	4467.5	4465.9	4450.1	4437.5	4416.9	4412.2
5°	4525.9	4552.8	4549.6	4555.9	4576.5	4581.2	4586.0	4576.5	4551.2	4525.9	4514.9
7.5°	4475.4	4505.4	4514.9	4552.8	4616.0	4672.8	4715.5	4732.9	4709.2	4672.8	4655.5
10°	4304.8	4337.9	4371.1	4461.2	4573.3	4707.6	4821.3	4889.3	4884.5	4849.8	4819.8
12.5°	3958.8	3993.6	4064.7	4240.0	4445.4	4682.3	4894.0	5036.2	5085.2	5059.9	5007.8
15°	3682.4	3712.4	3766.1	3946.2	4213.1	4573.3	4920.9	5197.3	5322.1	5307.9	5244.7
17.5°	3674.5	3687.1	3720.3	3805.6	4010.9	4402.7	4892.4	5355.3	5593.8	5592.3	5513.3
20°	3813.5	3818.2	3837.2	3854.5	3971.4	4273.2	4819.8	5486.4	5898.7	5898.7	5813.4
22.5°	4006.2	4003.0	4022.0	4006.2	4063.1	4262.1	4774.0	5601.7	6238.4	6263.6	6156.2
25°	4295.3	4279.5	4274.8	4238.4	4249.5	4364.8	4824.5	5732.8	6641.2	6693.3	6559.0
27.5°	4680.7	4655.5	4638.1	4554.4	4525.9	4576.5	4979.3	5890.8	7089.8	7179.9	7009.3
30°	5183.1	5137.3	5112.0	4966.7	4864.0	4871.9	5213.1	6100.9	7559.0	7704.4	7487.9
32.5°	5868.7	5797.6	5729.7	5491.2	5303.2	5241.6	5514.8	6391.6	8067.7	8299.9	8021.9
35°	6636.5	6579.6	6506.9	6138.8	5849.7	5707.6	5922.4	6797.6	8663.3	9031.3	8669.6
37.5°	7375.8	7326.8	7361.6	6865.5	6492.7	6285.8	6456.4	7342.6	9397.8	9941.3	9481.6
40°	8140.4	8102.4	8107.2	7633.3	7198.8	6966.6	7104.1	8026.6	10239.8	11023.4	10457.8
42.5°	8971.3	8942.9	8848.1	8427.9	7939.7	7723.3	7849.7	8816.5	11143.4	12255.6	11528.9
45°	9901.8	9884.4	9795.9	9314.1	8754.9	8511.6	8682.2	9688.5	12051.8	13415.1	12604.7
47.5°	10705.8	10720.1	10709.0	10303.0	9723.3	9366.2	9570.0	10598.4	12896.9	14505.1	13636.3
50°	11092.9	11167.1	11276.1	11149.8	10789.6	10426.2	10465.7	11476.8	13702.6	15527.2	14625.2
52.5°	10890.7	11031.3	11328.3	11530.5	11669.5	11593.7	11487.8	12348.8	14460.9	16449.8	15560.4
55°	10137.1	10334.6	10827.5	11315.6	12024.9	12576.3	12715.3	13315.6	15200.2	17261.7	16445.0
57.5°	8764.4	9085.0	9527.4	10514.7	11709.0	13051.7	14146.5	14656.8	15983.7	18129.0	17370.7
60°	6410.6	6840.2	7390.0	8859.1	10603.2	12797.4	15364.5	16716.7	17097.4	19252.2	18576.1
62.5°	4102.6	4368.0	4873.5	6257.3	8262.0	11494.1	15737.3	19291.7	18985.2	21094.2	20383.3
65°	2808.8	2979.4	3442.2	4219.5	5341.1	8555.8	14738.9	21222.1	21983.6	24013.5	23473.2
67.5°	2041.0	2170.6	2565.5	3246.4	3480.2	5063.0	11437.3	21133.7	24898.2	27021.3	26180.9
70°	1488.1	1579.7	1911.5	2565.5	2677.6	2816.7	6928.7	17964.7	24835.0	27820.7	26814.4
72.5°	1102.7	1165.8	1388.6	1990.5	2167.4	1902.0	3429.6	13056.5	21340.6	25163.6	24356.3
75°	797.8	845.2	1009.4	1522.9	1734.5	1448.6	1710.9	7630.1	14885.8	17700.9	17843.1
77.5°	609.8	646.1	753.5	1115.3	1388.6	1086.9	1061.6	3510.2	7058.2	7093.0	7491.1
80°	489.7	513.4	571.9	785.1	1064.7	813.6	691.9	1417.0	2230.6	1887.8	1981.0
82.5°	360.2	399.7	483.4	551.3	761.4	560.8	421.8	715.6	848.3	729.8	736.2
85°	205.4	232.2	292.3	394.9	486.6	342.8	241.7	317.5	394.9	323.8	289.1
87.5°	72.7	94.8	102.7	154.8	211.7	142.2	93.2	91.6	129.5	96.4	80.6
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°	4364.8	4364.8	4364.8	4364.8	4364.8	4364.8	4364.8	4364.8	4364.8	4364.8	4364.8
2.5°	4396.4	4388.5	4356.9	4314.2	4270.0	4227.4	4213.1	4183.1	4162.6	4151.5	4164.2
5°	4484.9	4459.6	4385.3	4290.6	4191.0	4083.6	4007.8	3938.3	3887.7	3840.3	3859.3
7.5°	4611.2	4567.0	4439.0	4273.2	4096.2	3917.7	3785.0	3683.9	3616.0	3571.8	3581.3
10°	4758.2	4690.2	4494.3	4246.3	3973.0	3717.1	3560.7	3473.8	3431.2	3407.5	3413.8
12.5°	4927.2	4830.8	4551.2	4184.7	3785.0	3492.8	3385.4	3360.1	3361.7	3363.3	3366.4
15°	5135.7	5001.4	4597.0	4050.4	3540.2	3320.6	3301.6	3342.7	3385.4	3405.9	3404.3
17.5°	5371.1	5181.5	4604.9	3829.3	3300.1	3210.0	3270.0	3358.5	3423.3	3451.7	3458.0
20°	5623.8	5364.8	4548.0	3516.5	3102.6	3120.0	3227.4	3341.1	3412.2	3448.6	3458.0
22.5°	5912.9	5560.7	4412.2	3187.9	2941.5	3022.0	3148.4	3259.0	3333.2	3369.6	3379.0
25°	6243.1	5780.2	4198.9	2911.4	2802.4	2911.4	3037.8	3129.5	3189.5	3222.7	3232.1
27.5°	6609.6	6009.3	3914.6	2691.9	2680.8	2797.7	2902.0	2973.1	3004.7	3029.9	3039.4
30°	6977.7	6217.8	3570.2	2526.0	2575.0	2685.5	2759.8	2791.4	2800.9	2805.6	2816.7
32.5°	7375.8	6397.9	3208.4	2388.6	2473.9	2576.5	2620.8	2635.0	2590.8	2560.7	2570.2
35°	7857.6	6590.6	2854.6	2279.6	2374.3	2462.8	2477.0	2464.4	2412.3	2350.6	2353.8
37.5°	8453.1	6830.8	2571.8	2202.1	2281.1	2339.6	2322.2	2319.0	2323.8	2251.1	2255.9
40°	9183.0	7143.6	2364.9	2142.1	2205.3	2217.9	2169.0	2195.8	2219.5	2108.9	2112.1
42.5°	9993.4	7521.1	2233.7	2101.0	2142.1	2112.1	2036.3	2066.3	2063.1	1917.8	1916.2
45°	10819.6	7931.8	2187.9	2071.0	2083.7	2023.6	1939.9	1947.8	1881.5	1750.3	1755.1
47.5°	11641.0	8372.6	2216.4	2045.8	2011.0	1943.1	1878.3	1843.5	1745.6	1647.7	1647.7
50°	12446.7	8835.4	2320.6	1995.2	1911.5	1872.0	1824.6	1763.0	1658.7	1575.0	1568.7
52.5°	13193.9	9301.5	2437.5	1911.5	1786.7	1810.4	1780.4	1709.3	1606.6	1521.3	1522.9
55°	13901.6	9767.5	2483.3	1796.2	1669.8	1756.7	1739.3	1608.2	1484.9	1415.4	1409.1
57.5°	14672.6	10328.3	2432.8	1649.2	1575.0	1695.1	1628.7	1483.4	1412.3	1360.1	1355.4
60°	15740.5	11208.2	2323.8	1467.6	1484.9	1603.4	1489.7	1429.7	1352.3	1293.8	1290.6
62.5°	17514.5	12849.5	2148.4	1287.5	1379.1	1467.6	1423.3	1363.3	1284.3	1227.5	1227.5
65°	20136.9	15130.7	1818.3	1146.9	1260.6	1334.9	1352.3	1292.2	1210.1	1150.0	1153.2
67.5°	22348.5	16561.9	1375.9	1030.0	1139.0	1227.5	1276.4	1218.0	1131.1	1072.6	1074.2
70°	22226.8	15522.5	1050.5	914.7	1031.6	1121.6	1184.8	1139.0	1045.8	990.5	995.2
72.5°	19741.9	12985.4	849.9	797.8	922.6	1011.0	1086.9	1052.1	957.3	903.6	903.6
75°	14503.5	9217.7	679.3	679.3	786.7	895.7	979.4	957.3	870.4	832.5	821.5
77.5°	6113.6	3867.2	532.4	564.0	654.0	769.3	873.6	881.5	805.7	853.1	774.1
80°	1625.5	1066.3	406.0	443.9	513.4	635.1	759.9	756.7	674.5	630.3	586.1
82.5°	619.3	420.2	289.1	312.8	371.2	486.6	601.9	620.8	538.7	466.0	466.0
85°	238.5	180.1	178.5	188.0	216.4	322.3	455.0	470.8	406.0	344.4	355.4
87.5°	61.6	53.7	66.3	63.2	99.5	172.2	260.7	270.1	248.0	143.8	205.4
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)