

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: P884799

Luminaire Tested: **NAV-SB5D-740-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884799  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5D-740-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 55708 lumens  
Efficiency: N/A  
Efficacy: 152.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U0 - G5

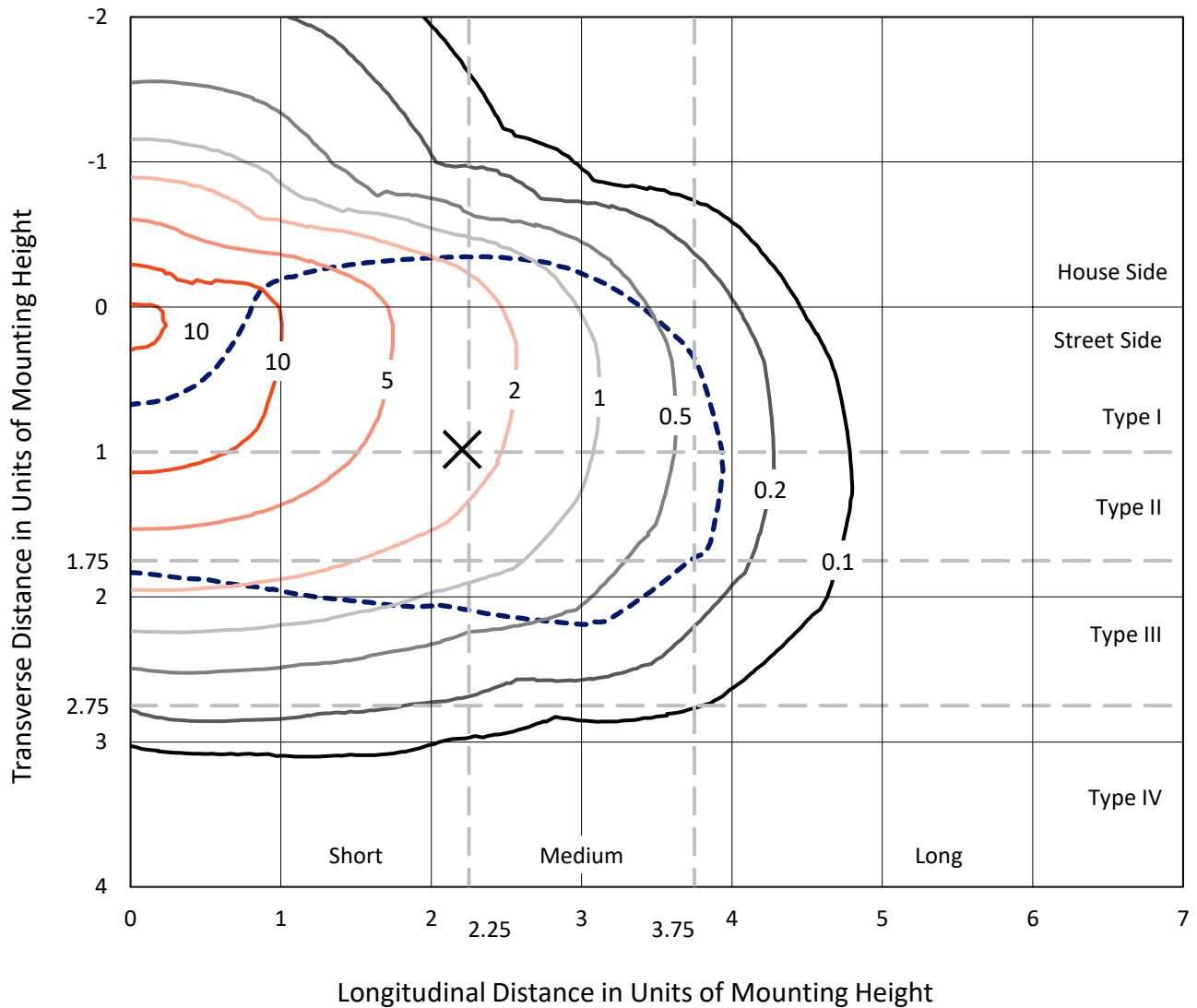
Input Watts (W): 364.9  
Input Voltage (V): 120.0  
Input Current (Ain): 3.094  
Voltage Rise (V): NR  
Power Factor: 0.998  
Total Harmonic Distortion (THDi): 3.28  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

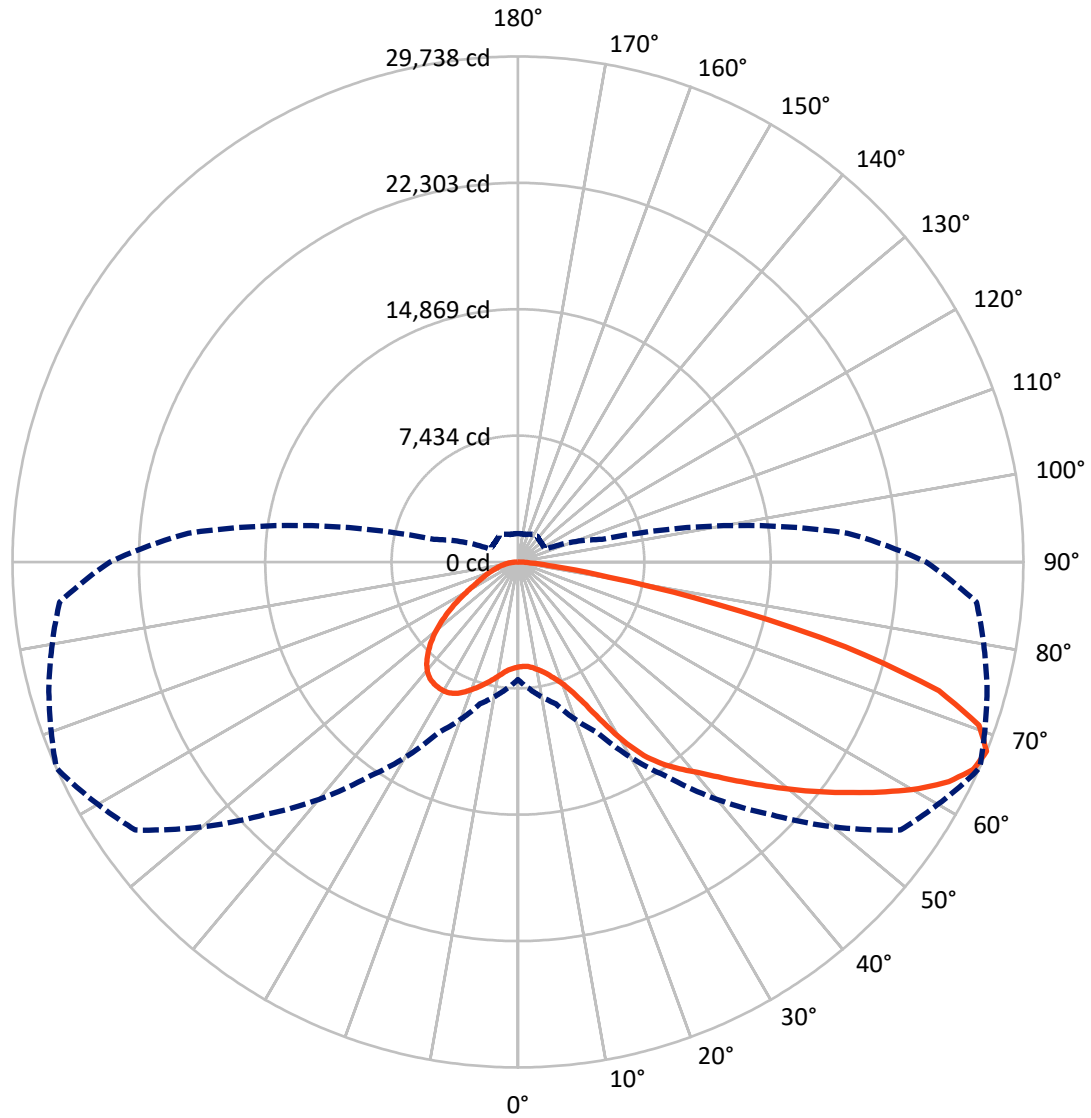
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	13851.6	0.0	13851.6
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	41856.4	0.0	41856.4
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	55708.0	0.0	55708.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	612.6	1.1
10°-20°	2023.9	3.6
20°-30°	3901.0	7.0
30°-40°	6840.0	12.3
40°-50°	10168.8	18.3
50°-60°	12889.9	23.1
60°-70°	12612.5	22.6
70°-80°	6016.3	10.8
80°-90°	643.0	1.2
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°	55708.0	100.0
0°-180°	55708.0	100.0

**Coefficient of Utilization**



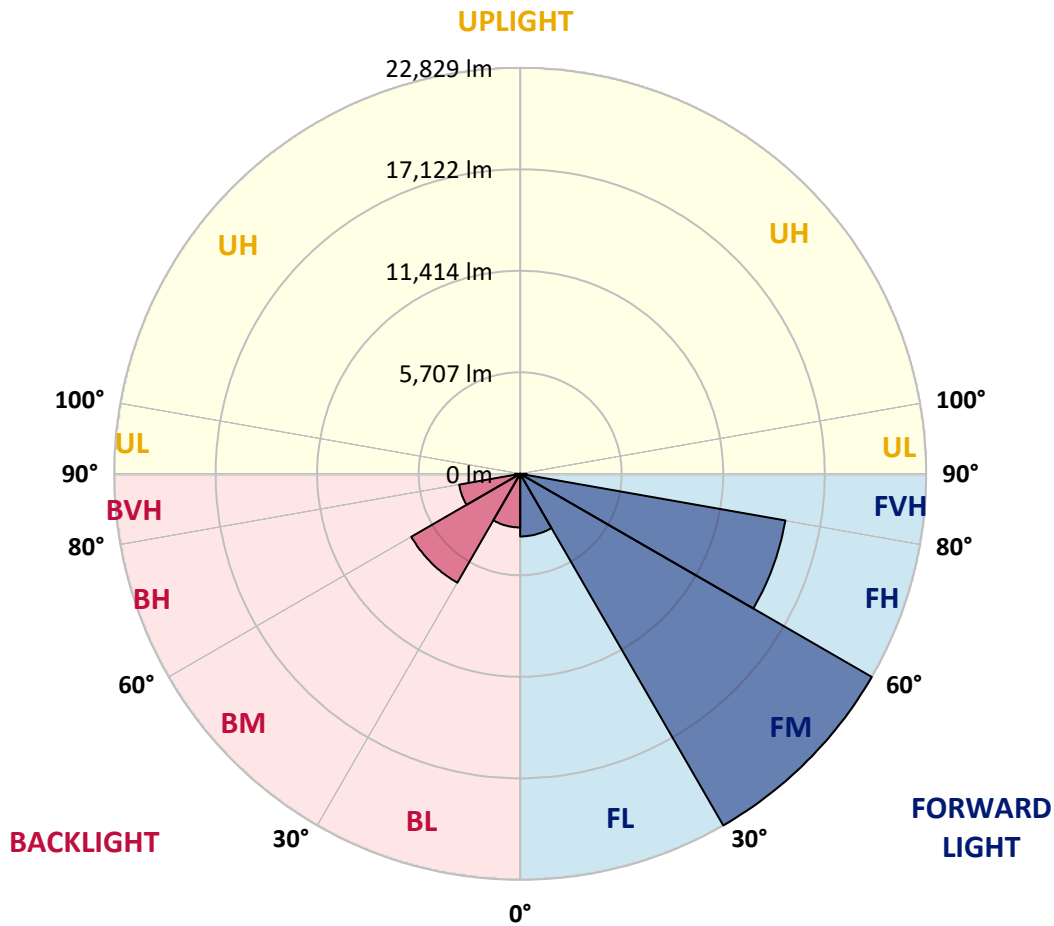
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3520.2	6.3			
FM (30°-60°)	22828.7	41.0			
FH (60°-80°)	15143.0	27.2			G5
FVH (80°-90°)	364.5	0.7			G3/500
BL (0°-30°)	3017.4	5.4	B4/5000		
BM (30°-60°)	7070.0	12.7	B4/8500		
BH (60°-80°)	3485.8	6.3	B4/5000		G4/5000
BVH (80°-90°)	278.4	0.5			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G5**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	6178.8	6178.8	6178.8	6178.8	6178.8	6178.8	6178.8	6178.8	6178.8	6178.8	6178.8
2.5°	6114.4	6149.5	6140.7	6126.1	6123.1	6129.0	6137.8	6146.6	6143.6	6158.3	6181.7
5°	6096.8	6131.9	6129.0	6129.0	6140.7	6164.1	6178.8	6193.4	6178.8	6196.3	6228.5
7.5°	6108.5	6134.8	6146.6	6158.3	6187.5	6231.4	6266.6	6298.8	6281.2	6301.7	6342.7
10°	6257.8	6278.3	6290.0	6290.0	6310.5	6360.2	6395.3	6453.9	6439.3	6471.4	6524.1
12.5°	6530.0	6550.5	6550.5	6538.8	6553.4	6585.6	6597.3	6661.7	6635.4	6688.0	6740.7
15°	6863.7	6904.6	6872.4	6851.9	6857.8	6890.0	6887.1	6936.8	6910.5	6954.4	7001.2
17.5°	7232.4	7285.1	7232.4	7229.5	7217.8	7252.9	7255.9	7299.8	7252.9	7285.1	7317.3
20°	7668.6	7741.7	7697.8	7712.5	7686.1	7700.8	7715.4	7779.8	7706.6	7730.0	7721.2
22.5°	8283.2	8371.0	8324.2	8379.8	8362.2	8350.5	8347.6	8461.8	8347.6	8356.4	8271.5
25°	9178.9	9284.2	9202.3	9278.4	9278.4	9316.4	9360.3	9506.7	9316.4	9260.8	9041.3
27.5°	10501.8	10607.2	10446.2	10493.1	10478.4	10572.1	10525.2	10888.2	10683.3	10592.6	10150.6
30°	12094.1	12281.4	11977.0	11965.3	11950.7	12099.9	12167.3	12407.3	12199.5	12108.7	11576.0
32.5°	13815.1	14011.2	13648.3	13542.9	13487.3	13578.0	13522.4	13715.6	13572.2	13431.7	12773.1
35°	15635.7	15828.8	15483.5	15278.6	15056.1	14865.9	14666.9	14716.6	14582.0	14368.3	13686.3
37.5°	17356.7	17710.9	17345.0	17125.5	16715.7	16344.0	15787.9	15556.6	15430.8	15234.7	14546.9
40°	19109.9	19311.9	19033.8	18846.5	18401.6	17819.2	16929.4	16440.6	16270.8	16080.6	15498.1
42.5°	20400.7	20593.9	20444.6	20315.8	19967.5	19291.4	18141.1	17529.4	17283.5	17069.9	16575.2
45°	21425.1	21568.6	21474.9	21521.7	21372.5	20716.8	19396.8	18697.2	18442.6	18182.1	17792.8
47.5°	21837.8	21990.0	22139.3	22417.4	22672.0	22189.1	20746.1	19961.7	19692.4	19426.0	19042.6
50°	21791.0	21946.1	22379.3	22970.6	23760.8	23599.9	22168.6	21308.1	21059.3	20754.9	20400.7
52.5°	21416.4	21592.0	22148.1	23131.5	24390.1	24656.5	23617.4	22698.4	22464.2	22101.3	21747.1
55°	20432.9	20538.3	21372.5	22765.7	24539.4	25394.1	25037.0	24179.4	23945.2	23438.9	23052.5
57.5°	18609.4	18761.6	19976.3	21779.3	24164.8	25894.6	26283.8	25736.5	25511.1	24782.3	24378.4
60°	16229.8	16472.8	17863.1	20122.7	23210.6	25891.6	27416.6	27267.3	27080.0	26105.3	25683.8
62.5°	13537.1	13818.0	15155.7	17781.1	21542.2	25157.0	28124.9	28549.3	28452.7	27325.8	26787.3
65°	10396.5	10589.6	11921.4	14751.7	18946.0	23579.4	28206.8	29424.4	29442.0	28253.7	27363.9
67.5°	6922.2	7478.3	8634.4	11069.7	15468.8	21000.7	27486.8	29567.9	29737.6	28572.7	27074.1
70°	3377.7	4109.4	5242.1	7194.4	11069.7	17046.5	25604.8	28391.2	28768.8	27641.9	25347.2
72.5°	1402.0	1639.1	2256.7	3550.4	6354.4	11502.8	21823.2	25200.9	25900.4	24492.6	21311.0
75°	945.4	1024.4	1290.8	1820.6	2894.7	5672.4	15738.1	18790.9	19917.8	18498.2	15120.5
77.5°	728.8	778.6	939.5	1273.2	1721.0	2145.4	8423.7	11324.3	11906.8	11022.8	7867.6
80°	573.7	611.7	702.5	927.8	1220.5	1147.4	2871.3	5130.9	5467.5	4586.5	2528.9
82.5°	497.6	512.2	503.4	629.3	810.8	670.3	942.5	1893.7	2089.8	1516.2	825.4
85°	360.0	401.0	418.6	389.3	430.3	339.5	386.4	670.3	737.6	658.6	465.4
87.5°	146.3	216.6	266.4	251.7	158.1	96.6	120.0	196.1	225.4	245.9	152.2
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°	6178.8	6178.8	6178.8	6178.8	6178.8	6178.8	6178.8	6178.8	6178.8	6178.8	6178.8
2.5°	6184.6	6205.1	6219.7	6237.3	6249.0	6266.6	6301.7	6322.2	6325.1	6339.7	6336.8
5°	6240.2	6269.5	6301.7	6348.5	6401.2	6445.1	6512.4	6559.3	6576.8	6591.5	6588.5
7.5°	6360.2	6401.2	6459.7	6541.7	6617.8	6676.3	6758.3	6813.9	6869.5	6890.0	6892.9
10°	6538.8	6597.3	6682.2	6793.4	6875.4	6951.5	7036.3	7083.2	7138.8	7162.2	7173.9
12.5°	6761.2	6822.7	6933.9	7089.0	7165.1	7217.8	7247.1	7235.4	7247.1	7267.6	7273.4
15°	7015.9	7083.2	7209.0	7375.9	7428.6	7381.7	7317.3	7258.8	7250.0	7255.9	7276.4
17.5°	7317.3	7367.1	7513.4	7653.9	7615.9	7422.7	7282.2	7188.5	7141.7	7127.1	7147.6
20°	7738.8	7738.8	7858.8	7946.6	7692.0	7364.2	7144.6	6992.4	6895.9	6854.9	6846.1
22.5°	8251.0	8204.2	8280.3	8218.8	7677.3	7200.3	6895.9	6632.4	6486.1	6427.5	6418.8
25°	8900.8	8845.2	8824.7	8444.2	7572.0	6939.8	6445.1	6126.1	5997.3	5965.1	5970.9
27.5°	9881.3	9740.8	9474.5	8567.1	7378.8	6530.0	5918.3	5622.6	5549.5	5552.4	5561.2
30°	11186.7	10905.7	10253.0	8587.6	7062.7	5950.5	5379.7	5169.0	5133.8	5148.5	5198.2
32.5°	12395.6	12129.2	11049.2	8494.0	6576.8	5382.6	4896.8	4756.3	4703.6	4721.1	4744.6
35°	13343.9	13270.7	11786.8	8362.2	5979.7	4849.9	4463.6	4343.6	4241.1	4217.7	4235.3
37.5°	14239.5	14210.3	12339.9	8177.8	5388.5	4472.4	4115.3	3957.2	3807.9	3726.0	3728.9
40°	15223.0	15193.7	12702.9	7893.9	4864.6	4144.5	3802.1	3594.3	3409.9	3260.6	3275.2
42.5°	16329.4	16156.7	12875.6	7487.1	4419.7	3866.5	3547.4	3266.5	3023.5	2886.0	2894.7
45°	17538.2	17148.9	12872.6	6969.0	4045.0	3611.8	3275.2	2877.2	2651.8	2523.0	2517.2
47.5°	18820.2	18097.2	12714.6	6395.3	3682.1	3330.8	2853.8	2549.4	2400.1	2321.1	2303.5
50°	20143.1	18984.1	12445.3	5736.8	3310.4	3011.8	2590.3	2382.5	2268.4	2195.2	2168.9
52.5°	21387.1	19789.0	12120.4	4990.4	2932.8	2701.6	2473.3	2312.3	2192.3	2110.3	2075.2
55°	22543.2	20482.7	11660.9	4226.5	2625.5	2493.7	2417.6	2283.0	2145.4	2048.9	2010.8
57.5°	23570.6	20933.4	10867.7	3509.4	2405.9	2350.3	2359.1	2233.2	2075.2	1993.2	1940.6
60°	24425.2	21264.2	9694.0	2845.0	2227.4	2209.8	2268.4	2139.6	1955.2	1861.5	1820.6
62.5°	24937.5	21258.3	8253.9	2329.8	2075.2	2081.0	2148.4	2022.5	1835.2	1747.4	1721.0
65°	24893.6	20737.3	6673.4	1993.2	1928.8	1934.7	2022.5	1893.7	1735.7	1683.0	1680.1
67.5°	24012.5	19467.0	5119.2	1773.7	1767.9	1794.2	1896.7	1805.9	1674.2	1668.4	1677.1
70°	21627.1	16829.9	3687.9	1598.1	1601.0	1639.1	1773.7	1750.3	1642.0	1653.7	1650.8
72.5°	17342.1	12831.7	2476.2	1413.7	1416.6	1478.1	1656.6	1706.4	1609.8	1764.9	1788.4
75°	11549.7	8002.2	1592.3	1217.6	1220.5	1299.6	1554.2	1621.5	1522.0	1759.1	1773.7
77.5°	5549.5	3597.2	1153.2	1024.4	1024.4	1097.6	1343.5	1451.8	1296.6	1366.9	1252.7
80°	1917.1	1352.2	907.3	825.4	807.8	857.6	1132.7	1258.6	1118.1	1030.3	965.9
82.5°	755.1	702.5	728.8	641.0	582.5	614.7	881.0	1039.1	822.5	743.4	740.5
85°	433.2	456.6	515.1	424.4	336.6	377.6	646.9	746.4	620.5	547.3	559.0
87.5°	117.1	161.0	237.1	219.5	152.2	161.0	307.3	412.7	357.1	275.1	283.9
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)