

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: P884761

Luminaire Tested: **NAV-SB5D-722-U-T4FT**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884761  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5D-722-U-T4FT  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

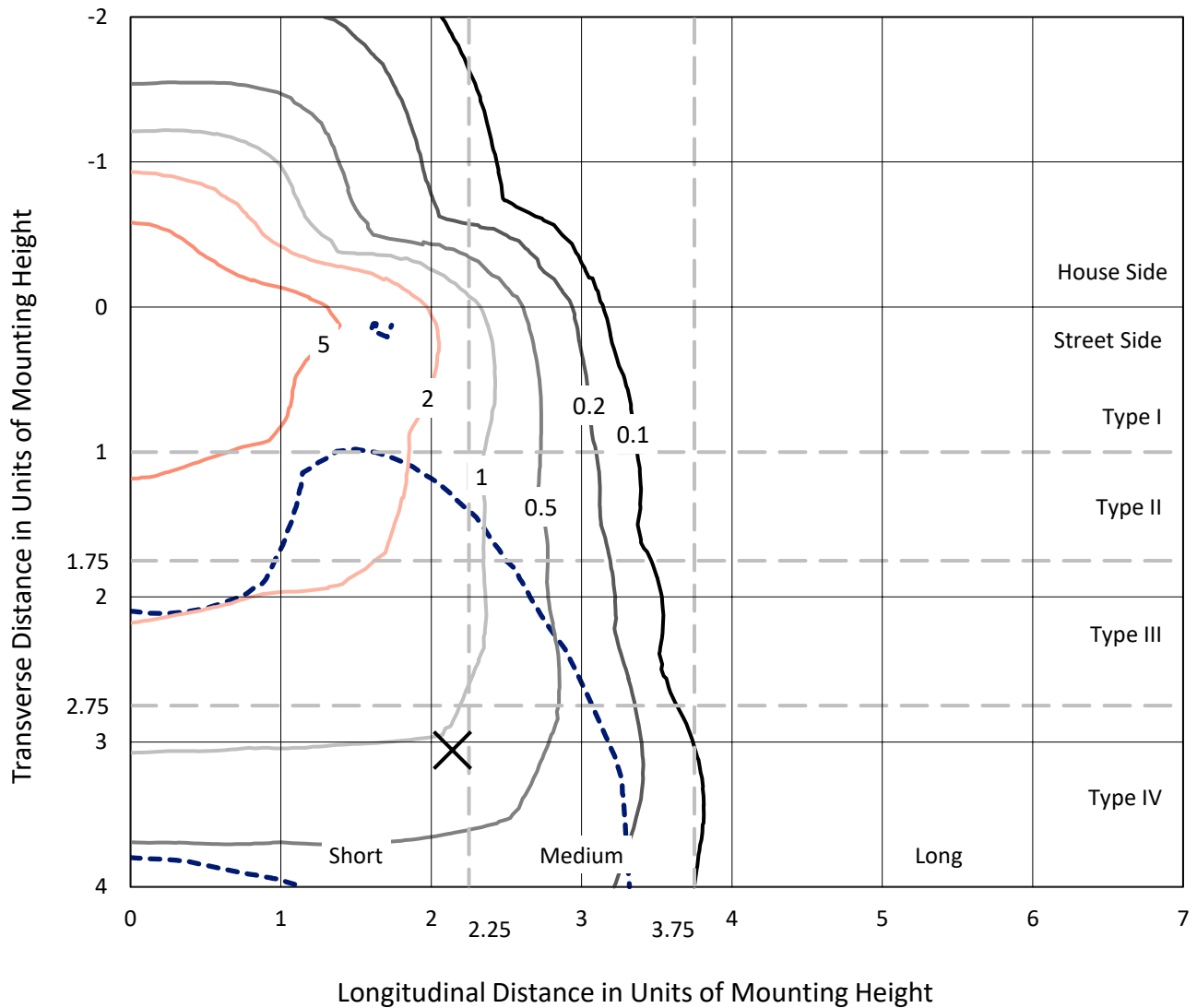
Lumens per Lamp: N/A  
Luminaire Lumens: 40670 lumens  
Efficiency: N/A  
Efficacy: 111.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5  
  
Input Watts (W): 364.9  
Input Voltage (V): 120.0  
Input Current (Ain): 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

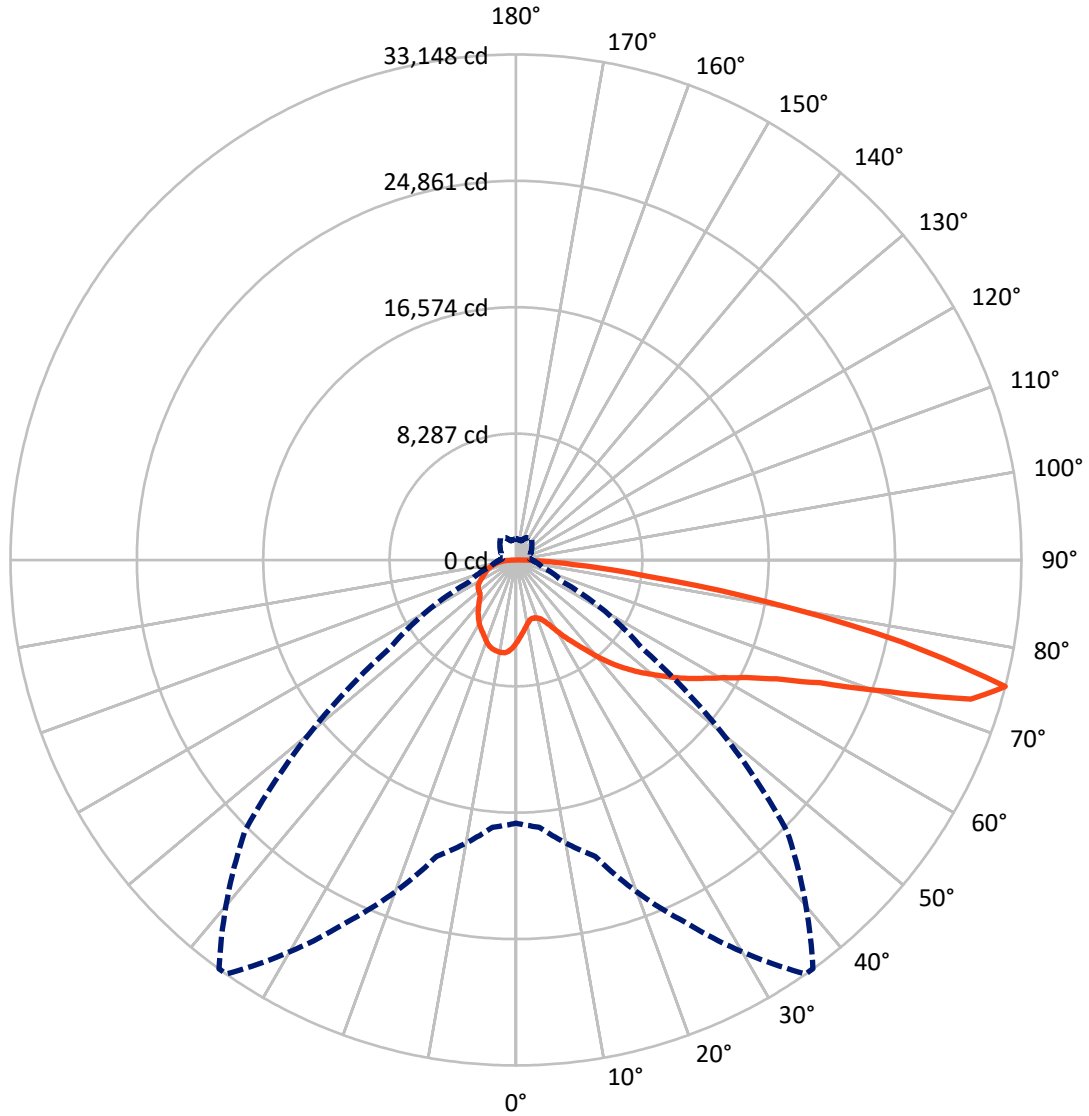
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.6 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9678.4	0.0	9678.4
	% Fixture	23.8	0.0	23.8
<b>Street Side</b>	Lumens	30991.6	0.0	30991.6
	% Fixture	76.2	0.0	76.2
<b>Total</b>	Lumens	40670.0	0.0	40670.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	513.1	1.3
10°-20°	1480.1	3.6
20°-30°	2485.4	6.1
30°-40°	3862.7	9.5
40°-50°	5733.3	14.1
50°-60°	7915.1	19.5
60°-70°	9602.8	23.6
70°-80°	7936.0	19.5
80°-90°	1141.4	2.8
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°	40670.0	100.0
0°-180°	40670.0	100.0

**Coefficient of Utilization**



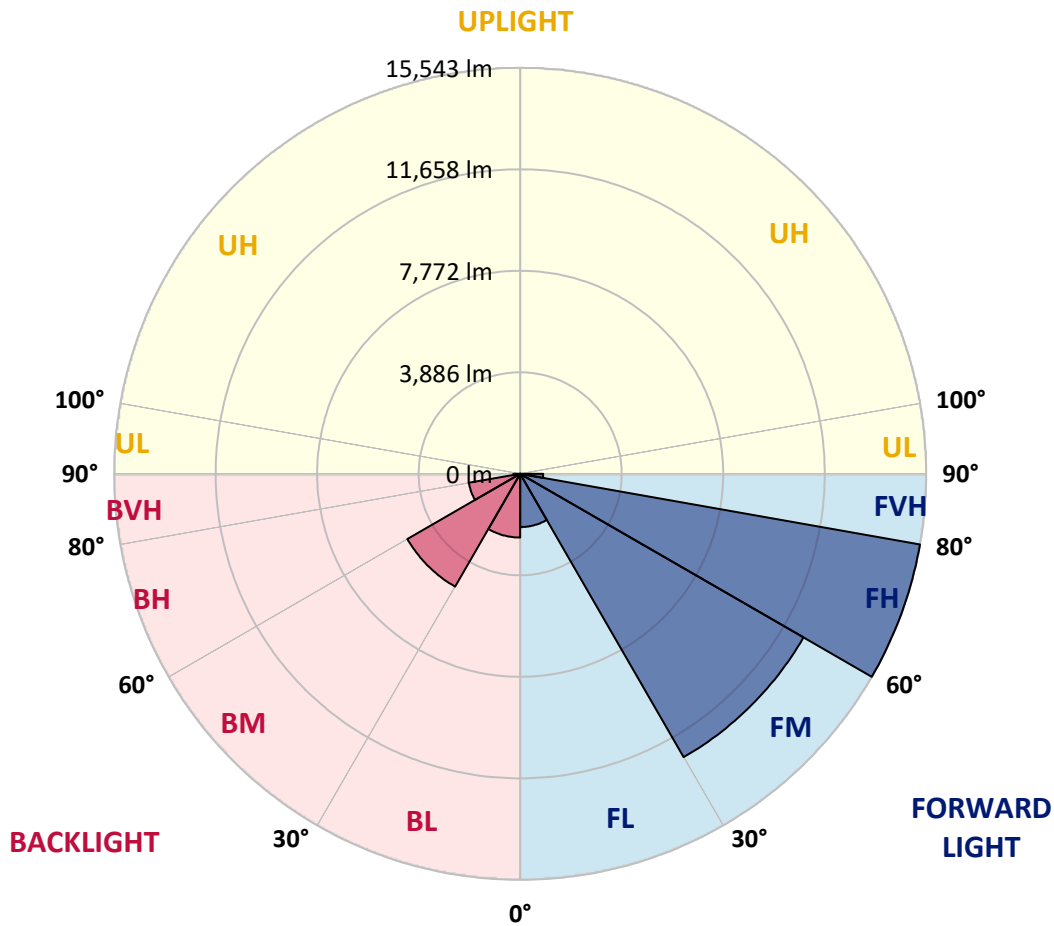
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2039.5	5.0			
FM (30°-60°)	12524.2	30.8			
FH (60°-80°)	15543.5	38.2			G5
FVH (80°-90°)	884.4	2.2			G5
BL (0°-30°)	2439.1	6.0	B3/2500		
BM (30°-60°)	4986.9	12.3	B3/5000		
BH (60°-80°)	1995.4	4.9	B3/2500		G3/2500
BVH (80°-90°)	257.0	0.6			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	5419.6	5419.6	5419.6	5419.6	5419.6	5419.6	5419.6	5419.6	5419.6	5419.6	5419.6
2.5°	4997.4	5028.2	5041.4	5034.8	5067.8	5063.4	5109.5	5166.7	5245.9	5322.8	5434.9
5°	4612.7	4645.6	4674.2	4700.6	4764.4	4784.2	4856.7	4966.6	5111.7	5259.1	5443.7
7.5°	4254.3	4282.9	4326.8	4375.2	4482.9	4502.7	4623.7	4795.1	4997.4	5212.9	5467.9
10°	3961.9	3990.5	4036.6	4091.6	4225.7	4249.9	4403.8	4632.5	4896.3	5168.9	5494.3
12.5°	3836.6	3845.4	3871.7	3926.7	4043.2	4058.6	4227.9	4489.5	4797.3	5135.9	5533.9
15°	3830.0	3847.6	3849.8	3878.3	3975.1	3981.7	4137.8	4397.2	4735.8	5129.3	5593.2
17.5°	3895.9	3909.1	3889.3	3906.9	3988.3	3999.3	4122.4	4353.2	4716.0	5157.9	5694.4
20°	4071.8	4082.8	4023.4	3999.3	4058.6	4067.4	4188.3	4381.8	4735.8	5217.3	5832.9
22.5°	4445.6	4452.2	4307.1	4208.1	4212.5	4216.9	4322.5	4498.3	4812.7	5325.0	6008.8
25°	5028.2	5023.8	4793.0	4601.7	4491.7	4467.6	4537.9	4687.4	4942.5	5467.9	6235.2
27.5°	5709.8	5676.8	5445.9	5160.1	4920.5	4885.3	4869.9	4933.7	5127.1	5657.0	6512.3
30°	6479.3	6448.5	6200.1	5826.3	5494.3	5437.1	5292.0	5259.1	5402.0	5914.2	6897.0
32.5°	7323.5	7303.8	7006.9	6554.0	6109.9	6044.0	5799.9	5712.0	5824.1	6303.4	7433.5
35°	8031.5	8013.9	7767.7	7301.6	6758.5	6677.2	6428.7	6329.8	6386.9	6802.5	8134.8
37.5°	8671.3	8662.5	8451.4	8084.3	7523.6	7424.7	7145.5	7112.5	7101.5	7459.9	8985.7
40°	9264.9	9242.9	9023.1	8829.6	8414.0	8323.9	8077.7	8049.1	7965.5	8268.9	9948.7
42.5°	9922.3	9865.1	9546.3	9456.2	9344.1	9269.3	9122.0	9126.4	8941.7	9181.4	10968.8
45°	10458.7	10425.8	10098.2	10045.4	10166.3	10135.6	10263.1	10296.1	9937.7	10137.8	12028.5
47.5°	11034.8	11004.0	10727.0	10689.6	11017.2	11026.0	11476.7	11487.7	10909.5	11131.5	13090.5
50°	11744.9	11701.0	11426.1	11472.3	11839.5	11872.4	12696.9	12622.2	11804.3	12140.7	14143.6
52.5°	12213.2	12239.6	12180.3	12255.0	12756.3	12787.1	13897.4	13706.1	12690.3	13136.6	15176.9
55°	12558.4	12611.2	12795.9	12967.4	13723.7	13754.5	15029.6	14737.2	13424.7	14060.1	16148.7
57.5°	13002.5	12927.8	13273.0	13607.1	14642.7	14724.0	16131.1	15731.0	14075.4	14856.0	16814.9
60°	13640.1	13587.4	13855.6	14350.3	15671.6	15801.3	17296.4	16625.8	14552.5	15486.9	16944.6
62.5°	14932.9	14801.0	14842.8	15280.3	16968.8	17140.3	18611.2	17406.3	14790.0	15733.2	16249.9
65°	16865.5	16639.0	16428.0	16731.4	18795.8	18965.1	20095.2	18019.7	14702.0	15256.1	14405.2
67.5°	19299.3	19075.1	18815.6	19101.4	21486.9	21621.0	21926.7	18364.9	14009.5	13418.1	11144.7
70°	21306.6	21223.1	21533.1	22709.4	25785.2	25789.6	24274.8	18079.1	12112.1	9513.3	6448.5
72.5°	21040.6	20990.0	22623.6	26260.1	31202.6	31086.0	26497.5	15915.7	8159.0	4291.7	2416.3
75°	17261.2	17588.8	20119.4	26196.3	33148.3	33132.9	25136.6	10118.0	3374.9	1778.7	1248.8
77.5°	9256.1	9775.0	13061.9	19341.1	25877.5	26266.7	17672.4	3539.7	1448.9	1138.9	864.1
80°	3018.7	3471.6	5206.3	9847.5	16814.9	16742.4	7574.2	1389.5	991.6	806.9	598.0
82.5°	1281.8	1334.6	2326.1	4650.0	8629.5	8495.4	2411.9	798.1	697.0	551.8	369.4
85°	501.3	560.6	1026.7	2150.2	3737.6	3656.3	870.6	395.7	446.3	360.6	219.9
87.5°	164.9	200.1	367.2	736.5	1163.1	1121.3	213.3	136.3	193.5	164.9	79.1
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°	5419.6	5419.6	5419.6	5419.6	5419.6	5419.6	5419.6	5419.6	5419.6	5419.6	5419.6
2.5°	5465.7	5500.9	5542.7	5604.2	5657.0	5701.0	5747.1	5775.7	5786.7	5819.7	5817.5
5°	5505.3	5582.2	5685.6	5786.7	5885.7	5945.0	5997.8	6024.2	6048.4	6065.9	6070.3
7.5°	5571.3	5670.2	5832.9	5964.8	6048.4	6096.7	6131.9	6123.1	6131.9	6136.3	6142.9
10°	5628.4	5766.9	5960.4	6085.7	6149.5	6151.7	6142.9	6112.1	6096.7	6098.9	6103.3
12.5°	5696.6	5850.5	6059.3	6164.9	6182.5	6134.1	6096.7	6044.0	6024.2	6015.4	6011.0
15°	5788.9	5964.8	6167.1	6206.7	6162.7	6101.1	6037.4	5951.6	5907.6	5872.5	5883.5
17.5°	5901.0	6094.5	6250.6	6222.0	6127.5	6026.4	5923.0	5793.3	5703.2	5665.8	5668.0
20°	6057.1	6230.8	6314.4	6189.1	6046.2	5892.3	5716.4	5558.1	5474.5	5437.1	5432.7
22.5°	6246.2	6413.3	6375.9	6131.9	5929.6	5683.4	5463.5	5347.0	5305.2	5278.8	5283.2
25°	6472.7	6615.6	6419.9	6048.4	5738.3	5406.4	5237.1	5199.7	5179.9	5160.1	5160.1
27.5°	6767.3	6844.2	6452.9	5925.2	5439.3	5111.7	5050.2	5056.8	5050.2	5017.2	5023.8
30°	7156.4	7141.1	6483.7	5725.2	5096.4	4845.7	4850.1	4878.7	4883.1	4861.1	4872.1
32.5°	7668.7	7512.6	6499.1	5465.7	4768.8	4612.7	4617.1	4647.8	4669.8	4632.5	4650.0
35°	8288.7	7945.7	6474.9	5140.3	4515.9	4390.6	4357.6	4366.4	4373.0	4337.8	4362.0
37.5°	9012.1	8431.6	6367.1	4779.8	4307.1	4172.9	4102.6	4043.2	4008.1	3975.1	3997.1
40°	9805.8	8961.5	6169.3	4428.0	4074.0	3942.1	3836.6	3724.4	3605.7	3561.7	3581.5
42.5°	10636.8	9506.8	5929.6	4091.6	3805.8	3698.0	3585.9	3423.2	3245.1	3155.0	3166.0
45°	11498.7	10065.2	5694.4	3759.6	3531.0	3484.8	3355.1	3159.4	2965.9	2851.6	2842.8
47.5°	12342.9	10592.9	5349.2	3425.4	3273.7	3324.3	3223.1	3042.9	2827.4	2647.1	2627.3
50°	13149.8	11087.5	4784.2	3086.8	3064.9	3275.9	3179.2	2919.7	2673.5	2442.6	2422.9
52.5°	13950.1	11487.7	4060.8	2779.0	2952.7	3262.7	3122.0	2836.2	2535.0	2293.1	2266.8
55°	14629.5	11694.4	3363.9	2515.2	2790.0	3150.6	3053.9	2737.3	2339.3	2082.1	2060.1
57.5°	15016.4	11527.3	2783.4	2255.8	2565.8	2965.9	2937.3	2526.2	2106.3	1908.4	1882.0
60°	14849.4	10850.1	2308.5	2029.3	2352.5	2765.8	2735.1	2317.3	1928.2	1741.3	1714.9
62.5°	13928.1	9559.5	1932.6	1831.4	2159.0	2561.4	2532.8	2156.8	1791.9	1611.6	1583.0
65°	12072.5	7776.5	1640.2	1666.5	1963.4	2315.1	2356.9	2022.7	1684.1	1508.2	1479.7
67.5°	9207.7	5632.8	1411.5	1523.6	1772.1	2073.3	2194.2	1926.0	1594.0	1426.9	1400.5
70°	5248.1	3199.0	1218.0	1385.1	1602.8	1849.0	2068.9	1849.0	1497.2	1358.7	1341.1
72.5°	1989.7	1468.7	1053.1	1246.6	1440.1	1659.9	1930.4	1728.1	1385.1	1281.8	1264.2
75°	1061.9	894.8	886.0	1083.9	1253.2	1475.3	1756.7	1609.4	1301.6	1354.3	1398.3
77.5°	723.3	633.2	740.9	927.8	1048.7	1270.8	1572.0	1429.1	1127.9	1123.5	1035.5
80°	501.3	448.5	602.4	747.5	811.3	1068.5	1371.9	1226.8	919.0	857.5	820.1
82.5°	301.2	292.4	450.7	558.4	573.8	824.5	1136.7	1028.9	751.9	655.2	659.6
85°	164.9	173.7	288.0	327.6	334.2	576.0	890.4	795.9	578.2	485.9	490.3
87.5°	46.2	59.4	105.5	129.7	160.5	299.0	529.9	472.7	290.2	202.3	202.3
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)