

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: P883270

Luminaire Tested: **NAV-SB3C-740-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883270  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3C-740-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

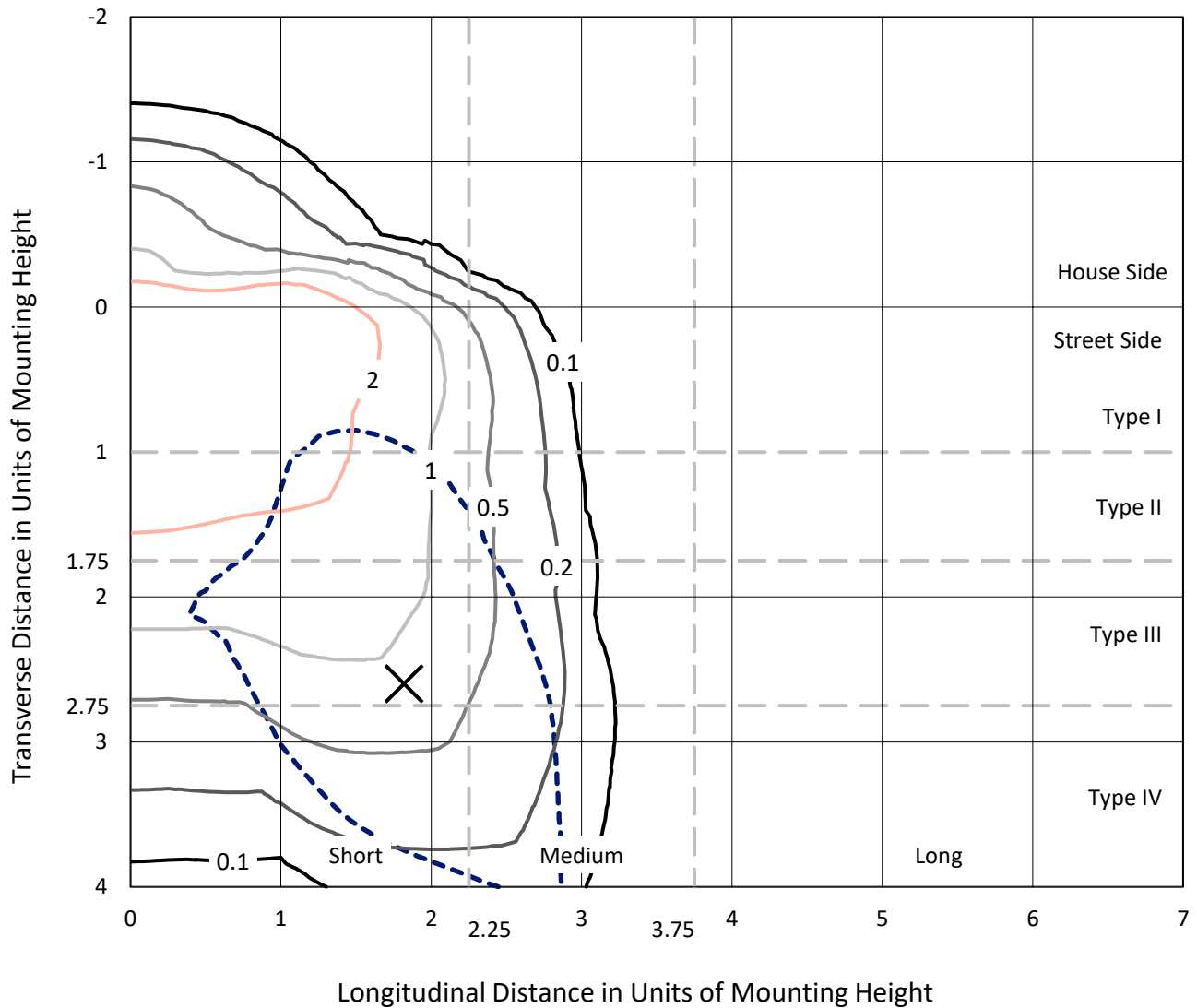
Lumens per Lamp: N/A  
Luminaire Lumens: 18337 lumens  
Efficiency: N/A  
Efficacy: 123.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G4  
  
Input Watts (W): 149.1  
Input Voltage (V): 120.0  
Input Current (Ain): 1.259  
Voltage Rise (V): NR  
Power Factor: 0.997  
Total Harmonic Distortion (THDi): 6.297  
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

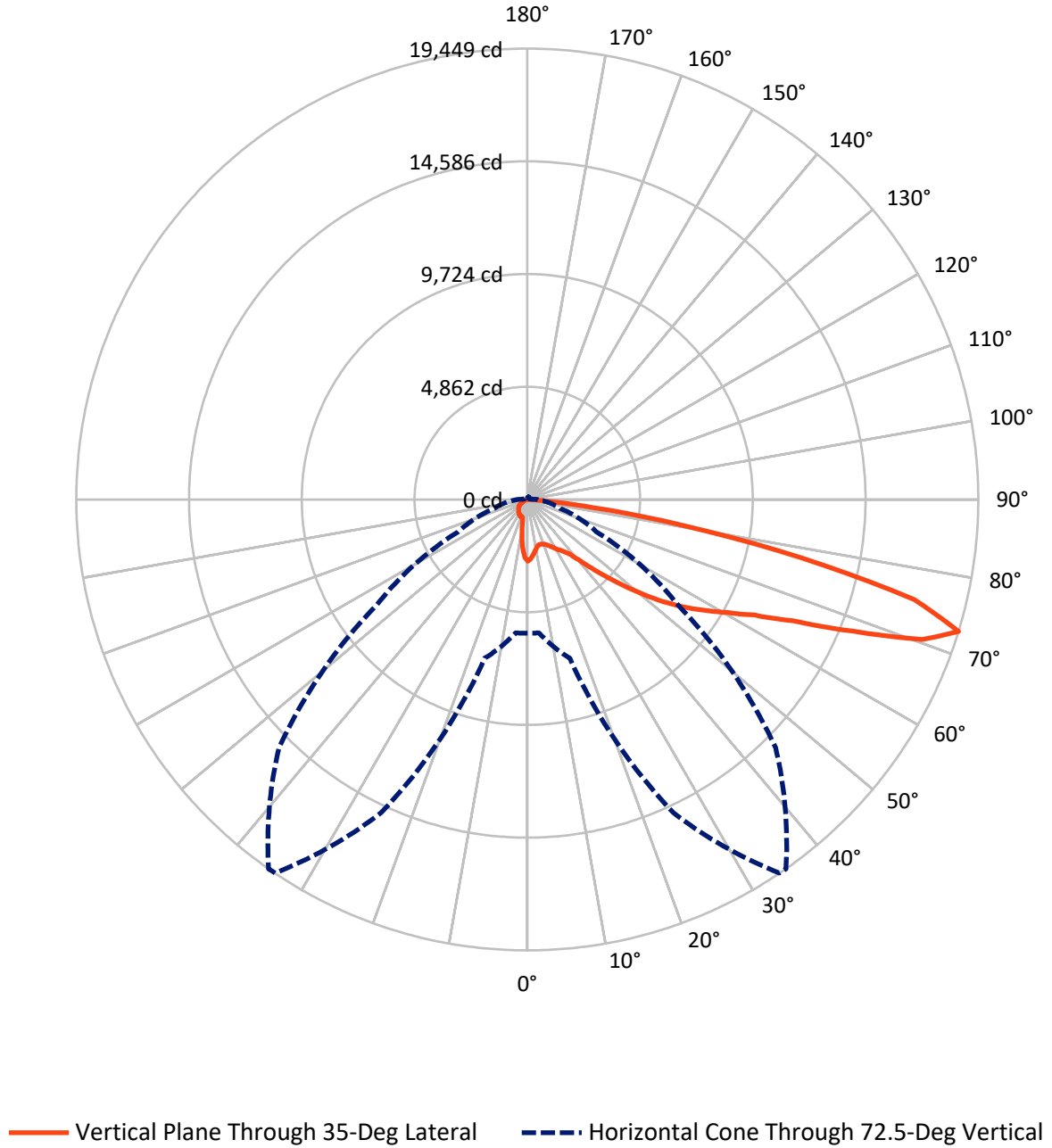
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2063.7	0.0	2063.7
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	16273.3	0.0	16273.3
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	18337.0	0.0	18337.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	218.4	1.2
10°-20°	510.9	2.8
20°-30°	829.9	4.5
30°-40°	1384.7	7.6
40°-50°	2619.9	14.3
50°-60°	4163.1	22.7
60°-70°	5150.0	28.1
70°-80°	3201.3	17.5
80°-90°	258.7	1.4
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°	18337.0	100.0
0°-180°	18337.0	100.0

**Coefficient of Utilization**



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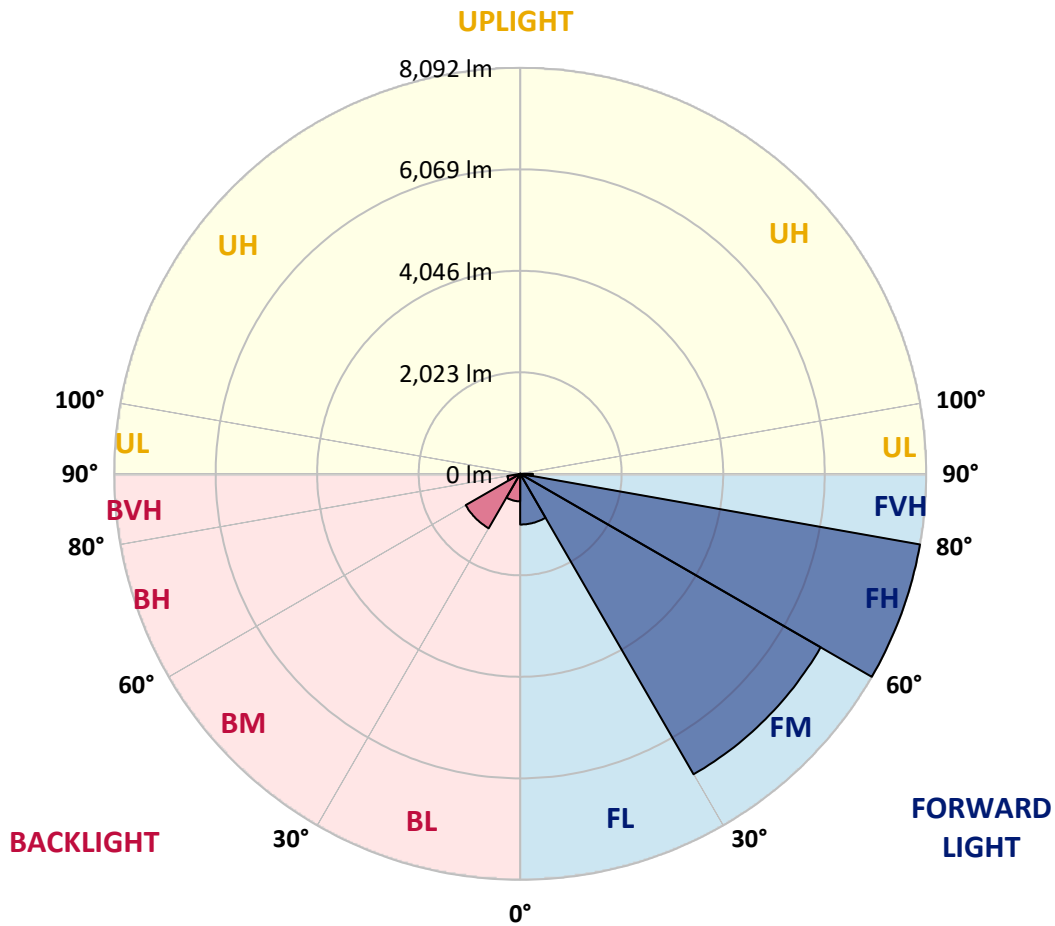
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1010.8	5.5			
FM (30°-60°)	6914.9	37.7			
FH (60°-80°)	8092.3	44.1			G4/12000
FVH (80°-90°)	255.2	1.4			G3/500
BL (0°-30°)	548.4	3.0	B2/1000		
BM (30°-60°)	1252.9	6.8	B2/2500		
BH (60°-80°)	259.0	1.4	B1/500		G1/500
BVH (80°-90°)	3.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	2657.6	2657.6	2657.6	2657.6	2657.6	2657.6	2657.6	2657.6	2657.6	2657.6	2657.6
2.5°	2539.4	2560.9	2564.9	2571.7	2571.7	2579.7	2593.2	2612.0	2642.9	2659.0	2669.7
5°	2340.6	2356.7	2376.8	2393.0	2423.9	2427.9	2480.3	2531.3	2602.6	2656.3	2693.9
7.5°	2140.4	2159.2	2186.0	2225.0	2265.3	2277.4	2356.7	2442.7	2555.5	2656.3	2719.5
10°	1999.3	2000.6	2024.8	2063.8	2128.3	2143.0	2239.8	2362.1	2503.1	2640.2	2743.6
12.5°	1920.0	1929.4	1940.2	1969.7	2031.5	2040.9	2144.4	2288.2	2450.7	2630.8	2771.9
15°	1920.0	1926.7	1933.4	1948.2	1997.9	2006.0	2097.4	2241.1	2423.9	2634.8	2817.5
17.5°	1940.2	1950.9	1945.5	1963.0	2015.4	2020.8	2101.4	2227.7	2422.5	2660.3	2887.4
20°	1988.5	1996.6	1985.8	1996.6	2049.0	2059.7	2143.0	2253.2	2445.4	2704.7	2974.7
22.5°	2065.1	2069.1	2043.6	2051.7	2105.4	2118.9	2215.6	2325.8	2500.4	2775.9	3091.6
25°	2161.9	2169.9	2131.0	2140.4	2191.4	2207.5	2319.1	2434.6	2587.8	2874.0	3240.8
27.5°	2273.4	2277.4	2243.8	2242.5	2308.3	2331.2	2444.0	2569.0	2704.7	2997.6	3428.9
30°	2401.0	2413.1	2380.9	2375.5	2458.8	2477.6	2589.1	2734.2	2876.7	3183.0	3696.3
32.5°	2501.8	2511.2	2492.4	2505.8	2590.5	2605.2	2765.1	2968.0	3146.7	3446.3	4060.4
35°	2646.9	2652.3	2609.3	2633.5	2730.2	2767.8	3005.6	3295.9	3486.6	3776.9	4536.0
37.5°	3172.2	3172.2	2989.5	2869.9	2962.6	2996.2	3334.8	3708.3	3905.9	4220.3	5135.2
40°	3899.1	3887.0	3619.7	3375.1	3363.0	3428.9	3803.7	4228.3	4447.3	4752.3	5809.7
42.5°	4674.4	4655.6	4291.5	4049.6	4009.3	4032.2	4345.2	4869.2	5092.3	5401.3	6535.3
45°	5362.3	5356.9	5023.7	4698.6	4626.0	4698.6	5021.0	5618.9	5778.8	6104.0	7259.5
47.5°	5938.7	5938.7	5695.5	5483.2	5445.6	5488.6	5936.0	6450.6	6435.9	6852.4	7964.9
50°	6602.5	6597.1	6366.0	6274.6	6313.6	6374.1	6989.4	7326.7	7115.7	7587.3	8595.0
52.5°	7067.4	7099.6	7020.3	7005.5	7204.4	7309.2	8058.9	8183.9	7724.4	8284.7	9066.6
55°	7435.5	7473.1	7564.5	7667.9	8050.9	8187.9	9094.8	8996.8	8233.6	8889.3	9338.0
57.5°	7956.8	7903.1	8044.1	8248.4	8867.8	9033.0	10098.5	9764.0	8643.4	9379.7	9367.6
60°	8589.7	8597.7	8621.9	8879.9	9683.3	9895.6	11087.4	10489.5	8906.7	9680.7	9039.8
62.5°	9350.1	9362.2	9411.9	9808.3	10778.4	10978.6	12140.8	11083.4	9027.7	9596.0	8193.3
65°	9297.7	9348.8	9903.7	11259.4	12443.1	12640.6	13370.2	11499.9	8844.9	8822.1	6671.0
67.5°	8470.1	8553.4	9481.8	12992.6	14953.0	15173.3	14856.2	11581.9	8056.2	6860.4	4351.9
70°	7384.4	7414.0	8530.5	14551.2	17859.2	18082.2	16186.4	10680.3	6113.4	3826.6	1949.6
72.5°	5766.7	5773.5	7083.5	14912.6	19436.6	19448.6	15142.4	7928.6	3287.8	1469.9	677.2
75°	4119.5	4079.2	4744.3	12093.8	17100.0	17237.1	11352.1	3719.1	1256.3	694.6	337.2
77.5°	2208.9	2253.2	2684.5	7172.2	11813.0	12046.7	6194.0	1072.2	639.6	472.9	223.0
80°	682.6	720.2	1100.4	3283.8	6691.1	6832.2	2296.2	477.0	446.1	337.2	146.5
82.5°	215.0	223.0	513.3	1379.9	2777.2	2841.7	665.1	270.1	305.0	223.0	86.0
85°	61.8	63.1	228.4	514.6	686.6	700.0	186.8	104.8	174.7	138.4	44.3
87.5°	6.7	21.5	86.0	86.0	60.5	59.1	20.2	22.8	49.7	17.5	8.1
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°	2657.6	2657.6	2657.6	2657.6	2657.6	2657.6	2657.6	2657.6	2657.6	2657.6	2657.6
2.5°	2663.0	2664.4	2646.9	2617.3	2585.1	2558.2	2524.6	2497.8	2478.9	2473.6	2483.0
5°	2681.8	2672.4	2622.7	2532.7	2425.2	2332.5	2229.0	2147.1	2093.3	2070.5	2078.6
7.5°	2710.0	2683.2	2574.3	2397.0	2191.4	2008.7	1823.3	1679.5	1588.1	1542.5	1549.2
10°	2734.2	2680.5	2493.7	2200.8	1886.4	1609.6	1359.7	1186.4	1089.7	1044.0	1045.3
12.5°	2757.1	2679.1	2388.9	1968.4	1542.5	1203.9	971.4	885.4	858.6	849.2	846.5
15°	2800.1	2683.2	2257.3	1702.3	1199.8	909.6	825.0	823.6	829.0	826.3	825.0
17.5°	2859.2	2687.2	2108.1	1420.2	925.7	802.1	798.1	810.2	818.3	814.2	812.9
20°	2935.8	2703.3	1949.6	1140.7	795.4	775.3	784.7	795.4	802.1	795.4	794.1
22.5°	3043.3	2731.5	1776.2	916.3	753.8	759.1	767.2	779.3	786.0	776.6	775.3
25°	3174.9	2775.9	1605.6	796.8	733.6	740.3	752.4	765.9	773.9	764.5	763.2
27.5°	3345.6	2847.1	1448.4	769.9	713.5	717.5	735.0	755.1	765.9	753.8	753.8
30°	3592.8	2964.0	1312.7	782.0	701.4	692.0	716.1	744.4	756.4	745.7	744.4
32.5°	3920.6	3129.3	1229.4	800.8	696.0	662.4	685.2	721.5	741.7	735.0	735.0
35°	4350.6	3380.5	1197.1	822.3	692.0	631.5	647.6	686.6	721.5	728.2	728.2
37.5°	4871.9	3729.8	1206.6	831.7	679.9	606.0	614.0	647.6	693.3	714.8	720.2
40°	5464.4	4137.0	1260.3	822.3	666.4	584.5	585.8	611.3	651.6	683.9	694.6
42.5°	6075.8	4612.6	1359.7	787.4	654.3	565.7	561.6	579.1	606.0	628.8	638.2
45°	6657.6	5101.7	1457.8	739.0	639.6	546.8	537.4	544.2	549.5	558.9	564.3
47.5°	7165.4	5445.6	1429.6	694.6	619.4	525.3	509.2	506.5	490.4	489.1	487.7
50°	7516.1	5520.9	1269.7	650.3	589.8	501.2	475.6	459.5	431.3	417.9	419.2
52.5°	7627.6	5223.9	1037.3	606.0	541.5	468.9	432.6	407.1	372.2	360.1	358.7
55°	7479.8	4642.1	829.0	552.2	474.3	425.9	385.6	352.0	323.8	309.0	309.0
57.5°	7118.4	3901.8	655.7	489.1	403.1	377.6	337.2	303.7	279.5	264.7	262.0
60°	6519.2	3098.3	518.6	413.8	344.0	325.2	283.5	262.0	240.5	223.0	219.0
62.5°	5609.5	2211.6	407.1	327.8	287.5	266.0	241.8	225.7	200.2	176.0	172.0
65°	4377.5	1353.0	314.4	240.5	231.1	220.4	205.6	190.8	159.9	135.7	131.7
67.5°	2761.1	640.9	224.4	181.4	182.7	177.4	170.6	158.5	135.7	114.2	111.5
70°	1216.0	310.4	147.8	138.4	135.7	135.7	141.1	137.0	115.5	95.4	91.4
72.5°	413.8	166.6	110.2	104.8	98.1	96.7	118.2	114.2	92.7	73.9	69.9
75°	216.3	111.5	80.6	75.2	59.1	71.2	94.1	88.7	65.8	48.4	44.3
77.5°	141.1	79.3	55.1	48.4	33.6	47.0	69.9	61.8	39.0	24.2	21.5
80°	88.7	52.4	32.2	22.8	16.1	25.5	37.6	26.9	14.8	5.4	4.0
82.5°	47.0	26.9	12.1	8.1	6.7	8.1	9.4	6.7	2.7	0.0	0.0
85°	18.8	9.4	4.0	2.7	1.3	0.0	2.7	1.3	0.0	0.0	0.0
87.5°	6.7	1.3	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)