

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: P883400

Luminaire Tested: **NAV-SB3D-722-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883400  
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-SB3D-722-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

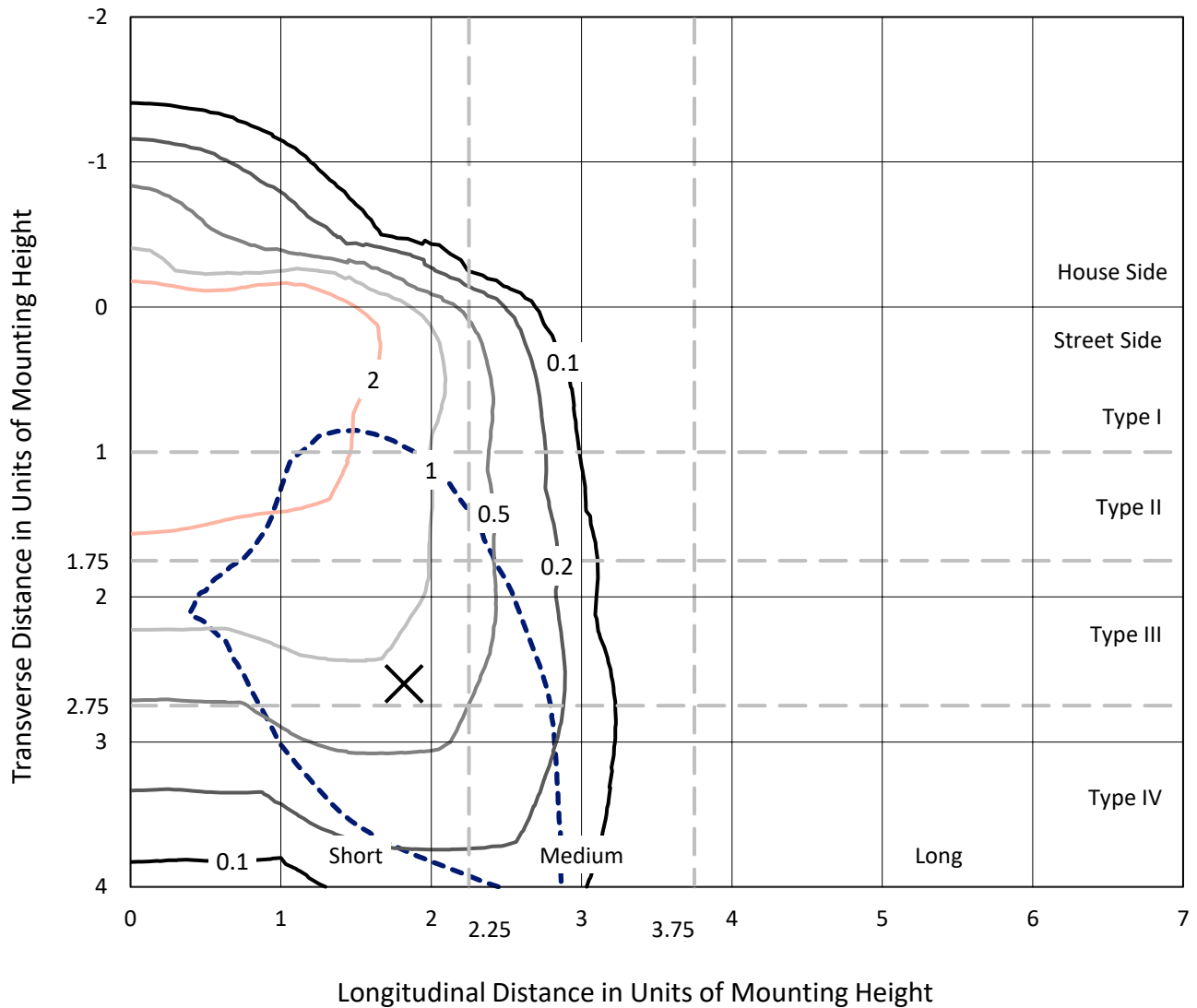
Lumens per Lamp: N/A  
Luminaire Lumens: 18416 lumens  
Efficiency: N/A  
Efficacy: 84.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G4  
  
Input Watts (W): 218.1  
Input Voltage (V): 120.0  
Input Current (Ain): 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

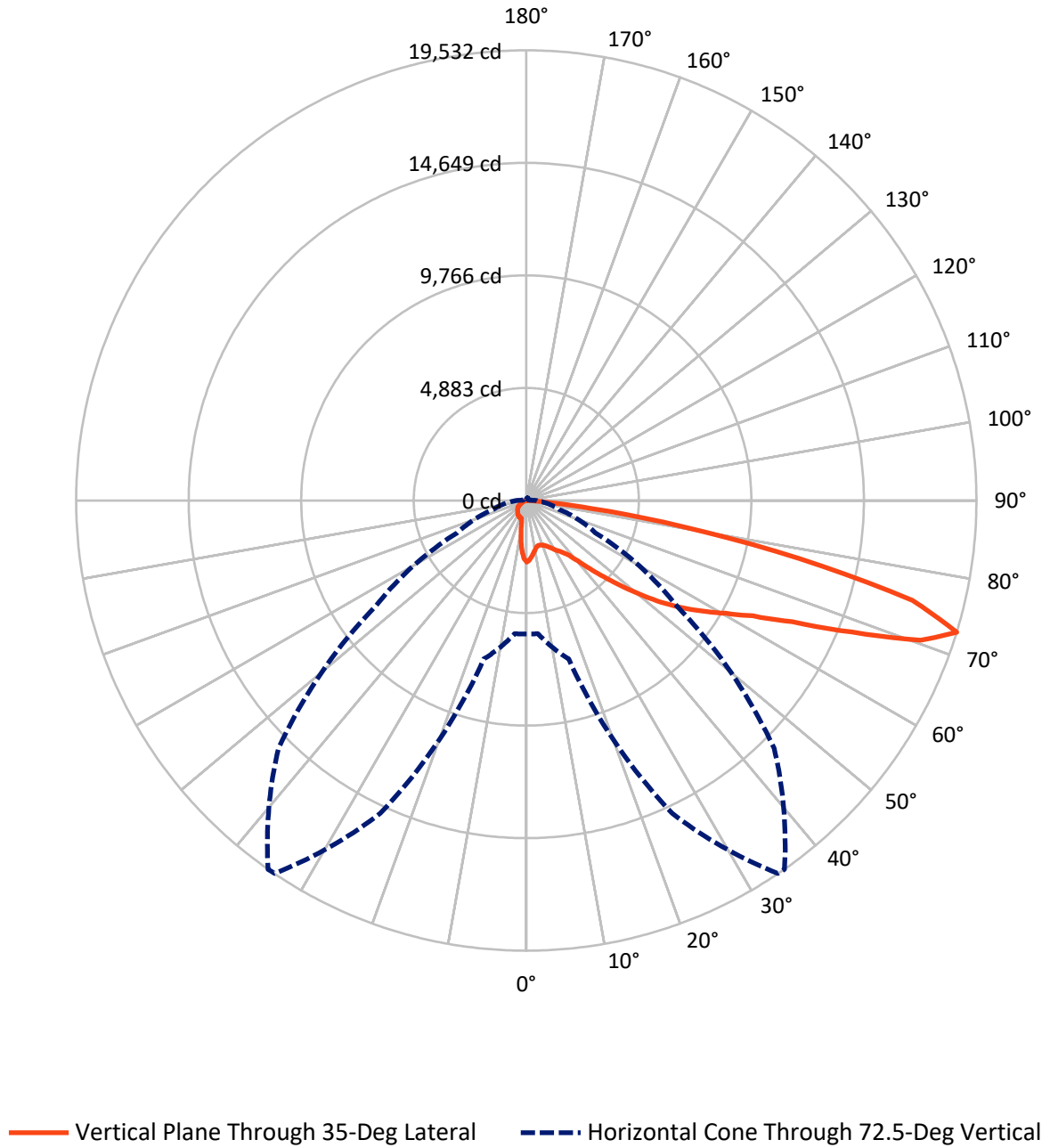
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 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	2072.6	0.0	2072.6
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	16343.4	0.0	16343.4
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	18416.0	0.0	18416.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	219.3	1.2
10°-20°	513.1	2.8
20°-30°	833.5	4.5
30°-40°	1390.7	7.6
40°-50°	2631.2	14.3
50°-60°	4181.0	22.7
60°-70°	5172.2	28.1
70°-80°	3215.1	17.5
80°-90°	259.8	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°	18416.0	100.0
0°-180°	18416.0	100.0

**Coefficient of Utilization**



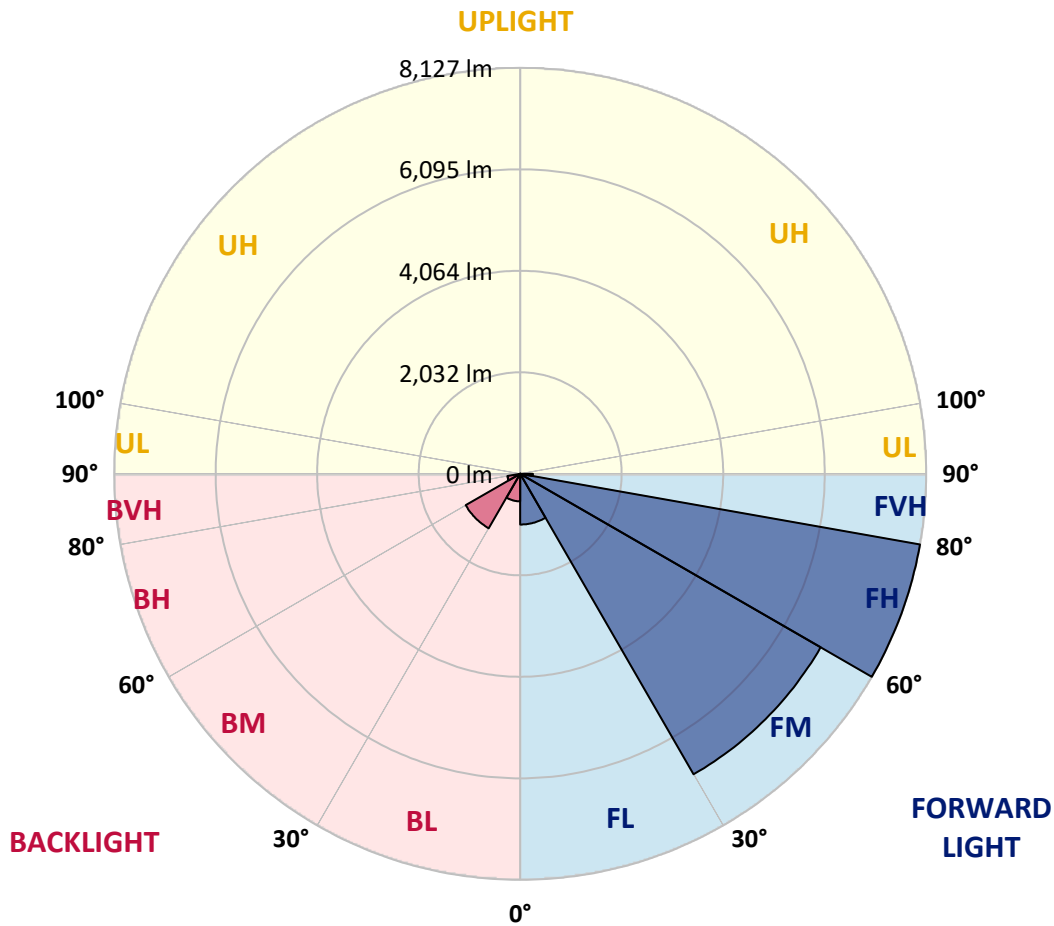
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1015.2	5.5			
FM (30°-60°)	6944.7	37.7			
FH (60°-80°)	8127.2	44.1			G4/12000
FVH (80°-90°)	256.3	1.4			G3/500
BL (0°-30°)	550.7	3.0	B2/1000		
BM (30°-60°)	1258.3	6.8	B2/2500		
BH (60°-80°)	260.1	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°	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1
2.5°	2550.3	2571.9	2576.0	2582.7	2582.7	2590.8	2604.3	2623.2	2654.3	2670.4	2681.2
5°	2350.6	2366.8	2387.1	2403.3	2434.3	2438.3	2491.0	2542.3	2613.8	2667.7	2705.5
7.5°	2149.6	2168.5	2195.5	2234.6	2275.1	2287.2	2366.8	2453.2	2566.5	2667.7	2731.2
10°	2007.9	2009.2	2033.5	2072.7	2137.4	2152.3	2249.4	2372.2	2513.9	2651.6	2755.5
12.5°	1928.3	1937.7	1948.5	1978.2	2040.3	2049.7	2153.6	2298.0	2461.3	2642.1	2783.8
15°	1928.3	1935.0	1941.8	1956.6	2006.5	2014.6	2106.4	2250.8	2434.3	2646.2	2829.7
17.5°	1948.5	1959.3	1953.9	1971.5	2024.1	2029.5	2110.4	2237.3	2433.0	2671.8	2899.8
20°	1997.1	2005.2	1994.4	2005.2	2057.8	2068.6	2152.3	2262.9	2455.9	2716.3	2987.6
22.5°	2074.0	2078.1	2052.4	2060.5	2114.5	2128.0	2225.1	2335.8	2511.2	2787.8	3104.9
25°	2171.2	2179.3	2140.1	2149.6	2200.9	2217.0	2329.0	2445.1	2598.9	2886.3	3254.7
27.5°	2283.2	2287.2	2253.5	2252.1	2318.3	2341.2	2454.5	2580.0	2716.3	3010.5	3443.6
30°	2411.4	2423.5	2391.1	2385.7	2469.4	2488.3	2600.3	2746.0	2889.0	3196.7	3712.2
32.5°	2512.6	2522.0	2503.1	2516.6	2601.6	2616.5	2777.0	2980.8	3160.3	3461.2	4077.9
35°	2658.3	2663.7	2620.5	2644.8	2742.0	2779.7	3018.6	3310.1	3501.7	3793.1	4555.5
37.5°	3185.9	3185.9	3002.4	2882.3	2975.4	3009.1	3349.2	3724.3	3922.7	4238.4	5157.4
40°	3915.9	3903.8	3635.3	3389.7	3377.5	3443.6	3820.1	4246.5	4466.5	4772.8	5834.8
42.5°	4694.5	4675.6	4310.0	4067.1	4026.6	4049.5	4363.9	4890.2	5114.2	5424.6	6563.4
45°	5385.4	5380.0	5045.4	4718.8	4646.0	4718.8	5042.7	5643.2	5803.7	6130.3	7290.8
47.5°	5964.3	5964.3	5720.1	5506.9	5469.1	5512.3	5961.6	6478.4	6463.6	6881.9	7999.2
50°	6630.9	6625.5	6393.4	6301.7	6340.8	6401.5	7019.5	7358.2	7146.4	7620.0	8632.1
52.5°	7097.8	7130.2	7050.6	7035.7	7235.4	7340.7	8093.6	8219.1	7757.7	8320.3	9105.7
55°	7467.5	7505.3	7597.1	7701.0	8085.6	8223.2	9134.0	9035.5	8269.1	8927.6	9378.3
57.5°	7991.1	7937.1	8078.8	8283.9	8906.0	9072.0	10142.0	9806.0	8680.6	9420.1	9408.0
60°	8626.7	8634.8	8659.0	8918.1	9725.1	9938.3	11135.2	10534.7	8945.1	9722.4	9078.7
62.5°	9390.4	9402.6	9452.5	9850.6	10824.8	11025.9	12193.1	11131.1	9066.6	9637.4	8228.6
65°	9337.8	9389.1	9946.4	11307.9	12496.7	12695.1	13427.8	11549.4	8883.0	8860.1	6699.7
67.5°	8506.6	8590.2	9522.7	13048.6	15017.4	15238.7	14920.2	11631.8	8090.9	6890.0	4370.7
70°	7416.3	7445.9	8567.3	14613.9	17936.1	18160.1	16256.1	10726.3	6139.7	3843.1	1958.0
72.5°	5791.6	5798.3	7114.0	14976.9	19520.3	19532.4	15207.6	7962.8	3302.0	1476.2	680.1
75°	4137.2	4096.8	4764.7	12145.9	17173.7	17311.3	11401.0	3735.1	1261.7	697.6	338.7
77.5°	2218.4	2262.9	2696.1	7203.1	11863.8	12098.6	6220.7	1076.8	642.3	475.0	224.0
80°	685.5	723.3	1105.2	3297.9	6720.0	6861.7	2306.1	479.0	448.0	338.7	147.1
82.5°	215.9	224.0	515.5	1385.8	2789.2	2854.0	667.9	271.2	306.3	224.0	86.4
85°	62.1	63.4	229.4	516.8	689.5	703.0	187.6	105.3	175.4	139.0	44.5
87.5°	6.7	21.6	86.4	86.4	60.7	59.4	20.2	22.9	49.9	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°	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1	2669.1
2.5°	2674.5	2675.8	2658.3	2628.6	2596.2	2569.2	2535.5	2508.5	2489.6	2484.2	2493.7
5°	2693.4	2683.9	2634.0	2543.6	2435.7	2342.5	2238.6	2156.3	2102.4	2079.4	2087.5
7.5°	2721.7	2694.7	2585.4	2407.3	2200.9	2017.3	1831.1	1686.7	1595.0	1549.1	1555.8
10°	2746.0	2692.0	2504.5	2210.3	1894.5	1616.6	1365.6	1191.5	1094.4	1048.5	1049.8
12.5°	2769.0	2690.7	2399.2	1976.9	1549.1	1209.1	975.6	889.2	862.3	852.8	850.1
15°	2812.1	2694.7	2267.0	1709.7	1205.0	913.5	828.5	827.2	832.6	829.9	828.5
17.5°	2871.5	2698.8	2117.2	1426.3	929.7	805.6	801.5	813.7	821.8	817.7	816.4
20°	2948.4	2715.0	1958.0	1145.6	798.8	778.6	788.0	798.8	805.6	798.8	797.5
22.5°	3056.4	2743.3	1783.9	920.3	757.0	762.4	770.5	782.6	789.4	779.9	778.6
25°	3188.6	2787.8	1612.5	800.2	736.8	743.5	755.7	769.2	777.2	767.8	766.5
27.5°	3360.0	2859.4	1454.6	773.2	716.5	720.6	738.1	758.4	769.2	757.0	757.0
30°	3608.3	2976.8	1318.4	785.3	704.4	694.9	719.2	747.6	759.7	748.9	747.6
32.5°	3937.5	3142.7	1234.7	804.2	699.0	665.2	688.2	724.6	744.9	738.1	738.1
35°	4369.3	3395.1	1202.3	825.8	694.9	634.2	650.4	689.5	724.6	731.4	731.4
37.5°	4892.9	3745.9	1211.8	835.3	682.8	608.6	616.7	650.4	696.3	717.9	723.3
40°	5488.0	4154.8	1265.7	825.8	669.3	587.0	588.3	614.0	654.5	686.8	697.6
42.5°	6101.9	4632.5	1365.6	790.7	657.2	568.1	564.0	581.6	608.6	631.5	641.0
45°	6686.2	5123.6	1464.1	742.2	642.3	549.2	539.8	546.5	551.9	561.3	566.7
47.5°	7196.3	5469.1	1435.8	697.6	622.1	527.6	511.4	508.7	492.5	491.2	489.8
50°	7548.5	5544.6	1275.2	653.1	592.4	503.3	477.7	461.5	433.2	419.7	421.0
52.5°	7660.5	5246.4	1041.7	608.6	543.8	470.9	434.5	408.9	373.8	361.6	360.3
55°	7512.1	4662.1	832.6	554.6	476.3	427.8	387.3	353.5	325.2	310.4	310.4
57.5°	7149.1	3918.6	658.5	491.2	404.8	379.2	338.7	305.0	280.7	265.8	263.1
60°	6547.2	3111.7	520.9	415.6	345.4	326.6	284.7	263.1	241.5	224.0	220.0
62.5°	5633.7	2221.1	408.9	329.3	288.8	267.2	242.9	226.7	201.1	176.8	172.7
65°	4396.3	1358.8	315.8	241.5	232.1	221.3	206.5	191.6	160.6	136.3	132.2
67.5°	2773.0	643.7	225.3	182.2	183.5	178.1	171.4	159.2	136.3	114.7	112.0
70°	1221.2	311.7	148.4	139.0	136.3	136.3	141.7	137.6	116.0	95.8	91.8
72.5°	415.6	167.3	110.7	105.3	98.5	97.2	118.7	114.7	93.1	74.2	70.2
75°	217.3	112.0	81.0	75.6	59.4	71.5	94.5	89.1	66.1	48.6	44.5
77.5°	141.7	79.6	55.3	48.6	33.7	47.2	70.2	62.1	39.1	24.3	21.6
80°	89.1	52.6	32.4	22.9	16.2	25.6	37.8	27.0	14.8	5.4	4.0
82.5°	47.2	27.0	12.1	8.1	6.7	8.1	9.4	6.7	2.7	0.0	0.0
85°	18.9	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)