

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: P883440

Luminaire Tested: **NAV-SB3D-740-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883440  
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-740-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

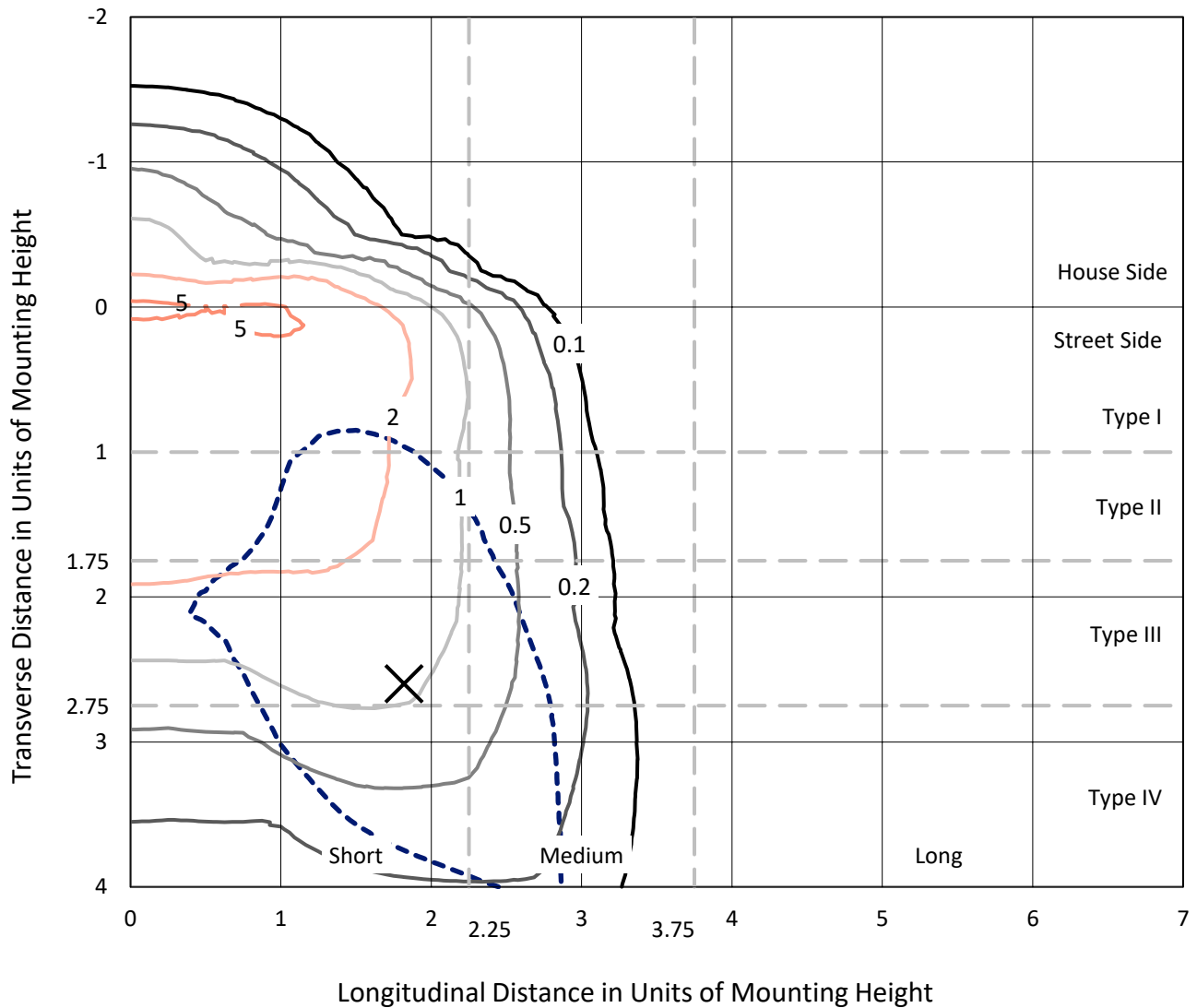
Lumens per Lamp: N/A  
Luminaire Lumens: 24916 lumens  
Efficiency: N/A  
Efficacy: 114.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G4  
  
Input Watts (W): 218.1  
Input Voltage (V): 120.0  
Input Current (Ain): 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

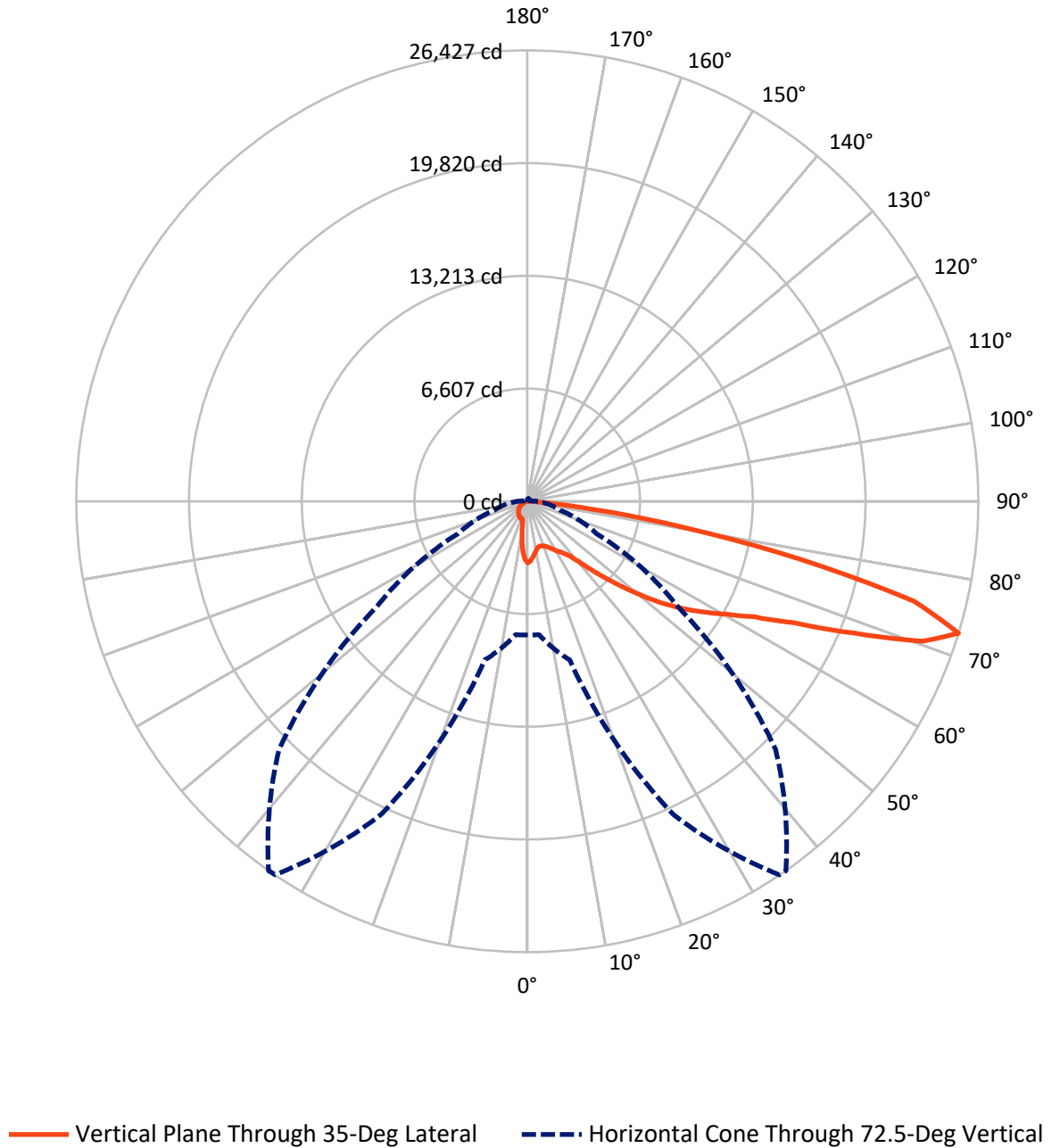
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 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	2804.2	0.0	2804.2
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	22111.8	0.0	22111.8
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	24916.0	0.0	24916.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	296.7	1.2
10°-20°	694.2	2.8
20°-30°	1127.7	4.5
30°-40°	1881.5	7.6
40°-50°	3559.9	14.3
50°-60°	5656.7	22.7
60°-70°	6997.8	28.1
70°-80°	4349.8	17.5
80°-90°	351.5	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°	24916.0	100.0
0°-180°	24916.0	100.0

**Coefficient of Utilization**



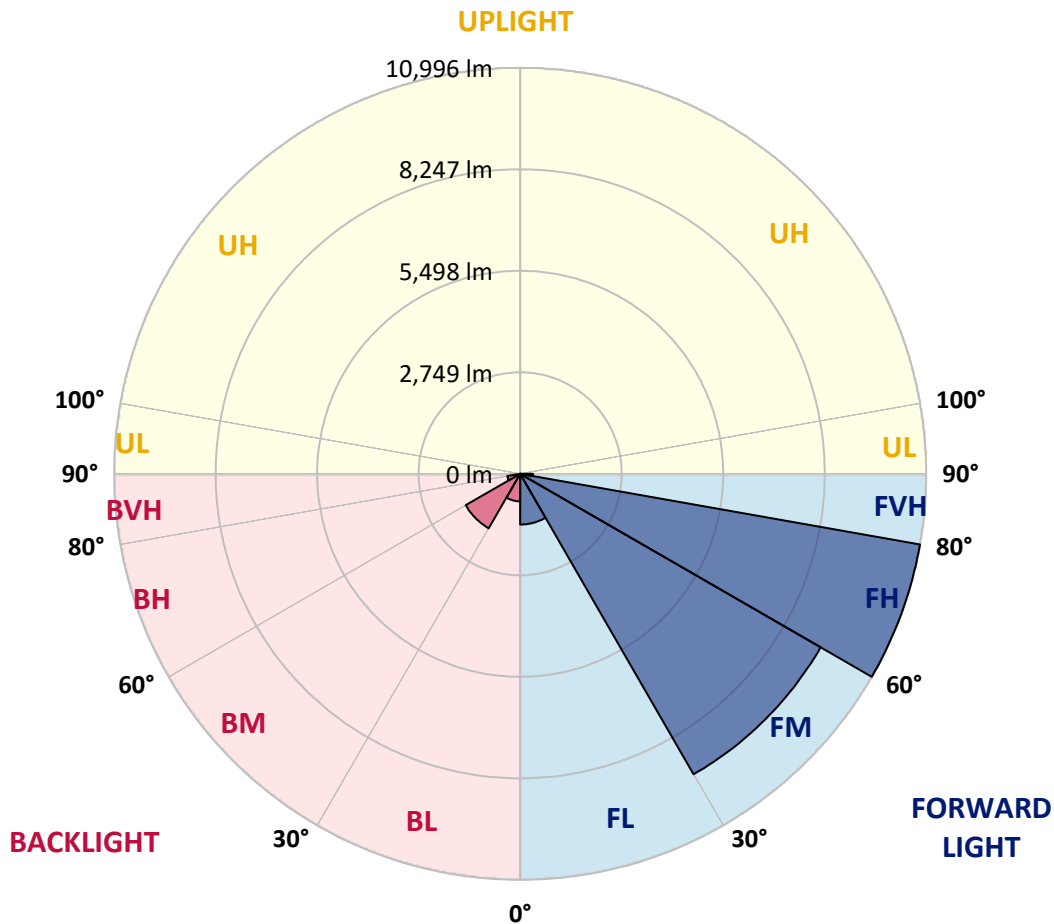
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1373.5	5.5			
FM (30°-60°)	9395.8	37.7			
FH (60°-80°)	10995.7	44.1			G4/12000
FVH (80°-90°)	346.8	1.4			G3/500
BL (0°-30°)	745.1	3.0	B2/1000		
BM (30°-60°)	1702.4	6.8	B2/2500		
BH (60°-80°)	351.9	1.4	B1/500		G1/500
BVH (80°-90°)	4.8	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°	3611.2	3611.2	3611.2	3611.2	3611.2	3611.2	3611.2	3611.2	3611.2	3611.2	3611.2
2.5°	3450.5	3479.7	3485.2	3494.3	3494.3	3505.3	3523.5	3549.1	3591.1	3613.0	3627.6
5°	3180.3	3202.2	3229.6	3251.5	3293.5	3299.0	3370.2	3439.6	3536.3	3609.3	3660.5
7.5°	2908.3	2933.8	2970.4	3023.3	3078.1	3094.5	3202.2	3319.1	3472.4	3609.3	3695.1
10°	2716.6	2718.4	2751.3	2804.2	2891.9	2911.9	3043.4	3209.5	3401.2	3587.4	3728.0
12.5°	2608.9	2621.7	2636.3	2676.4	2760.4	2773.2	2913.8	3109.1	3330.0	3574.7	3766.3
15°	2608.9	2618.0	2627.1	2647.2	2714.8	2725.7	2849.9	3045.2	3293.5	3580.1	3828.4
17.5°	2636.3	2650.9	2643.6	2667.3	2738.5	2745.8	2855.3	3027.0	3291.7	3614.8	3923.4
20°	2702.0	2712.9	2698.3	2712.9	2784.1	2798.7	2911.9	3061.6	3322.7	3675.1	4042.0
22.5°	2806.0	2811.5	2776.8	2787.8	2860.8	2879.1	3010.5	3160.2	3397.6	3771.8	4200.9
25°	2937.5	2948.4	2895.5	2908.3	2977.7	2999.6	3151.1	3308.1	3516.2	3905.1	4403.5
27.5°	3089.0	3094.5	3048.9	3047.0	3136.5	3167.5	3320.9	3490.7	3675.1	4073.1	4659.1
30°	3262.5	3278.9	3235.1	3227.8	3341.0	3366.5	3518.1	3715.2	3908.7	4325.0	5022.4
32.5°	3399.4	3412.2	3386.6	3404.9	3519.9	3540.0	3757.2	4032.9	4275.7	4682.8	5517.2
35°	3596.6	3603.9	3545.4	3578.3	3709.7	3760.9	4084.0	4478.4	4737.6	5131.9	6163.4
37.5°	4310.4	4310.4	4062.1	3899.6	4025.6	4071.2	4531.3	5038.8	5307.2	5734.4	6977.7
40°	5298.1	5281.6	4918.3	4586.1	4569.6	4659.1	5168.5	5745.4	6042.9	6457.4	7894.2
42.5°	6351.5	6325.9	5831.2	5502.6	5447.8	5478.8	5904.2	6616.2	6919.3	7339.2	8880.0
45°	7286.2	7278.9	6826.2	6384.3	6285.8	6384.3	6822.5	7634.9	7852.2	8294.0	9864.1
47.5°	8069.4	8069.4	7739.0	7450.5	7399.4	7457.8	8065.8	8765.0	8744.9	9310.9	10822.5
50°	8971.3	8964.0	8650.0	8525.9	8578.8	8661.0	9497.1	9955.3	9668.7	10309.5	11678.8
52.5°	9603.0	9646.8	9539.1	9519.0	9789.2	9931.6	10950.3	11120.1	10495.7	11257.0	12319.6
55°	10103.2	10154.3	10278.5	10419.1	10939.4	11125.6	12357.9	12224.6	11187.7	12078.6	12688.4
57.5°	10811.6	10738.6	10930.3	11207.8	12049.4	12273.9	13721.7	13267.1	11744.5	12745.0	12728.5
60°	11671.5	11682.4	11715.3	12065.8	13157.6	13446.0	15065.4	14253.0	12102.3	13153.9	12283.1
62.5°	12704.8	12721.2	12788.8	13327.3	14645.5	14917.5	16496.7	15059.9	12266.6	13038.9	11132.9
65°	12633.6	12703.0	13457.0	15299.1	16907.5	17175.8	18167.2	15625.9	12018.3	11987.3	9064.4
67.5°	11509.0	11622.2	12883.7	17654.2	20317.8	20617.2	20186.4	15737.2	10946.7	9321.8	5913.3
70°	10033.9	10074.0	11591.1	19771.9	24266.7	24569.8	21993.8	14512.2	8306.8	5199.5	2649.0
72.5°	7835.8	7844.9	9624.9	20263.0	26410.1	26426.5	20575.2	10773.2	4467.4	1997.3	920.1
75°	5597.5	5542.7	6446.4	16432.8	23235.2	23421.4	15425.0	5053.4	1707.0	943.9	458.2
77.5°	3001.4	3061.6	3647.7	9745.4	16051.2	16368.9	8416.3	1456.9	869.0	642.6	303.1
80°	927.4	978.6	1495.2	4461.9	9091.8	9283.5	3120.1	648.1	606.1	458.2	199.0
82.5°	292.1	303.1	697.4	1875.0	3773.6	3861.3	903.7	367.0	414.4	303.1	116.8
85°	84.0	85.8	310.4	699.2	932.9	951.2	253.8	142.4	237.3	188.0	60.2
87.5°	9.1	29.2	116.8	116.8	82.2	80.3	27.4	31.0	67.5	23.7	11.0
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°	3611.2	3611.2	3611.2	3611.2	3611.2	3611.2	3611.2	3611.2	3611.2	3611.2	3611.2
2.5°	3618.5	3620.3	3596.6	3556.4	3512.6	3476.1	3430.4	3393.9	3368.4	3361.0	3373.8
5°	3644.0	3631.2	3563.7	3441.4	3295.3	3169.4	3028.8	2917.4	2844.4	2813.3	2824.3
7.5°	3682.4	3645.9	3498.0	3257.0	2977.7	2729.4	2477.4	2282.1	2157.9	2095.9	2105.0
10°	3715.2	3642.2	3388.4	2990.4	2563.2	2187.1	1847.6	1612.1	1480.6	1418.5	1420.4
12.5°	3746.3	3640.4	3246.0	2674.6	2095.9	1635.8	1320.0	1203.1	1166.6	1153.8	1150.2
15°	3804.7	3645.9	3067.1	2313.1	1630.3	1236.0	1121.0	1119.1	1126.4	1122.8	1121.0
17.5°	3885.0	3651.3	2864.5	1929.7	1257.9	1089.9	1084.4	1100.9	1111.8	1106.4	1104.5
20°	3989.1	3673.2	2649.0	1550.0	1080.8	1053.4	1066.2	1080.8	1089.9	1080.8	1079.0
22.5°	4135.1	3711.6	2413.5	1245.1	1024.2	1031.5	1042.5	1058.9	1068.0	1055.2	1053.4
25°	4314.0	3771.8	2181.7	1082.6	996.8	1005.9	1022.4	1040.6	1051.6	1038.8	1037.0
27.5°	4545.9	3868.6	1968.1	1046.1	969.4	974.9	998.6	1026.0	1040.6	1024.2	1024.2
30°	4881.8	4027.4	1783.7	1062.5	953.0	940.2	973.1	1011.4	1027.8	1013.2	1011.4
32.5°	5327.3	4252.0	1670.5	1088.1	945.7	900.1	931.1	980.4	1007.8	998.6	998.6
35°	5911.5	4593.4	1626.7	1117.3	940.2	858.1	880.0	932.9	980.4	989.5	989.5
37.5°	6619.9	5068.0	1639.4	1130.1	923.8	823.4	834.3	880.0	942.0	971.3	978.6
40°	7425.0	5621.2	1712.5	1117.3	905.5	794.2	796.0	830.7	885.4	929.3	943.9
42.5°	8255.7	6267.5	1847.6	1069.8	889.1	768.6	763.1	786.9	823.4	854.4	867.2
45°	9046.2	6932.0	1980.8	1004.1	869.0	743.0	730.3	739.4	746.7	759.5	766.8
47.5°	9736.3	7399.4	1942.5	943.9	841.6	713.8	691.9	688.3	666.4	664.5	662.7
50°	10212.8	7501.7	1725.3	883.6	801.5	681.0	646.3	624.4	586.0	567.8	569.6
52.5°	10364.3	7098.2	1409.4	823.4	735.7	637.2	587.9	553.2	505.7	489.3	487.5
55°	10163.5	6307.7	1126.4	750.3	644.5	578.7	524.0	478.3	440.0	419.9	419.9
57.5°	9672.4	5301.7	890.9	664.5	547.7	513.0	458.2	412.6	379.7	359.7	356.0
60°	8858.1	4210.0	704.7	562.3	467.4	441.8	385.2	356.0	326.8	303.1	297.6
62.5°	7622.1	3005.0	553.2	445.5	390.7	361.5	328.6	306.7	272.0	239.2	233.7
65°	5948.0	1838.4	427.2	326.8	314.0	299.4	279.3	259.2	217.3	184.4	178.9
67.5°	3751.7	870.8	304.9	246.5	248.3	241.0	231.9	215.4	184.4	155.2	151.5
70°	1652.2	421.7	200.8	188.0	184.4	184.4	191.7	186.2	157.0	129.6	124.1
72.5°	562.3	226.4	149.7	142.4	133.3	131.4	160.7	155.2	126.0	100.4	94.9
75°	293.9	151.5	109.5	102.2	80.3	96.8	127.8	120.5	89.5	65.7	60.2
77.5°	191.7	107.7	74.9	65.7	45.6	63.9	94.9	84.0	52.9	32.9	29.2
80°	120.5	71.2	43.8	31.0	21.9	34.7	51.1	36.5	20.1	7.3	5.5
82.5°	63.9	36.5	16.4	11.0	9.1	11.0	12.8	9.1	3.7	0.0	0.0
85°	25.6	12.8	5.5	3.7	1.8	0.0	3.7	1.8	0.0	0.0	0.0
87.5°	9.1	1.8	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)