

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: P883420

Luminaire Tested: **NAV-SB3D-730-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883420  
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-730-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

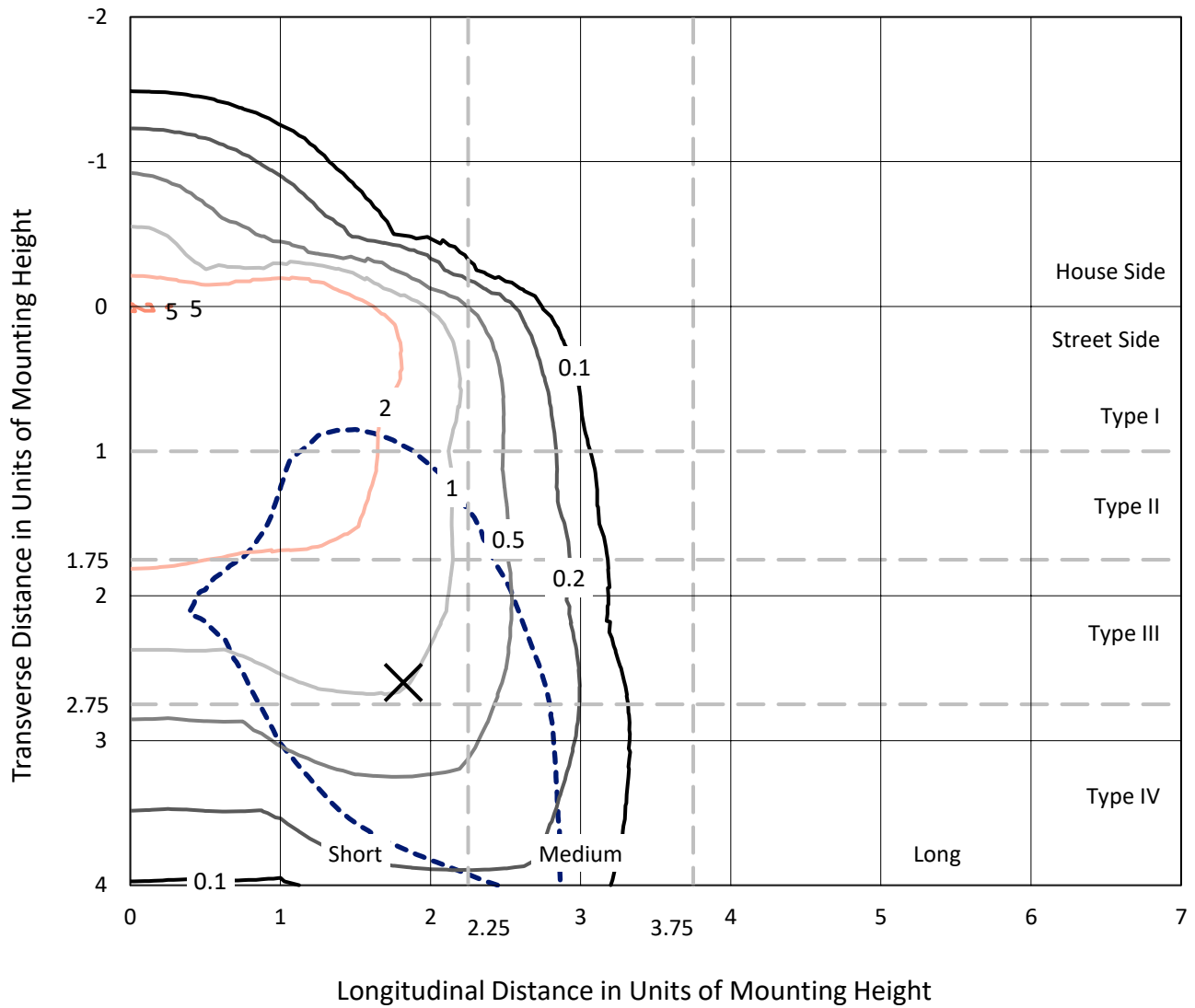
Lumens per Lamp: N/A  
Luminaire Lumens: 22749 lumens  
Efficiency: N/A  
Efficacy: 104.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G4  
  
Input Watts (W): 218.1  
Input Voltage (V): 120.0  
Input Current (Ain): 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

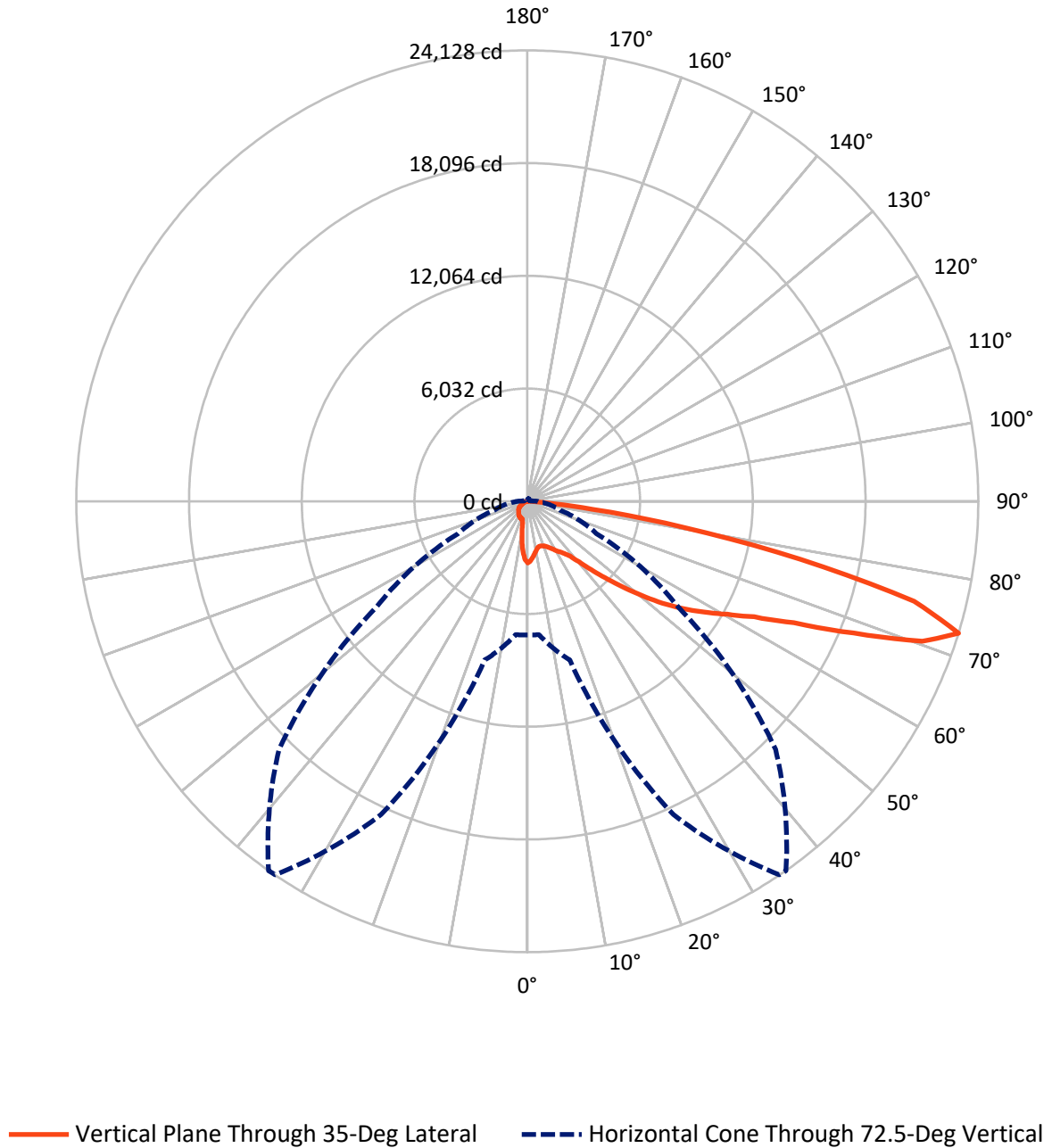
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 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	2560.3	0.0	2560.3
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	20188.7	0.0	20188.7
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	22749.0	0.0	22749.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	270.9	1.2
10°-20°	633.8	2.8
20°-30°	1029.6	4.5
30°-40°	1717.9	7.6
40°-50°	3250.3	14.3
50°-60°	5164.7	22.7
60°-70°	6389.2	28.1
70°-80°	3971.5	17.5
80°-90°	321.0	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°	22749.0	100.0
0°-180°	22749.0	100.0

**Coefficient of Utilization**



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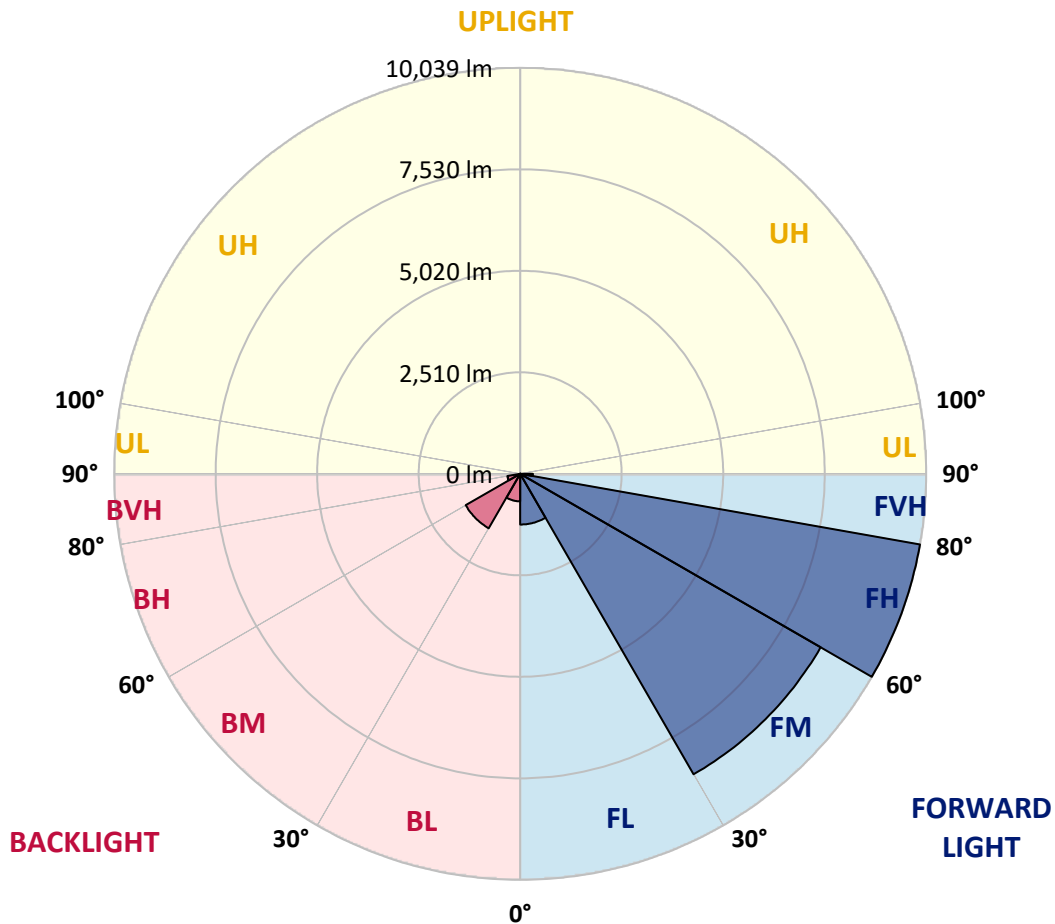
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1254.0	5.5			
FM (30°-60°)	8578.6	37.7			
FH (60°-80°)	10039.4	44.1			G4/12000
FVH (80°-90°)	316.6	1.4			G3/500
BL (0°-30°)	680.3	3.0	B2/1000		
BM (30°-60°)	1554.3	6.8	B2/2500		
BH (60°-80°)	321.3	1.4	B1/500		G1/500
BVH (80°-90°)	4.4	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°	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1
2.5°	3150.4	3177.1	3182.1	3190.4	3190.4	3200.4	3217.1	3240.4	3278.8	3298.8	3312.1
5°	2903.7	2923.7	2948.7	2968.7	3007.1	3012.1	3077.1	3140.4	3228.8	3295.4	3342.1
7.5°	2655.3	2678.7	2712.0	2760.4	2810.4	2825.4	2923.7	3030.4	3170.4	3295.4	3373.8
10°	2480.3	2482.0	2512.0	2560.3	2640.3	2658.7	2778.7	2930.4	3105.4	3275.4	3403.8
12.5°	2382.0	2393.6	2407.0	2443.6	2520.3	2532.0	2660.3	2838.7	3040.4	3263.8	3438.8
15°	2382.0	2390.3	2398.6	2417.0	2478.7	2488.7	2602.0	2780.4	3007.1	3268.8	3495.5
17.5°	2407.0	2420.3	2413.6	2435.3	2500.3	2507.0	2607.0	2763.7	3005.4	3300.4	3582.1
20°	2467.0	2477.0	2463.7	2477.0	2542.0	2555.3	2658.7	2795.4	3033.7	3355.4	3690.5
22.5°	2562.0	2567.0	2535.3	2545.3	2612.0	2628.7	2748.7	2885.4	3102.1	3443.8	3835.5
25°	2682.0	2692.0	2643.7	2655.3	2718.7	2738.7	2877.0	3020.4	3210.4	3565.5	4020.5
27.5°	2820.4	2825.4	2783.7	2782.0	2863.7	2892.0	3032.1	3187.1	3355.4	3718.8	4253.9
30°	2978.7	2993.7	2953.7	2947.0	3050.4	3073.7	3212.1	3392.1	3568.8	3948.8	4585.6
32.5°	3103.7	3115.4	3092.1	3108.7	3213.7	3232.1	3430.4	3682.1	3903.8	4275.6	5037.3
35°	3283.8	3290.4	3237.1	3267.1	3387.1	3433.8	3728.8	4088.9	4325.6	4685.6	5627.4
37.5°	3935.5	3935.5	3708.8	3560.5	3675.5	3717.1	4137.2	4600.6	4845.6	5235.7	6370.8
40°	4837.3	4822.3	4490.6	4187.2	4172.2	4253.9	4718.9	5245.7	5517.4	5895.8	7207.6
42.5°	5799.1	5775.7	5324.0	5024.0	4974.0	5002.3	5390.7	6040.8	6317.5	6700.9	8107.7
45°	6652.5	6645.9	6232.5	5829.1	5739.1	5829.1	6229.1	6970.9	7169.3	7572.6	9006.2
47.5°	7367.6	7367.6	7065.9	6802.5	6755.9	6809.2	7364.3	8002.7	7984.4	8501.1	9881.3
50°	8191.1	8184.4	7897.7	7784.3	7832.7	7907.7	8671.1	9089.5	8827.8	9412.9	10663.0
52.5°	8767.8	8807.8	8709.5	8691.1	8937.8	9067.8	9998.0	10153.0	9582.9	10278.0	11248.1
55°	9224.5	9271.2	9384.5	9512.9	9988.0	10158.0	11283.1	11161.4	10214.7	11028.1	11584.8
57.5°	9871.3	9804.6	9979.6	10233.0	11001.4	11206.4	12528.3	12113.2	10723.1	11636.5	11621.5
60°	10656.4	10666.4	10696.4	11016.4	12013.2	12276.6	13755.1	13013.3	11049.8	12009.9	11214.8
62.5°	11599.8	11614.8	11676.5	12168.2	13371.7	13620.1	15061.9	13750.1	11199.8	11904.9	10164.6
65°	11534.8	11598.2	12286.6	13968.5	15437.0	15682.0	16587.1	14266.8	10973.1	10944.7	8276.1
67.5°	10508.0	10611.4	11763.2	16118.8	18550.7	18824.1	18430.7	14368.5	9994.6	8511.1	5399.0
70°	9161.2	9197.9	10583.0	18052.3	22156.2	22432.9	20080.9	13250.0	7584.3	4747.3	2418.6
72.5°	7154.3	7162.6	8787.8	18500.7	24113.1	24128.1	18785.8	9836.3	4078.9	1823.6	840.1
75°	5110.7	5060.7	5885.8	15003.6	21214.4	21384.4	14083.5	4613.9	1558.5	861.8	418.4
77.5°	2740.4	2795.4	3330.4	8897.8	14655.2	14945.3	7684.3	1330.2	793.4	586.7	276.7
80°	846.8	893.4	1365.2	4073.9	8301.1	8476.1	2848.7	591.7	553.4	418.4	181.7
82.5°	266.7	276.7	636.7	1711.9	3445.4	3525.5	825.1	335.0	378.4	276.7	106.7
85°	76.7	78.3	283.4	638.4	851.8	868.4	231.7	130.0	216.7	171.7	55.0
87.5°	8.3	26.7	106.7	106.7	75.0	73.3	25.0	28.3	61.7	21.7	10.0
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°	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1
2.5°	3303.8	3305.4	3283.8	3247.1	3207.1	3173.7	3132.1	3098.7	3075.4	3068.7	3080.4
5°	3327.1	3315.4	3253.8	3142.1	3008.7	2893.7	2765.4	2663.7	2597.0	2568.7	2578.7
7.5°	3362.1	3328.8	3193.7	2973.7	2718.7	2492.0	2262.0	2083.6	1970.3	1913.6	1921.9
10°	3392.1	3325.4	3093.7	2730.4	2340.3	1996.9	1686.9	1471.9	1351.8	1295.2	1296.8
12.5°	3420.4	3323.8	2963.7	2442.0	1913.6	1493.5	1205.2	1098.5	1065.1	1053.5	1050.1
15°	3473.8	3328.8	2800.4	2111.9	1488.5	1128.5	1023.5	1021.8	1028.5	1025.1	1023.5
17.5°	3547.1	3333.8	2615.3	1761.9	1148.5	995.1	990.1	1005.1	1015.1	1010.1	1008.5
20°	3642.1	3353.8	2418.6	1415.2	986.8	961.8	973.5	986.8	995.1	986.8	985.1
22.5°	3775.5	3388.8	2203.6	1136.8	935.1	941.8	951.8	966.8	975.1	963.5	961.8
25°	3938.8	3443.8	1991.9	988.5	910.1	918.5	933.5	950.1	960.1	948.5	946.8
27.5°	4150.5	3532.1	1796.9	955.1	885.1	890.1	911.8	936.8	950.1	935.1	935.1
30°	4457.2	3677.1	1628.5	970.1	870.1	858.4	888.4	923.5	938.5	925.1	923.5
32.5°	4864.0	3882.2	1525.2	993.5	863.4	821.8	850.1	895.1	920.1	911.8	911.8
35°	5397.4	4193.9	1485.2	1020.1	858.4	783.4	803.4	851.8	895.1	903.5	903.5
37.5°	6044.1	4627.3	1496.9	1031.8	843.4	751.8	761.8	803.4	860.1	886.8	893.4
40°	6779.2	5132.3	1563.5	1020.1	826.8	725.1	726.8	758.4	808.4	848.4	861.8
42.5°	7537.6	5722.4	1686.9	976.8	811.8	701.8	696.8	718.4	751.8	780.1	791.8
45°	8259.4	6329.2	1808.6	916.8	793.4	678.4	666.8	675.1	681.8	693.4	700.1
47.5°	8889.5	6755.9	1773.6	861.8	768.4	651.8	631.7	628.4	608.4	606.7	605.1
50°	9324.5	6849.2	1575.2	806.8	731.8	621.7	590.1	570.1	535.1	518.4	520.1
52.5°	9462.9	6480.8	1286.8	751.8	671.8	581.7	536.7	505.1	461.7	446.7	445.1
55°	9279.5	5759.1	1028.5	685.1	588.4	528.4	478.4	436.7	401.7	383.4	383.4
57.5°	8831.1	4840.6	813.4	606.7	500.1	468.4	418.4	376.7	346.7	328.4	325.0
60°	8087.7	3843.8	643.4	513.4	426.7	403.4	351.7	325.0	298.4	276.7	271.7
62.5°	6959.2	2743.7	505.1	406.7	356.7	330.0	300.0	280.0	248.4	218.4	213.4
65°	5430.7	1678.6	390.1	298.4	286.7	273.4	255.0	236.7	198.4	168.4	163.4
67.5°	3425.4	795.1	278.4	225.0	226.7	220.0	211.7	196.7	168.4	141.7	138.4
70°	1508.5	385.0	183.4	171.7	168.4	168.4	175.0	170.0	143.4	118.3	113.3
72.5°	513.4	206.7	136.7	130.0	121.7	120.0	146.7	141.7	115.0	91.7	86.7
75°	268.4	138.4	100.0	93.3	73.3	88.3	116.7	110.0	81.7	60.0	55.0
77.5°	175.0	98.3	68.3	60.0	41.7	58.3	86.7	76.7	48.3	30.0	26.7
80°	110.0	65.0	40.0	28.3	20.0	31.7	46.7	33.3	18.3	6.7	5.0
82.5°	58.3	33.3	15.0	10.0	8.3	10.0	11.7	8.3	3.3	0.0	0.0
85°	23.3	11.7	5.0	3.3	1.7	0.0	3.3	1.7	0.0	0.0	0.0
87.5°	8.3	1.7	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)