

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: P963627

Luminaire Tested: **NAV-SB3A-827-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963627
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-827-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11923.8 lumens
Efficiency: N/A
Efficacy: 140.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

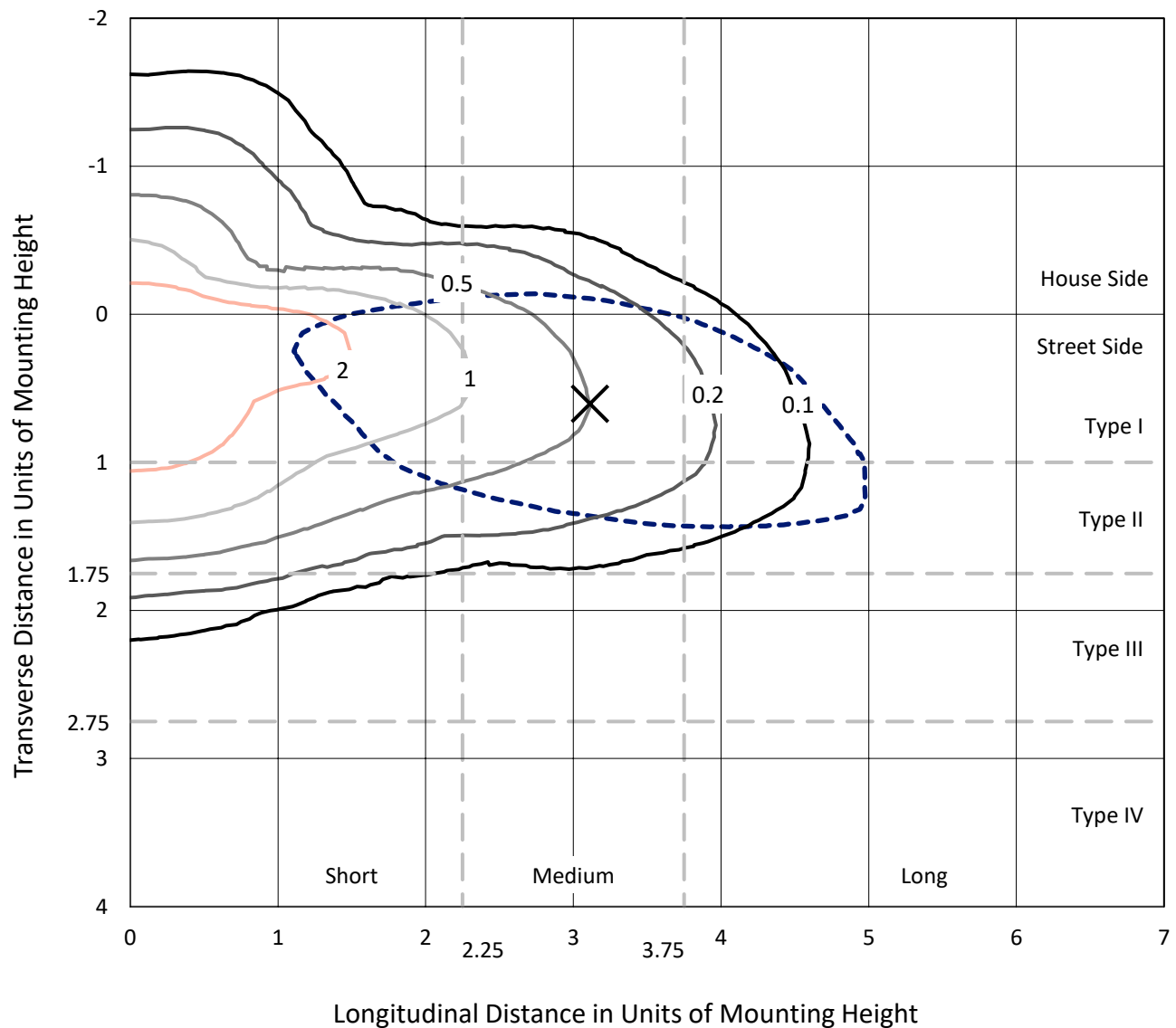


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Iso-Footcandle Lines of Horizontal Illumination

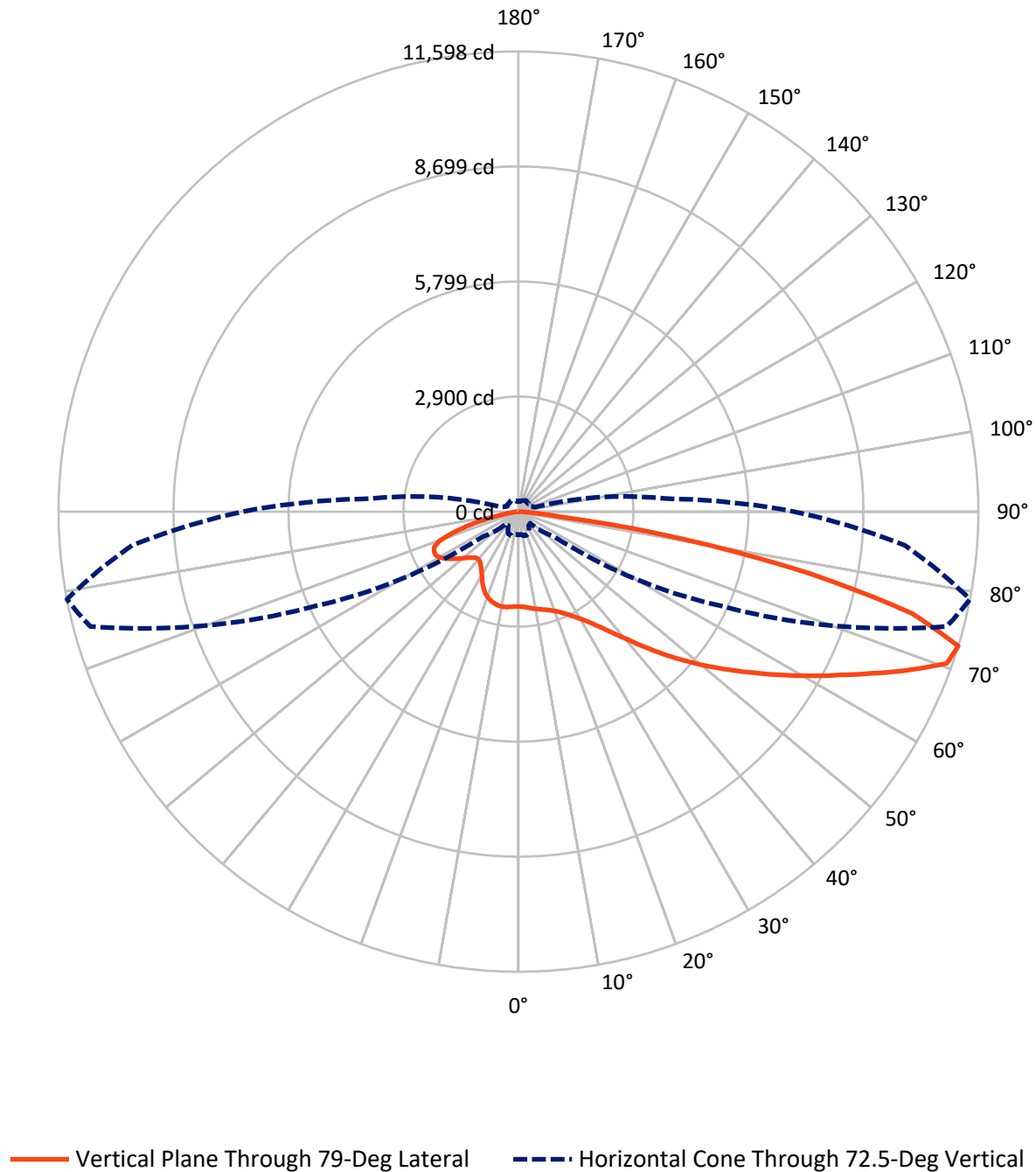
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2623.9	0.0	2623.9
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	9299.9	0.0	9299.9
	% Fixture	78.0	0.0	78.0
Total	Lumens	11923.8	0.0	11923.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.3	1.8
10°-20°	568.1	4.8
20°-30°	916.6	7.7
30°-40°	1375.7	11.5
40°-50°	1951.5	16.4
50°-60°	2464.5	20.7
60°-70°	2503.0	21.0
70°-80°	1705.9	14.3
80°-90°	221.3	1.9
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°	11923.8	100.0
0°-180°	11923.8	100.0

Coefficient of Utilization



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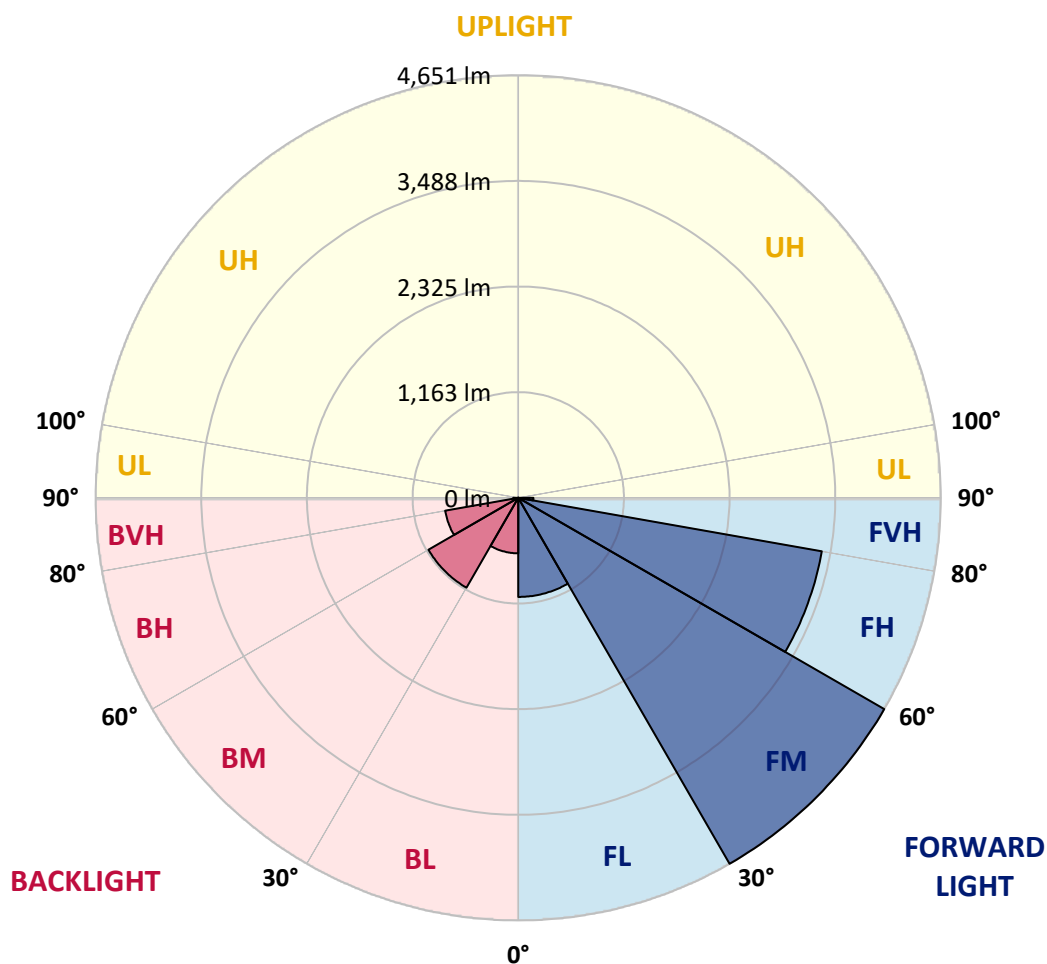
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1090.7	9.1			
FM	(30°-60°)	4650.5	39.0			
FH	(60°-80°)	3391.9	28.4			G2/5000
FVH	(80°-90°)	166.7	1.4			G2/225
BL	(0°-30°)	611.2	5.1	B2/1000		
BM	(30°-60°)	1141.1	9.6	B2/2500		
BH	(60°-80°)	817.0	6.9	B2/1000		G2/1000
BVH	(80°-90°)	54.6	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	2393.6	2393.6	2393.6	2393.6	2393.6	2393.6	2393.6	2393.6	2393.6	2393.6	2393.6
2.5°	2394.8	2383.5	2390.4	2387.9	2391.1	2394.8	2396.1	2398.0	2404.3	2403.7	2403.0
5°	2389.8	2378.4	2387.9	2384.8	2393.0	2401.8	2409.4	2416.3	2426.4	2430.8	2424.5
7.5°	2379.1	2371.5	2381.0	2390.4	2405.6	2418.8	2429.6	2445.3	2459.8	2462.4	2466.8
10°	2316.6	2311.0	2333.0	2357.6	2399.3	2435.2	2458.6	2476.8	2492.6	2495.2	2501.4
12.5°	2251.7	2244.8	2269.4	2302.8	2370.2	2435.2	2484.4	2508.4	2522.2	2530.4	2540.0
15°	2241.0	2235.3	2249.2	2278.2	2334.3	2418.2	2502.1	2546.2	2558.2	2567.6	2571.4
17.5°	2292.7	2282.0	2287.6	2297.7	2330.5	2402.4	2516.0	2589.1	2607.4	2617.5	2617.5
20°	2412.5	2397.4	2388.6	2368.4	2362.7	2405.0	2514.7	2640.8	2664.8	2677.4	2680.6
22.5°	2572.1	2562.0	2543.0	2492.0	2436.5	2435.8	2538.6	2707.0	2751.8	2763.8	2756.2
25°	2765.0	2750.0	2726.0	2656.6	2550.0	2497.0	2579.0	2791.6	2866.6	2869.8	2847.8
27.5°	2987.1	2964.4	2931.6	2840.2	2696.4	2592.9	2640.8	2888.8	2998.4	2997.2	2951.8
30°	3221.1	3198.4	3163.7	3052.7	2871.6	2722.2	2726.6	2993.4	3154.8	3148.0	3070.4
32.5°	3392.0	3375.0	3368.0	3282.3	3073.6	2874.8	2825.0	3109.4	3347.9	3341.6	3233.1
35°	3523.2	3501.2	3509.4	3465.8	3293.6	3045.8	2945.4	3247.6	3582.5	3581.9	3446.9
37.5°	3653.1	3633.6	3640.5	3611.5	3497.4	3262.8	3092.4	3416.6	3873.3	3887.1	3705.5
40°	3771.7	3750.9	3778.7	3751.5	3655.7	3493.6	3259.6	3607.7	4210.1	4236.5	4018.3
42.5°	3843.0	3826.6	3872.7	3873.3	3793.2	3688.5	3443.1	3818.4	4599.9	4659.1	4403.1
45°	3867.6	3861.9	3931.3	3945.8	3914.9	3801.4	3608.4	4048.0	5019.9	5125.9	4841.4
47.5°	3841.1	3830.4	3926.3	3979.9	4004.5	3854.3	3745.2	4296.5	5448.8	5604.0	5319.5
50°	3707.4	3686.6	3829.1	3942.0	4029.7	3889.1	3883.3	4583.5	5936.4	6106.0	5800.2
52.5°	3467.1	3451.3	3613.4	3809.6	3974.2	3906.1	4038.5	4896.9	6399.3	6618.8	6292.7
55°	3160.0	3139.1	3317.6	3573.7	3836.1	3900.4	4193.7	5247.6	6945.5	7168.1	6801.7
57.5°	2673.0	2631.4	2857.2	3160.0	3610.9	3893.5	4355.1	5596.4	7500.5	7767.3	7344.7
60°	1962.8	1901.0	2177.9	2536.8	3170.6	3826.0	4555.1	5987.4	8166.6	8406.9	7937.7
62.5°	1142.9	1106.9	1287.9	1622.9	2389.8	3428.6	4667.3	6442.2	8821.3	9073.6	8520.4
65°	887.4	877.3	893.1	918.9	1330.2	2567.0	4321.1	6885.6	9653.9	9830.5	9127.8
67.5°	811.7	804.2	811.1	762.5	674.9	1429.9	3418.5	6997.9	10545.7	10652.9	9659.5
70°	721.5	712.7	735.4	693.8	531.1	650.3	2208.8	6590.4	11255.2	11456.4	10063.9
72.5°	587.8	577.8	630.7	611.8	447.2	417.6	1109.5	5622.2	11180.8	11598.4	9774.3
75°	451.6	445.9	509.0	524.8	364.6	328.6	532.3	4179.1	9839.3	10259.9	8424.0
77.5°	350.7	346.2	378.4	435.8	293.9	254.8	327.4	2651.0	7414.7	7488.5	5805.2
80°	263.0	250.4	280.0	337.4	229.0	186.0	222.0	1545.9	4686.9	4248.5	2526.7
82.5°	164.6	158.4	182.9	225.2	161.4	128.0	144.4	854.0	1878.3	1106.3	487.6
85°	94.0	91.4	99.6	128.6	87.6	73.8	82.6	377.2	343.1	235.9	147.0
87.5°	37.8	36.6	45.4	57.4	32.2	27.2	29.0	90.8	75.6	70.0	48.6
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°	2393.6	2393.6	2393.6	2393.6	2393.6	2393.6	2393.6	2393.6	2393.6	2393.6	2393.6
2.5°	2400.5	2400.5	2391.7	2377.8	2362.0	2352.0	2335.6	2331.2	2314.1	2309.1	2317.3
5°	2429.6	2424.5	2397.4	2358.3	2304.7	2255.5	2201.2	2167.2	2119.2	2102.2	2114.8
7.5°	2466.1	2452.2	2405.6	2319.8	2207.5	2097.1	1982.4	1895.3	1812.1	1782.4	1786.2
10°	2499.6	2480.0	2400.5	2250.4	2056.1	1865.1	1682.1	1554.1	1456.9	1417.3	1426.1
12.5°	2533.0	2497.0	2367.1	2135.0	1841.1	1581.9	1386.9	1287.3	1227.4	1179.5	1195.3
15°	2564.5	2514.0	2315.4	1980.5	1605.1	1342.1	1198.3	1118.9	1070.9	1039.5	1045.1
17.5°	2601.1	2528.6	2237.8	1784.3	1380.7	1176.3	1059.0	1011.1	1001.6	997.8	1000.3
20°	2652.2	2541.8	2135.6	1564.9	1215.4	1043.9	983.3	978.9	978.3	976.3	982.7
22.5°	2707.0	2557.6	2000.7	1365.5	1074.7	961.2	950.5	941.7	936.0	935.3	942.3
25°	2772.0	2562.6	1831.6	1202.1	954.9	922.1	909.5	896.3	892.5	892.5	896.3
27.5°	2835.1	2545.6	1634.9	1060.3	887.4	886.2	869.8	865.3	864.7	866.6	871.7
30°	2898.2	2513.4	1439.3	929.1	848.3	848.3	842.7	845.8	848.3	854.6	859.1
32.5°	2983.4	2479.4	1275.9	831.9	814.3	808.0	813.6	819.9	822.5	830.7	837.6
35°	3108.2	2455.4	1146.1	778.9	778.9	770.7	773.9	772.6	767.0	763.2	772.0
37.5°	3273.4	2454.2	1038.8	754.3	749.3	748.0	748.7	740.5	718.4	691.9	692.5
40°	3472.1	2488.2	956.2	737.3	733.5	741.1	737.3	715.2	654.7	608.6	607.4
42.5°	3738.9	2585.4	903.2	716.5	727.9	737.3	722.2	645.9	604.9	574.0	572.7
45°	4053.1	2743.0	876.1	694.4	717.1	728.5	655.3	621.9	589.1	551.9	549.4
47.5°	4408.7	2941.6	869.8	673.6	693.2	700.1	626.9	611.8	574.6	534.2	531.1
50°	4796.0	3177.0	886.8	649.0	658.5	634.5	617.5	603.6	565.1	525.4	521.0
52.5°	5196.5	3436.2	920.9	615.6	623.8	597.3	613.7	601.7	559.4	505.8	502.0
55°	5590.1	3697.3	953.7	576.5	588.5	563.9	603.0	594.1	533.6	473.0	469.9
57.5°	5990.0	3957.1	985.8	541.8	554.4	531.7	586.0	574.0	504.6	442.8	441.5
60°	6405.6	4209.5	1000.9	508.4	517.2	502.0	560.1	539.3	471.8	411.8	410.0
62.5°	6794.8	4419.5	976.3	475.0	480.6	474.3	526.0	498.3	439.0	377.2	376.6
65°	7185.1	4544.3	900.7	442.2	443.4	440.2	478.1	454.1	400.5	346.9	343.1
67.5°	7539.1	4614.3	780.2	406.8	403.6	402.4	433.3	406.2	363.3	316.6	312.8
70°	7614.1	4436.5	596.0	365.2	365.2	362.0	384.1	356.4	322.3	284.4	283.2
72.5°	6954.3	3732.0	423.2	317.9	323.0	316.6	334.9	311.6	280.6	255.4	247.8
75°	5607.8	2736.7	307.8	269.4	278.2	267.4	284.4	268.0	241.6	241.0	217.0
77.5°	3853.1	1692.3	223.2	222.0	228.4	214.4	234.0	225.2	201.2	190.4	178.5
80°	1644.3	674.9	162.8	171.6	171.6	159.0	181.6	184.2	163.4	158.4	158.4
82.5°	327.4	191.8	114.2	118.0	111.0	107.2	128.6	142.6	196.8	218.8	219.5
85°	98.4	70.6	68.8	64.4	56.8	57.4	75.6	143.2	176.6	101.0	87.0
87.5°	27.2	17.6	18.2	14.6	12.0	15.8	25.8	108.4	59.2	25.2	21.4
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)