

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: P883304

Luminaire Tested: **NAV-SB3C-830-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883304
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3C-830-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19484 lumens
Efficiency: N/A
Efficacy: 130.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

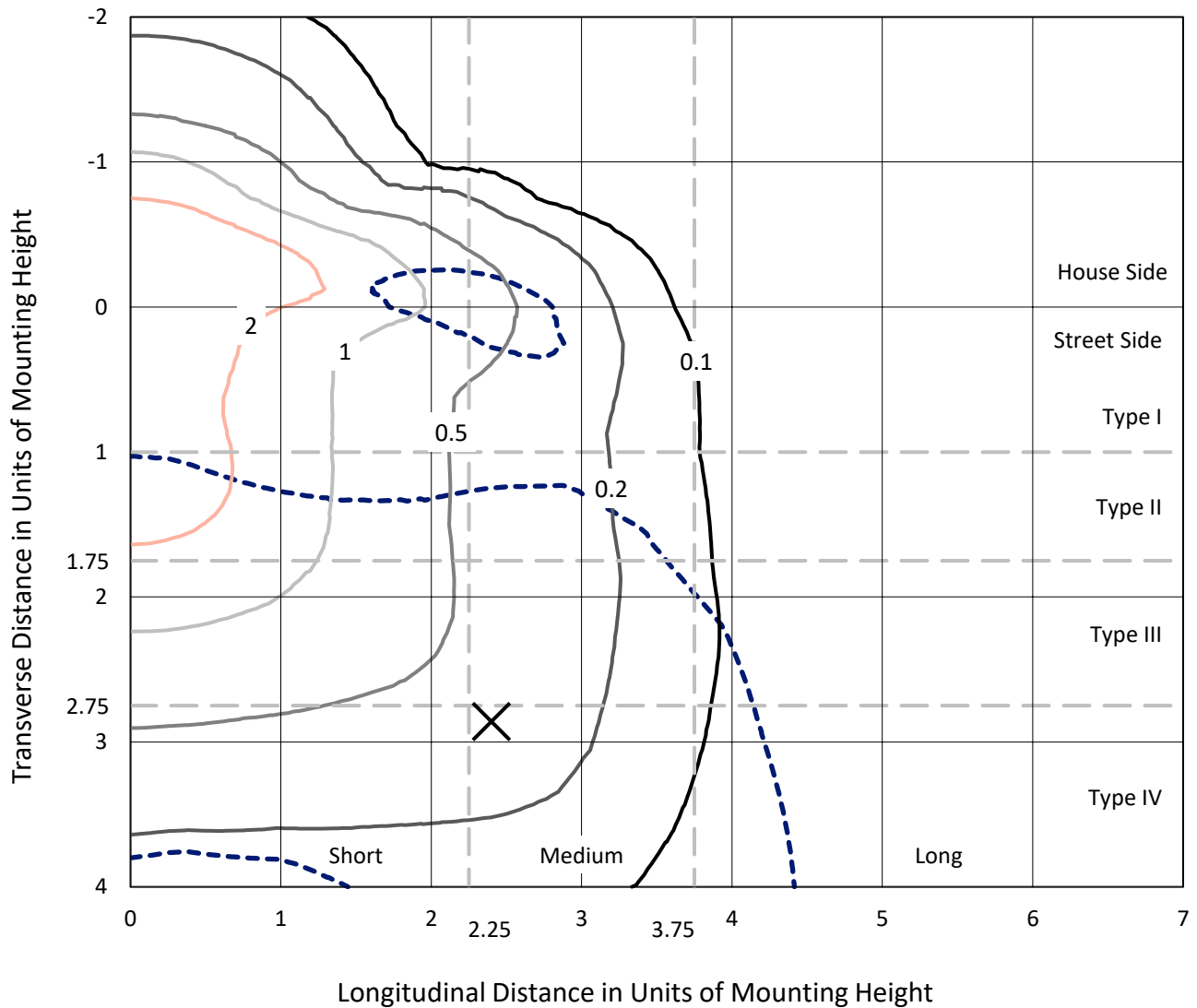
Input Watts (W): 149.1
Input Voltage (V): 120.0
Input Current (Ain): 1.259
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.297
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

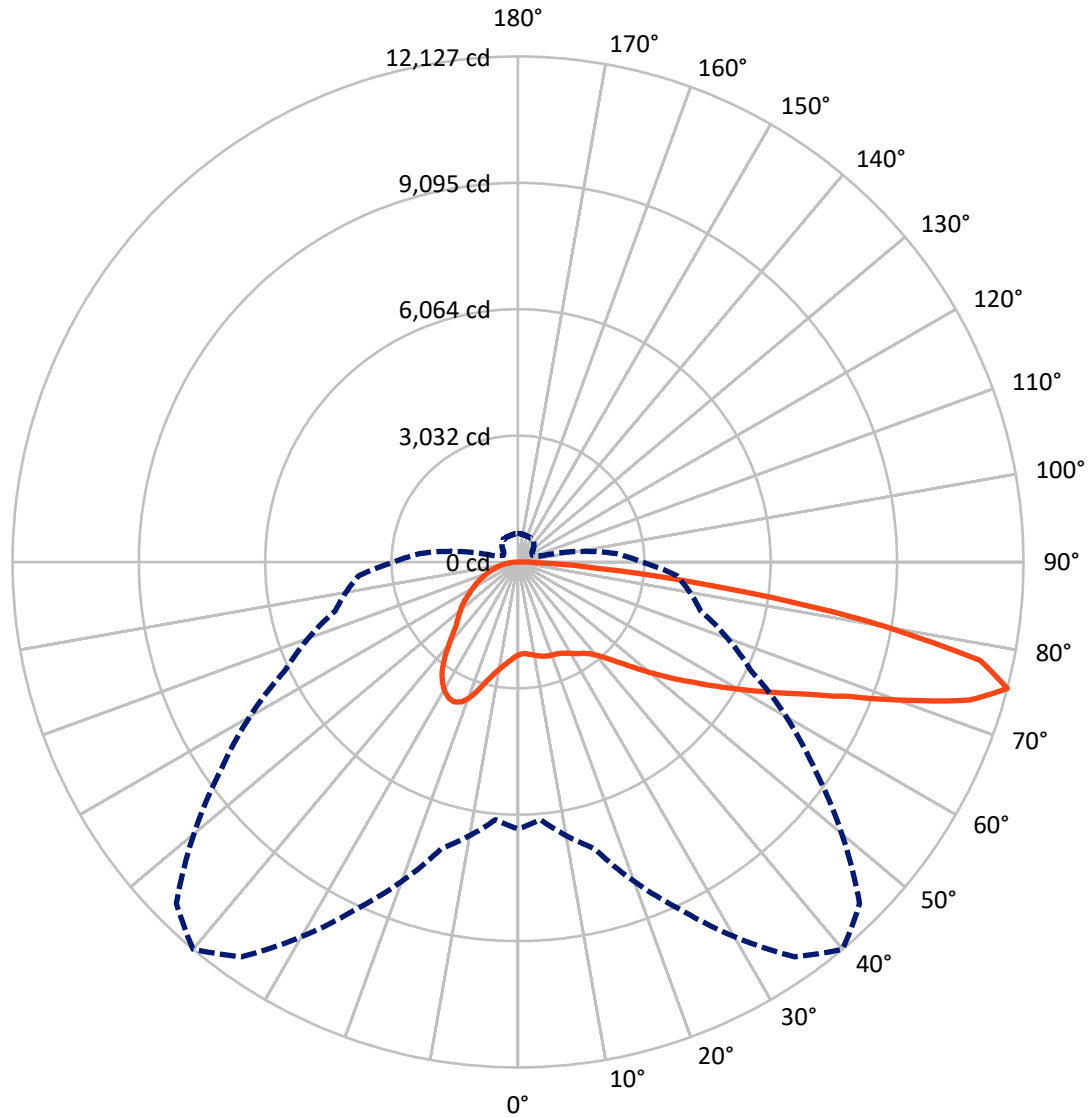
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6036.8	0.0	6036.8
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	13447.2	0.0	13447.2
	% Fixture	69.0	0.0	69.0
Total	Lumens	19484.0	0.0	19484.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.4	1.1
10°-20°	746.7	3.8
20°-30°	1363.4	7.0
30°-40°	1933.7	9.9
40°-50°	2611.1	13.4
50°-60°	3512.6	18.0
60°-70°	4458.3	22.9
70°-80°	4046.1	20.8
80°-90°	589.8	3.0
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°	19484.0	100.0
0°-180°	19484.0	100.0

Coefficient of Utilization



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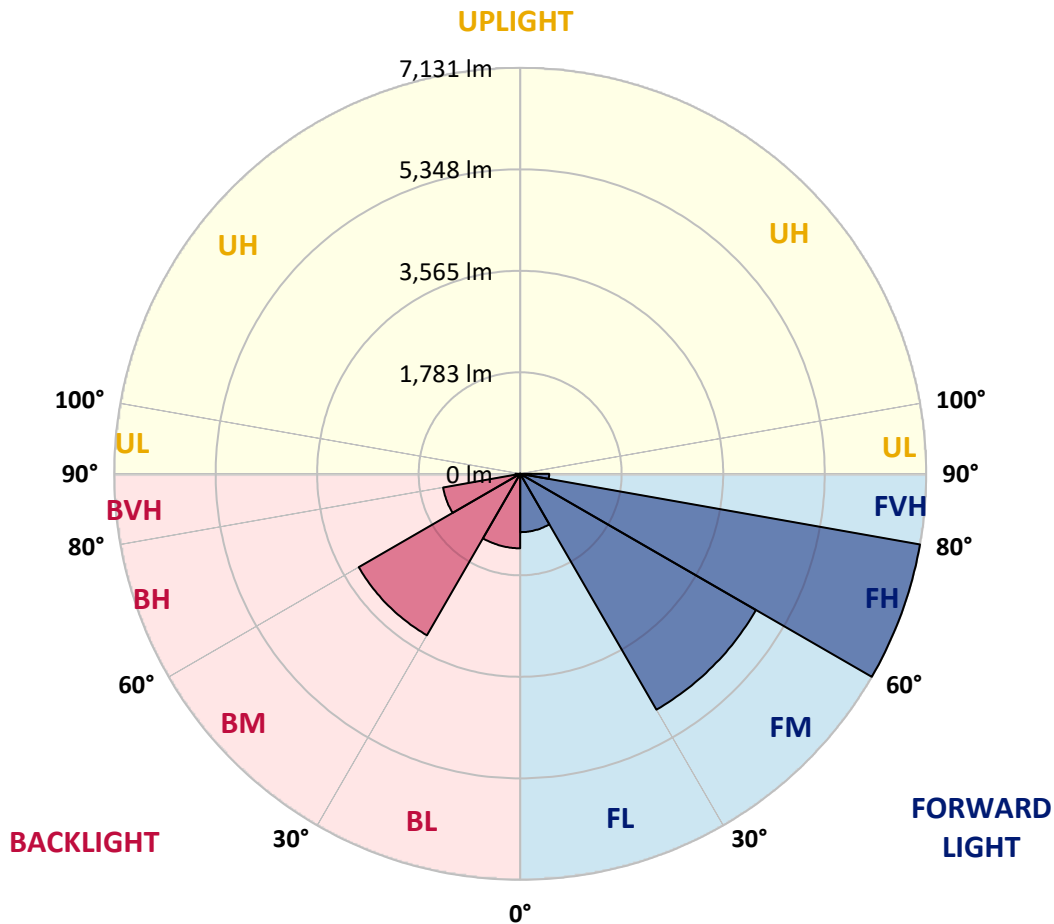
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1024.9	5.3			
FM (30°-60°)	4782.9	24.5			
FH (60°-80°)	7130.8	36.6			G3/7500
FVH (80°-90°)	508.6	2.6			G4/750
BL (0°-30°)	1307.6	6.7	B3/2500		
BM (30°-60°)	3274.4	16.8	B3/5000		
BH (60°-80°)	1373.6	7.0	B3/2500		G3/2500
BVH (80°-90°)	81.2	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	2228.0	2228.0	2228.0	2228.0	2228.0	2228.0	2228.0	2228.0	2228.0	2228.0	2228.0
2.5°	2193.9	2206.3	2203.2	2199.1	2199.1	2200.1	2199.1	2206.3	2213.6	2220.8	2232.2
5°	2216.7	2229.1	2222.9	2217.7	2213.6	2212.5	2209.4	2208.4	2212.5	2221.8	2237.3
7.5°	2261.1	2273.5	2264.2	2254.9	2246.6	2242.5	2238.4	2232.2	2229.1	2234.2	2255.9
10°	2310.7	2323.1	2311.7	2295.2	2281.8	2276.6	2272.5	2266.3	2262.1	2265.2	2289.0
12.5°	2360.3	2372.7	2357.2	2334.5	2316.9	2313.8	2308.6	2306.6	2305.5	2304.5	2328.3
15°	2406.8	2417.1	2397.5	2370.6	2352.0	2346.9	2341.7	2344.8	2350.0	2356.2	2383.0
17.5°	2443.0	2453.3	2424.4	2389.2	2371.7	2369.6	2366.5	2376.8	2391.3	2406.8	2439.9
20°	2476.0	2486.4	2449.2	2401.6	2381.0	2381.0	2382.0	2403.7	2424.4	2447.1	2492.6
22.5°	2522.5	2530.8	2485.3	2420.2	2390.3	2392.3	2400.6	2422.3	2448.1	2479.1	2542.2
25°	2591.8	2598.0	2542.2	2455.4	2421.3	2427.5	2434.7	2445.0	2469.8	2506.0	2590.7
27.5°	2703.4	2708.6	2635.2	2517.4	2465.7	2476.0	2486.4	2479.1	2490.5	2521.5	2630.0
30°	2860.5	2863.6	2770.6	2614.5	2541.1	2546.3	2548.4	2518.4	2496.7	2521.5	2657.9
32.5°	3046.5	3045.4	2934.9	2732.3	2626.9	2621.7	2604.2	2545.3	2494.6	2516.3	2682.7
35°	3334.8	3323.4	3180.8	2897.7	2724.1	2692.0	2650.7	2575.2	2505.0	2511.2	2704.4
37.5°	3812.2	3777.1	3579.7	3168.4	2868.7	2787.1	2726.1	2623.8	2527.7	2509.1	2730.3
40°	4350.6	4306.2	4089.2	3539.4	3085.7	2954.5	2856.3	2693.1	2564.9	2518.4	2768.5
42.5°	4989.3	4926.2	4692.7	3976.5	3360.6	3170.5	3022.7	2780.9	2619.7	2548.4	2820.2
45°	5773.6	5689.9	5359.2	4469.5	3706.8	3453.6	3256.3	2914.2	2703.4	2606.2	2897.7
47.5°	6566.3	6586.9	6116.7	5033.7	4122.3	3802.9	3548.7	3114.7	2825.3	2699.3	3022.7
50°	7408.5	7422.9	6870.1	5658.9	4593.5	4197.7	3877.3	3338.9	2994.8	2831.5	3209.8
52.5°	8065.7	8067.8	7554.2	6313.1	5084.4	4631.7	4231.8	3595.2	3191.2	3007.2	3458.8
55°	8477.0	8471.9	8033.7	6932.1	5648.6	5087.5	4624.5	3886.6	3430.9	3213.9	3771.9
57.5°	8775.7	8760.2	8364.4	7464.3	6250.0	5625.9	5068.9	4217.3	3714.1	3459.8	4184.3
60°	8889.4	8880.0	8588.6	7924.2	6882.5	6221.1	5581.4	4587.3	4035.4	3750.2	4714.4
62.5°	8932.8	8950.3	8808.7	8369.5	7559.4	6880.4	6144.6	5029.6	4397.1	4078.8	5273.5
65°	9085.7	9117.7	9088.8	8952.4	8324.1	7652.4	6891.8	5555.6	4791.9	4431.2	5857.3
67.5°	9388.5	9420.5	9432.9	9649.9	9258.3	8614.5	7823.9	6210.8	5253.8	4797.1	6296.5
70°	9381.3	9372.0	9591.0	10204.9	10428.1	9946.5	9080.5	7016.8	5804.6	5100.9	6352.3
72.5°	8539.0	8464.6	8982.4	10198.7	11401.6	11337.5	10615.1	8056.4	6280.0	5138.1	5512.2
75°	6406.1	6207.7	7122.2	9191.1	11563.8	12127.0	11590.7	8701.3	6167.4	4539.7	3836.0
77.5°	2739.6	2540.1	3618.0	6803.9	10349.6	11336.5	10695.7	7591.4	4923.1	3002.0	1883.9
80°	717.2	716.1	1093.3	3084.7	7038.5	8371.6	7344.4	4902.5	2812.9	1072.7	519.8
82.5°	296.6	289.4	402.0	1199.8	3439.2	4697.9	3833.9	2186.7	1015.8	290.4	172.6
85°	110.6	109.5	195.3	414.4	1213.2	1937.6	1402.3	559.1	253.2	141.6	77.5
87.5°	31.0	30.0	42.4	143.6	295.6	448.5	239.7	92.0	71.3	55.8	22.7
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°	2228.0	2228.0	2228.0	2228.0	2228.0	2228.0	2228.0	2228.0	2228.0	2228.0	2228.0
2.5°	2235.3	2240.4	2249.7	2257.0	2266.3	2276.6	2291.1	2300.4	2309.7	2315.9	2311.7
5°	2244.6	2255.9	2279.7	2303.5	2331.4	2357.2	2387.2	2408.9	2426.4	2431.6	2433.7
7.5°	2265.2	2283.8	2324.1	2364.4	2408.9	2451.2	2494.6	2531.8	2561.8	2573.2	2574.2
10°	2301.4	2326.2	2383.0	2439.9	2498.8	2563.9	2619.7	2673.4	2715.8	2733.4	2734.4
12.5°	2346.9	2377.9	2452.3	2530.8	2612.4	2702.4	2774.7	2840.8	2893.5	2917.3	2917.3
15°	2405.8	2446.1	2541.1	2646.6	2766.4	2891.5	2983.4	3056.8	3115.7	3144.7	3142.6
17.5°	2469.8	2523.6	2643.5	2802.6	2974.1	3138.5	3245.9	3299.7	3360.6	3388.5	3387.5
20°	2531.8	2598.0	2769.5	3001.0	3229.4	3404.0	3490.8	3505.3	3509.4	3512.5	3520.8
22.5°	2595.9	2684.8	2927.6	3251.1	3496.0	3616.9	3629.3	3567.3	3480.5	3440.2	3451.6
25°	2666.2	2784.0	3134.3	3527.0	3725.4	3739.9	3644.8	3493.9	3329.6	3254.2	3265.6
27.5°	2734.4	2898.7	3382.3	3790.5	3890.8	3763.7	3559.0	3345.1	3146.7	3067.1	3076.4
30°	2802.6	3029.9	3656.2	4021.0	3966.2	3704.8	3423.7	3185.0	2985.5	2901.8	2911.1
32.5°	2871.8	3182.9	3971.4	4187.4	3952.8	3579.7	3255.2	3005.1	2829.5	2741.6	2753.0
35°	2950.4	3371.0	4270.0	4278.3	3862.9	3395.8	3033.0	2790.2	2637.2	2567.0	2582.5
37.5°	3052.7	3609.7	4533.5	4301.0	3705.8	3126.1	2757.1	2536.0	2409.9	2377.9	2400.6
40°	3179.8	3897.0	4735.1	4264.9	3473.3	2798.5	2455.4	2278.7	2207.4	2214.6	2239.4
42.5°	3345.1	4218.4	4876.6	4171.9	3149.8	2460.5	2190.8	2112.3	2146.4	2175.3	2202.2
45°	3560.1	4552.1	4964.5	4013.7	2784.0	2174.3	2034.8	2053.4	2079.2	2082.3	2103.0
47.5°	3835.0	4890.1	5022.3	3775.0	2410.9	1972.8	1935.6	1939.7	1934.5	1912.8	1929.4
50°	4178.1	5218.7	5074.0	3458.8	2093.7	1846.7	1797.1	1782.6	1711.3	1641.0	1650.3
52.5°	4568.7	5520.4	5095.7	3066.1	1846.7	1741.3	1660.7	1569.7	1436.4	1414.7	1422.0
55°	5002.7	5799.5	5039.9	2583.5	1639.0	1605.9	1484.0	1374.4	1360.0	1341.4	1344.5
57.5°	5521.5	6100.2	4926.2	2045.1	1426.1	1447.8	1329.0	1341.4	1315.5	1286.6	1281.4
60°	6088.8	6411.2	4726.8	1554.2	1206.0	1250.4	1288.7	1287.6	1280.4	1256.6	1248.4
62.5°	6599.3	6615.9	4334.1	1190.5	1012.7	1097.5	1201.9	1200.8	1194.6	1181.2	1176.0
65°	6903.1	6584.9	3678.9	937.3	853.6	971.4	1084.0	1092.3	1093.3	1092.3	1092.3
67.5°	6849.4	6222.1	2779.9	746.1	722.4	843.3	967.3	978.6	986.9	989.0	991.0
70°	6241.8	5425.4	1812.6	595.2	605.6	730.6	856.7	868.1	875.3	883.6	887.7
72.5°	4865.3	3988.9	1037.5	481.6	503.3	633.5	747.2	760.6	764.7	780.2	786.4
75°	2964.8	2345.8	560.1	379.3	413.4	541.5	638.6	654.1	661.4	680.0	682.0
77.5°	1409.6	1015.8	319.3	295.6	332.8	442.3	539.4	557.0	537.4	547.7	539.4
80°	476.4	377.2	201.5	225.3	254.2	345.2	432.0	449.5	408.2	406.1	402.0
82.5°	166.4	152.9	128.1	149.8	164.3	247.0	326.6	349.3	303.8	302.8	288.3
85°	65.1	62.0	71.3	81.6	98.2	151.9	214.9	226.3	187.0	150.9	148.8
87.5°	13.4	14.5	17.6	18.6	30.0	52.7	77.5	95.1	75.4	64.1	58.9
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)