

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: P883294

Luminaire Tested: **NAV-SB3C-827-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883294
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-827-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 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: 18092 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G3

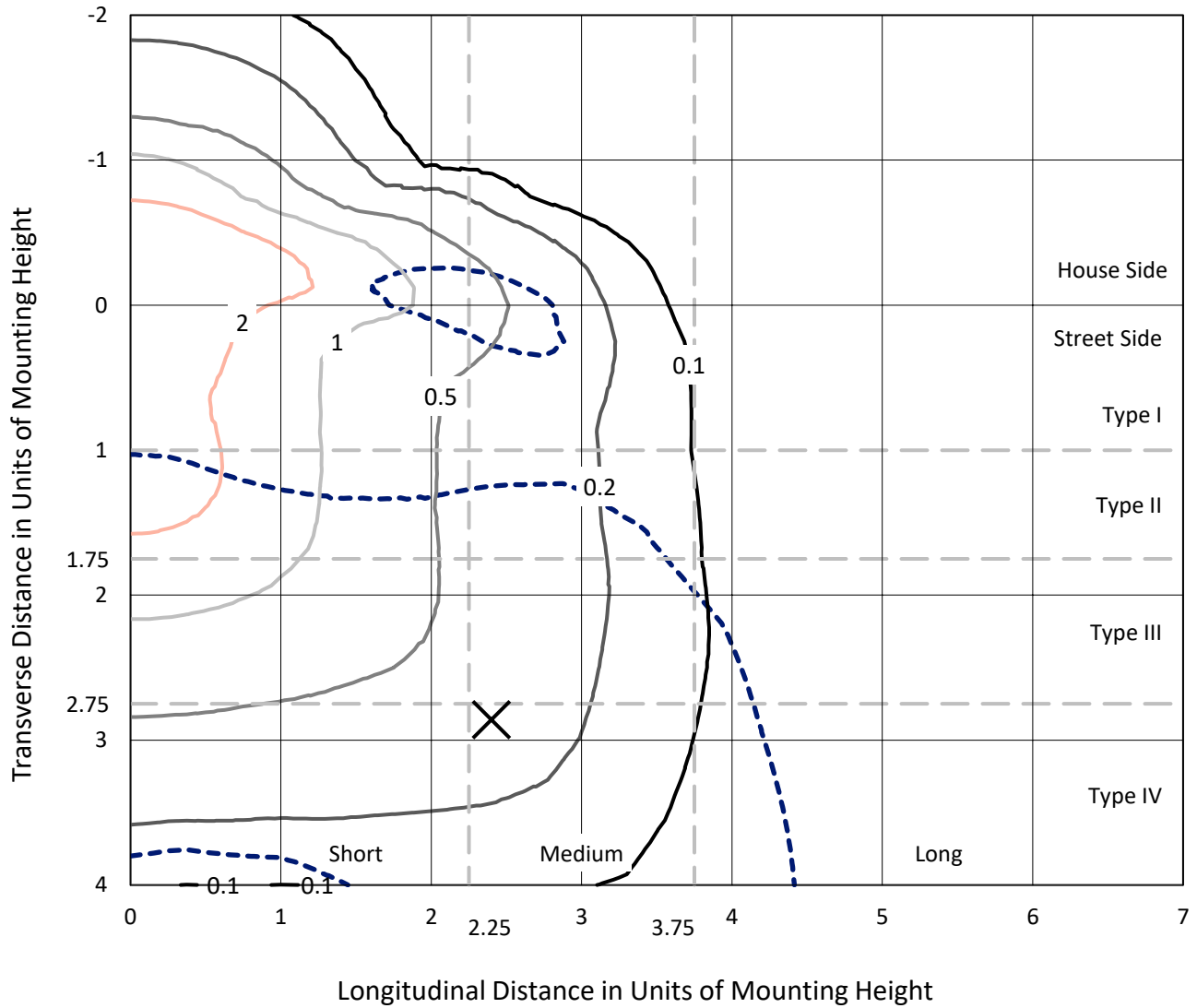
Input Watts (W): 149.1
Input Voltage (V): 120.0
Input Current (Ain): 1.259
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.297
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

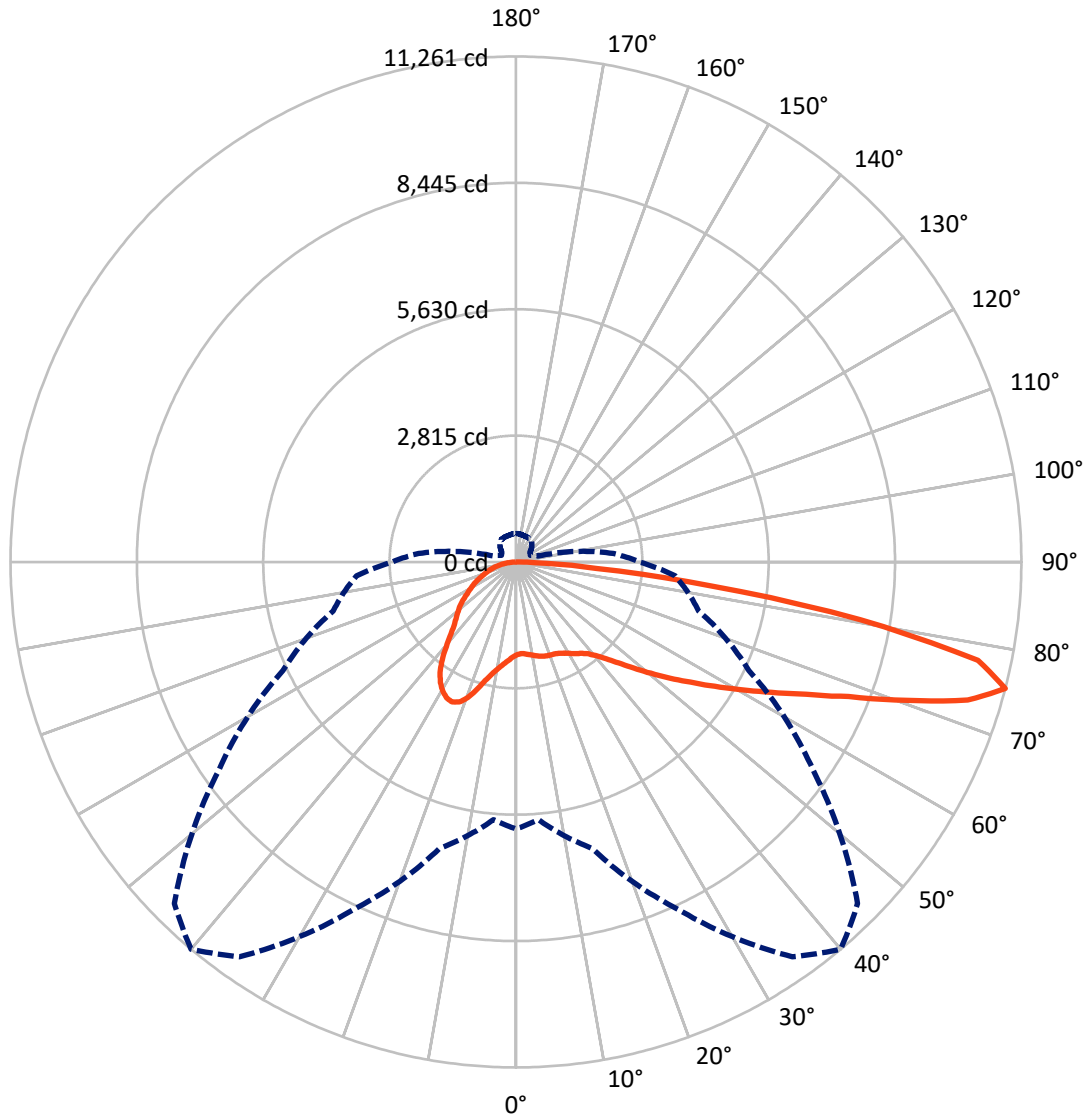
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 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	5605.5	0.0	5605.5
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	12486.5	0.0	12486.5
	% Fixture	69.0	0.0	69.0
Total	Lumens	18092.0	0.0	18092.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.5	1.1
10°-20°	693.4	3.8
20°-30°	1266.0	7.0
30°-40°	1795.5	9.9
40°-50°	2424.5	13.4
50°-60°	3261.6	18.0
60°-70°	4139.7	22.9
70°-80°	3757.1	20.8
80°-90°	547.7	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°	18092.0	100.0
0°-180°	18092.0	100.0



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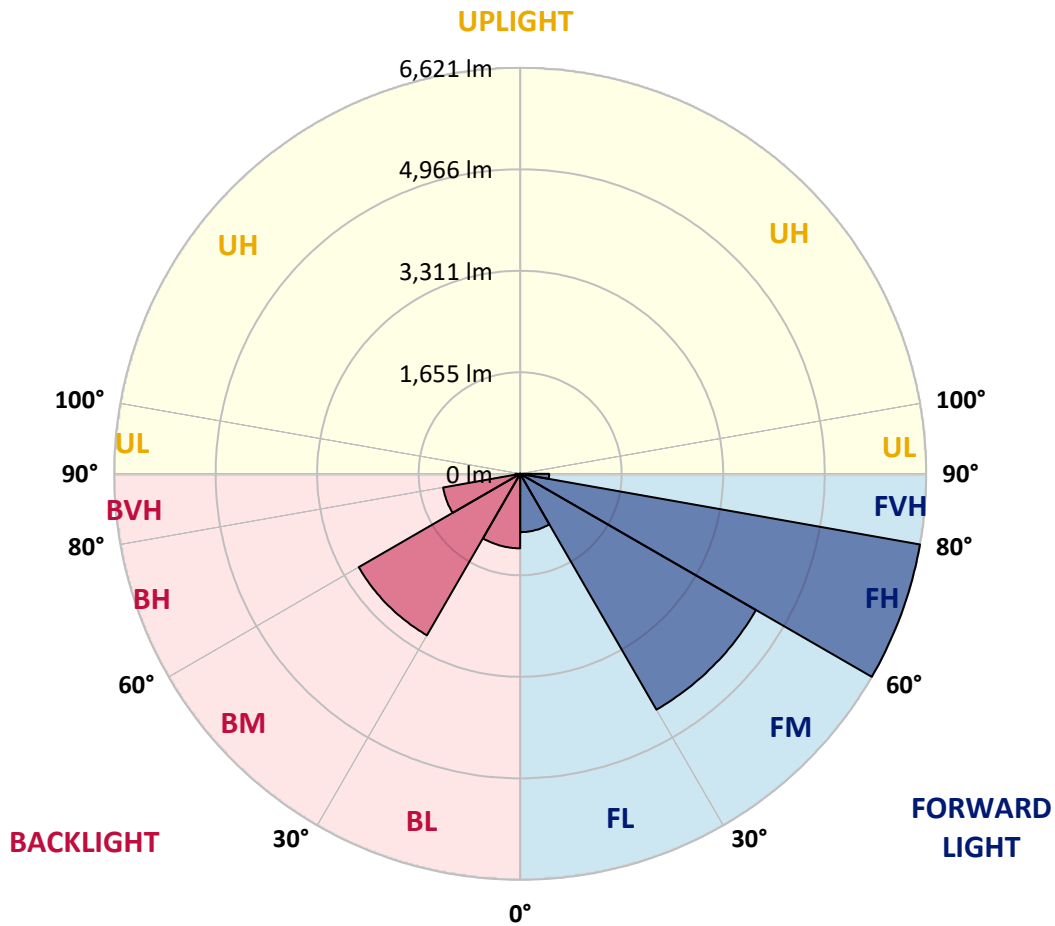
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	951.7	5.3			
FM (30°-60°)	4441.2	24.5			
FH (60°-80°)	6621.4	36.6			G3/7500
FVH (80°-90°)	472.3	2.6			G3/500
BL (0°-30°)	1214.2	6.7	B3/2500		
BM (30°-60°)	3040.5	16.8	B3/5000		
BH (60°-80°)	1275.4	7.0	B3/2500		G3/2500
BVH (80°-90°)	75.4	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-G3

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	2068.8	2068.8	2068.8	2068.8	2068.8	2068.8	2068.8	2068.8	2068.8	2068.8	2068.8
2.5°	2037.2	2048.7	2045.8	2042.0	2042.0	2042.9	2042.0	2048.7	2055.4	2062.1	2072.7
5°	2058.3	2069.8	2064.0	2059.2	2055.4	2054.5	2051.6	2050.6	2054.5	2063.1	2077.5
7.5°	2099.6	2111.1	2102.4	2093.8	2086.1	2082.3	2078.4	2072.7	2069.8	2074.6	2094.8
10°	2145.6	2157.1	2146.6	2131.2	2118.7	2113.9	2110.1	2104.3	2100.5	2103.4	2125.5
12.5°	2191.7	2203.2	2188.8	2167.7	2151.4	2148.5	2143.7	2141.8	2140.8	2139.9	2161.9
15°	2234.9	2244.4	2226.2	2201.3	2184.0	2179.2	2174.4	2177.3	2182.1	2187.8	2212.8
17.5°	2268.4	2278.0	2251.2	2218.5	2202.2	2200.3	2197.4	2207.0	2220.5	2234.9	2265.6
20°	2299.1	2308.7	2274.2	2230.1	2210.9	2210.9	2211.8	2232.0	2251.2	2272.3	2314.5
22.5°	2342.3	2350.0	2307.8	2247.3	2219.5	2221.4	2229.1	2249.2	2273.2	2302.0	2360.6
25°	2406.6	2412.4	2360.6	2280.0	2248.3	2254.0	2260.8	2270.4	2293.4	2327.0	2405.7
27.5°	2510.2	2515.0	2446.9	2337.5	2289.5	2299.1	2308.7	2302.0	2312.6	2341.4	2442.1
30°	2656.1	2659.0	2572.6	2427.7	2359.6	2364.4	2366.3	2338.5	2318.3	2341.4	2468.0
32.5°	2828.8	2827.9	2725.2	2537.1	2439.2	2434.4	2418.1	2363.4	2316.4	2336.6	2491.1
35°	3096.5	3086.0	2953.6	2690.6	2529.4	2499.7	2461.3	2391.3	2326.0	2331.8	2511.2
37.5°	3539.9	3507.2	3324.0	2942.1	2663.8	2588.0	2531.4	2436.4	2347.1	2329.8	2535.2
40°	4039.8	3998.6	3797.0	3286.5	2865.3	2743.4	2652.3	2500.7	2381.7	2338.5	2570.7
42.5°	4632.8	4574.3	4357.4	3692.4	3120.5	2944.0	2806.8	2582.2	2432.5	2366.3	2618.7
45°	5361.1	5283.4	4976.4	4150.2	3442.0	3206.9	3023.6	2706.0	2510.2	2420.0	2690.6
47.5°	6097.1	6116.3	5679.7	4674.1	3827.7	3531.2	3295.2	2892.2	2623.5	2506.4	2806.8
50°	6879.2	6892.6	6379.3	5254.6	4265.3	3897.8	3600.3	3100.4	2780.8	2629.2	2980.4
52.5°	7489.5	7491.4	7014.5	5862.0	4721.1	4300.8	3929.5	3338.4	2963.2	2792.4	3211.7
55°	7871.4	7866.6	7459.7	6436.8	5245.0	4724.0	4294.1	3609.0	3185.8	2984.3	3502.4
57.5°	8148.7	8134.3	7766.8	6931.0	5803.5	5223.9	4706.7	3916.0	3448.7	3212.7	3885.3
60°	8254.3	8245.6	7975.0	7358.0	6390.8	5776.6	5182.7	4259.6	3747.1	3482.3	4377.6
62.5°	8294.6	8310.9	8179.4	7771.6	7019.3	6388.9	5705.6	4670.3	4083.0	3787.4	4896.7
65°	8436.6	8466.3	8439.5	8312.8	7729.4	7105.7	6399.4	5158.7	4449.6	4114.7	5438.9
67.5°	8717.7	8747.5	8759.0	8960.5	8596.8	7999.0	7264.9	5767.0	4878.5	4454.3	5846.7
70°	8711.0	8702.4	8905.8	9475.8	9683.1	9235.9	8431.8	6515.5	5389.9	4736.5	5898.5
72.5°	7929.0	7859.9	8340.6	9470.0	10587.0	10527.5	9856.8	7480.8	5831.3	4771.0	5118.4
75°	5948.4	5764.2	6613.4	8534.5	10737.6	11260.6	10762.6	8079.6	5726.7	4215.4	3561.9
77.5°	2543.8	2358.6	3359.5	6317.8	9610.1	10526.5	9931.6	7049.0	4571.4	2787.6	1749.3
80°	665.9	665.0	1015.2	2864.3	6535.7	7773.5	6819.7	4552.2	2612.0	996.0	482.7
82.5°	275.4	268.7	373.3	1114.1	3193.5	4362.2	3560.0	2030.5	943.3	269.6	160.2
85°	102.7	101.7	181.4	384.8	1126.5	1799.2	1302.1	519.1	235.1	131.5	72.0
87.5°	28.8	27.8	39.3	133.4	274.4	416.5	222.6	85.4	66.2	51.8	21.1
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°	2068.8	2068.8	2068.8	2068.8	2068.8	2068.8	2068.8	2068.8	2068.8	2068.8	2068.8
2.5°	2075.6	2080.4	2089.0	2095.7	2104.3	2113.9	2127.4	2136.0	2144.7	2150.4	2146.6
5°	2084.2	2094.8	2116.8	2138.9	2164.8	2188.8	2216.6	2236.8	2253.1	2257.9	2259.8
7.5°	2103.4	2120.7	2158.1	2195.5	2236.8	2276.1	2316.4	2351.0	2378.8	2389.3	2390.3
10°	2137.0	2160.0	2212.8	2265.6	2320.3	2380.7	2432.5	2482.4	2521.8	2538.1	2539.0
12.5°	2179.2	2208.0	2277.1	2350.0	2425.8	2509.3	2576.5	2637.9	2686.8	2708.9	2708.9
15°	2233.9	2271.3	2359.6	2457.5	2568.8	2684.9	2770.3	2838.4	2893.1	2920.0	2918.1
17.5°	2293.4	2343.3	2454.6	2602.4	2761.7	2914.2	3014.0	3063.9	3120.5	3146.4	3145.5
20°	2351.0	2412.4	2571.7	2786.6	2998.7	3160.8	3241.4	3254.9	3258.7	3261.6	3269.3
22.5°	2410.5	2493.0	2718.5	3018.8	3246.2	3358.5	3370.0	3312.5	3231.8	3194.4	3205.0
25°	2475.7	2585.1	2910.4	3275.0	3459.3	3472.7	3384.4	3244.3	3091.8	3021.7	3032.3
27.5°	2539.0	2691.6	3140.7	3519.7	3612.8	3494.8	3304.8	3106.1	2921.9	2848.0	2856.7
30°	2602.4	2813.5	3395.0	3733.7	3682.8	3440.1	3179.1	2957.4	2772.2	2694.5	2703.1
32.5°	2666.7	2955.5	3687.6	3888.2	3670.4	3324.0	3022.7	2790.4	2627.3	2545.8	2556.3
35°	2739.6	3130.1	3965.0	3972.6	3586.9	3153.2	2816.4	2590.9	2448.8	2383.6	2398.0
37.5°	2834.6	3351.8	4209.7	3993.8	3441.0	2902.7	2560.1	2354.8	2237.7	2208.0	2229.1
40°	2952.6	3618.6	4396.8	3960.2	3225.1	2598.5	2280.0	2115.9	2049.7	2056.4	2079.4
42.5°	3106.1	3917.0	4528.2	3873.8	2924.8	2284.7	2034.3	1961.4	1993.0	2019.9	2044.9
45°	3305.7	4226.9	4609.8	3727.0	2585.1	2018.9	1889.4	1906.7	1930.7	1933.5	1952.7
47.5°	3561.0	4540.7	4663.5	3505.3	2238.7	1831.8	1797.3	1801.1	1796.3	1776.2	1791.5
50°	3879.6	4845.9	4711.5	3211.7	1944.1	1714.8	1668.7	1655.3	1589.1	1523.8	1532.4
52.5°	4242.3	5126.1	4731.7	2847.1	1714.8	1616.9	1542.0	1457.6	1333.8	1313.7	1320.4
55°	4645.3	5385.1	4679.8	2398.9	1521.9	1491.2	1378.0	1276.2	1262.8	1245.5	1248.4
57.5°	5127.0	5664.4	4574.3	1899.0	1324.2	1344.4	1234.0	1245.5	1221.5	1194.7	1189.9
60°	5653.8	5953.2	4389.1	1443.2	1119.8	1161.1	1196.6	1195.6	1188.9	1166.8	1159.2
62.5°	6127.8	6143.2	4024.5	1105.4	940.4	1019.1	1116.0	1115.0	1109.3	1096.8	1092.0
65°	6410.0	6114.4	3416.1	870.3	792.6	902.0	1006.6	1014.3	1015.2	1014.3	1014.3
67.5°	6360.1	5777.6	2581.3	692.8	670.7	783.0	898.2	908.7	916.4	918.3	920.2
70°	5795.8	5037.8	1683.1	552.7	562.3	678.4	795.5	806.0	812.8	820.4	824.3
72.5°	4517.7	3704.0	963.4	447.2	467.3	588.2	693.8	706.2	710.1	724.5	730.2
75°	2753.0	2178.2	520.1	352.2	383.8	502.8	593.0	607.4	614.1	631.4	633.3
77.5°	1308.9	943.3	296.5	274.4	309.0	410.7	500.9	517.2	499.0	508.6	500.9
80°	442.4	350.2	187.1	209.2	236.1	320.5	401.1	417.4	379.0	377.1	373.3
82.5°	154.5	142.0	119.0	139.1	152.6	229.3	303.2	324.3	282.1	281.2	267.7
85°	60.5	57.6	66.2	75.8	91.2	141.1	199.6	210.1	173.7	140.1	138.2
87.5°	12.5	13.4	16.3	17.3	27.8	48.9	72.0	88.3	70.0	59.5	54.7
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)