

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: P883297

Luminaire Tested: **NAV-SB3C-827-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883297
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3C-827-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18084 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 II - Medium
BUG Rating: B3 - U0 - G3

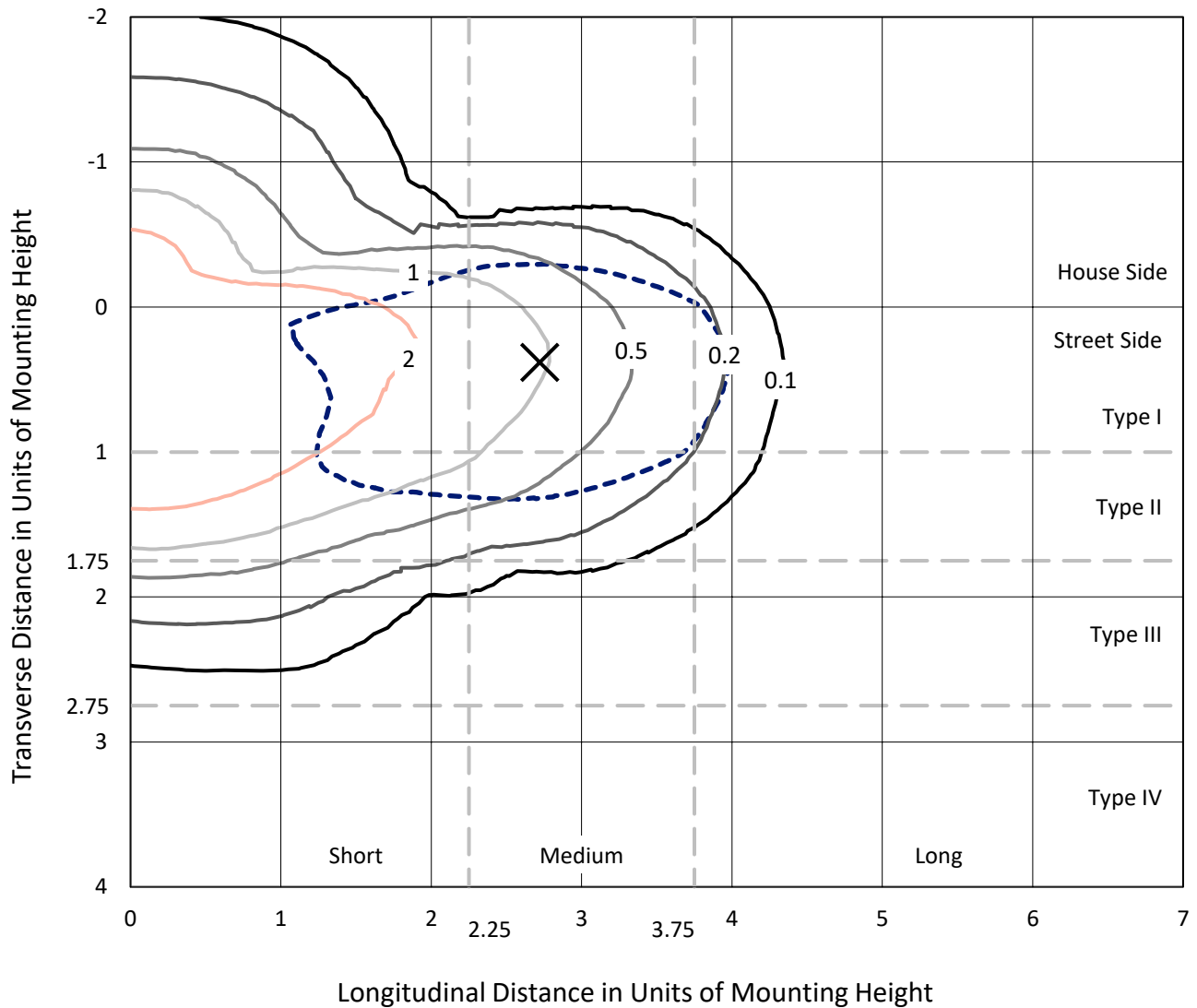
Input Watts (W): 149.1
Input Voltage (V): 120.0
Input Current (Ain): 1.259
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.297
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

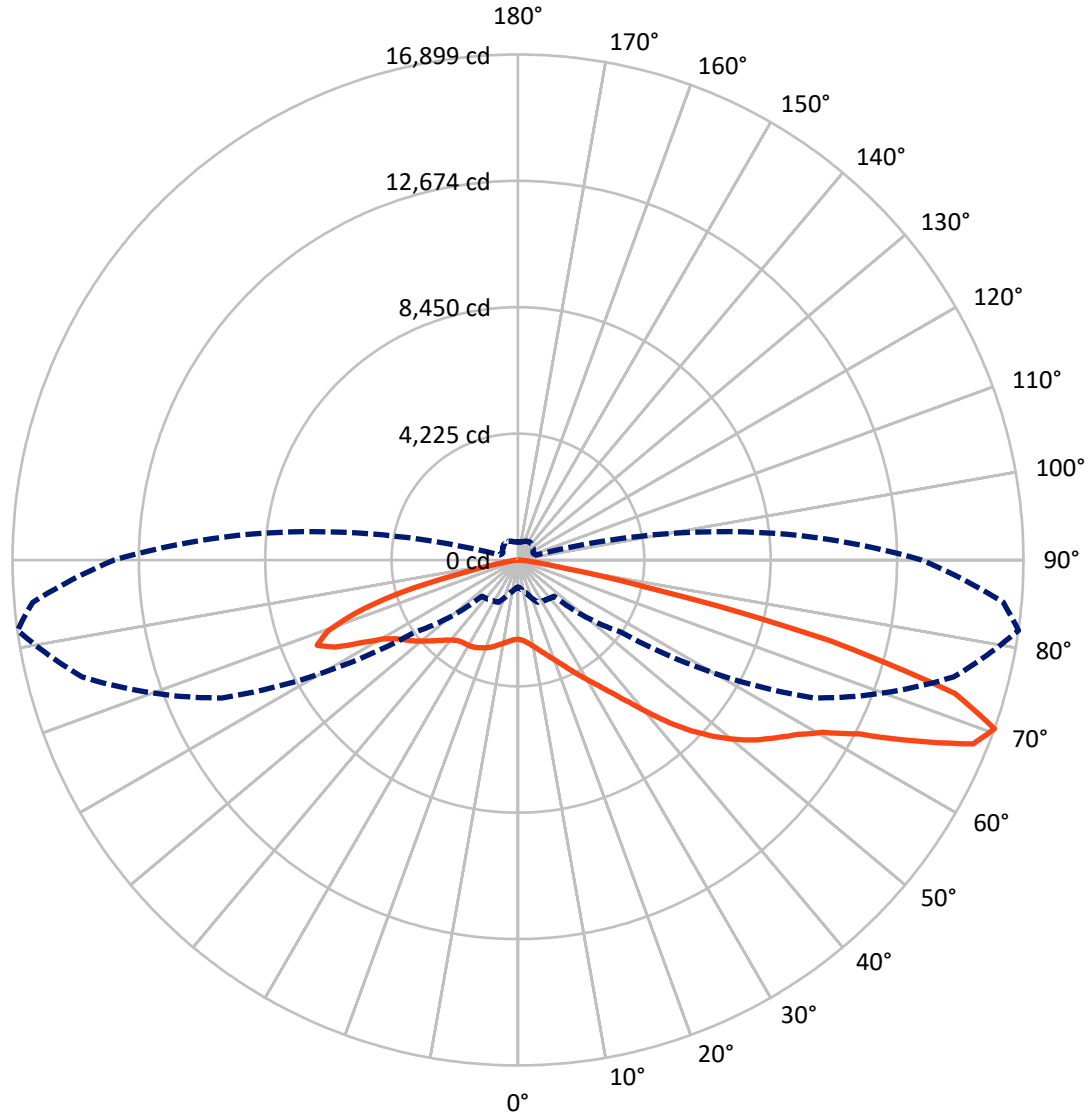
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4458.2	0.0	4458.2
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	13625.9	0.0	13625.9
	% Fixture	75.3	0.0	75.3
Total	Lumens	18084.0	0.0	18084.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.3	1.4
10°-20°	719.2	4.0
20°-30°	1203.2	6.7
30°-40°	1879.7	10.4
40°-50°	2993.6	16.6
50°-60°	4166.0	23.0
60°-70°	4357.8	24.1
70°-80°	2277.6	12.6
80°-90°	236.5	1.3
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°	18084.0	100.0
0°-180°	18084.0	100.0

Coefficient of Utilization



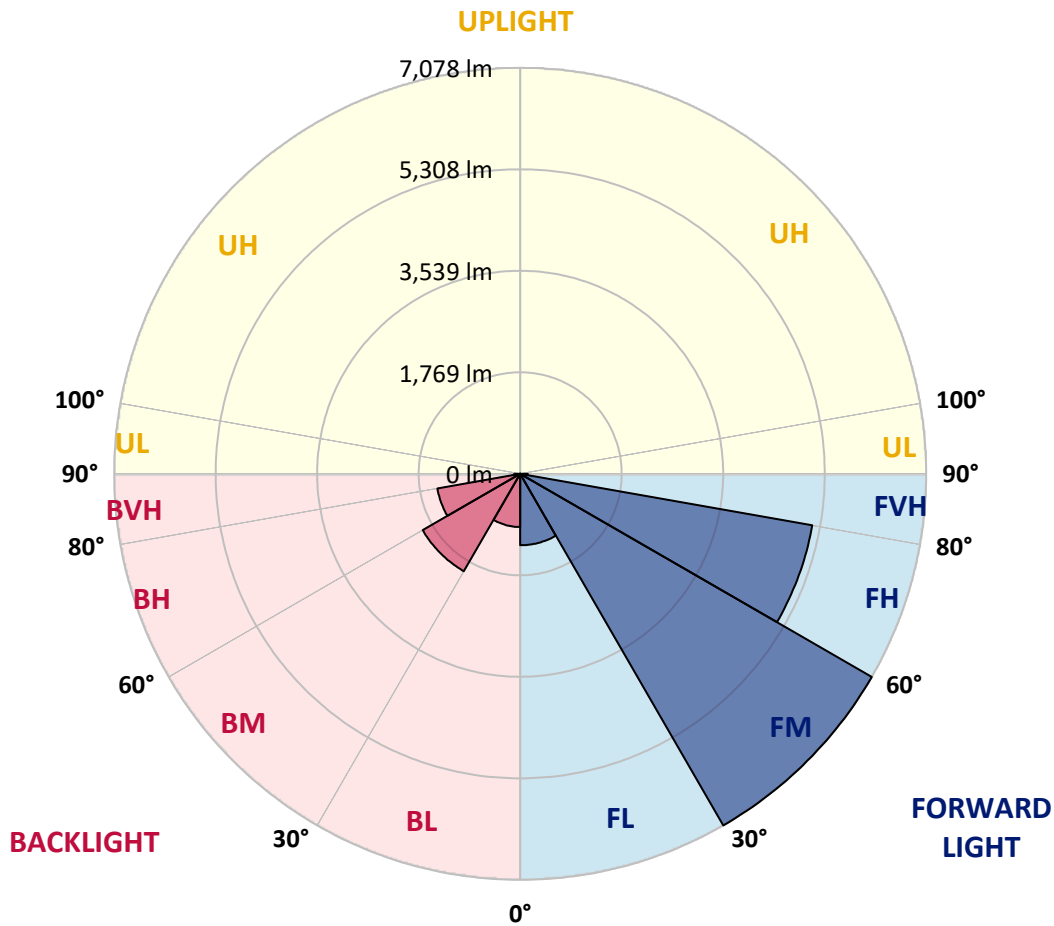
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1245.3	6.9			
FM (30°-60°)	7077.9	39.1			
FH (60°-80°)	5170.3	28.6			G3/7500
FVH (80°-90°)	132.4	0.7			G2/225
BL (0°-30°)	927.5	5.1	B2/1000		
BM (30°-60°)	1961.4	10.8	B2/2500		
BH (60°-80°)	1465.2	8.1	B3/2500		G3/2500
BVH (80°-90°)	104.1	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2651.3	2651.3	2651.3	2651.3	2651.3	2651.3	2651.3	2651.3	2651.3	2651.3	2651.3
2.5°	2714.7	2730.0	2725.2	2720.4	2720.4	2713.7	2712.8	2703.2	2695.5	2683.0	2680.1
5°	2749.2	2765.5	2763.6	2767.5	2779.9	2782.8	2785.7	2779.9	2764.6	2749.2	2742.5
7.5°	2718.5	2736.7	2742.5	2765.5	2803.9	2838.5	2864.4	2874.9	2860.5	2838.5	2827.9
10°	2614.9	2635.0	2655.2	2709.9	2778.0	2859.6	2928.7	2969.9	2967.0	2945.9	2927.7
12.5°	2404.7	2425.8	2469.0	2575.5	2700.3	2844.2	2972.8	3059.2	3088.9	3073.6	3041.9
15°	2236.8	2255.0	2287.7	2397.0	2559.2	2778.0	2989.1	3157.0	3232.9	3224.2	3185.8
17.5°	2232.0	2239.7	2259.8	2311.6	2436.4	2674.4	2971.8	3253.0	3397.9	3396.9	3349.0
20°	2316.4	2319.3	2330.8	2341.4	2412.4	2595.7	2927.7	3332.6	3583.1	3583.1	3531.3
22.5°	2433.5	2431.6	2443.1	2433.5	2468.1	2589.0	2899.9	3402.7	3789.4	3804.8	3739.5
25°	2609.1	2599.5	2596.6	2574.6	2581.3	2651.3	2930.6	3482.3	4034.1	4065.8	3984.2
27.5°	2843.3	2827.9	2817.3	2766.5	2749.2	2779.9	3024.6	3578.3	4306.6	4361.3	4257.7
30°	3148.4	3120.6	3105.2	3016.9	2954.6	2959.4	3166.6	3705.9	4591.6	4679.9	4548.4
32.5°	3564.9	3521.7	3480.4	3335.5	3221.3	3183.9	3349.9	3882.5	4900.6	5041.7	4872.8
35°	4031.2	3996.7	3952.5	3729.0	3553.4	3467.0	3597.5	4129.1	5262.4	5486.0	5266.2
37.5°	4480.3	4450.6	4471.7	4170.4	3943.9	3818.2	3921.8	4460.2	5708.6	6038.7	5759.4
40°	4944.8	4921.7	4924.6	4636.7	4372.8	4231.8	4315.3	4875.7	6220.0	6696.0	6352.5
42.5°	5449.5	5432.2	5374.7	5119.4	4822.9	4691.4	4768.2	5355.5	6768.9	7444.5	7003.1
45°	6014.7	6004.1	5950.4	5657.7	5318.0	5170.3	5273.9	5885.2	7320.7	8148.8	7656.5
47.5°	6503.1	6511.8	6505.0	6258.4	5906.3	5689.4	5813.2	6437.9	7834.1	8810.9	8283.2
50°	6738.2	6783.3	6849.5	6772.8	6554.0	6333.3	6357.3	6971.4	8323.5	9431.8	8883.9
52.5°	6615.4	6700.8	6881.2	7004.0	7088.5	7042.4	6978.1	7501.1	8784.1	9992.2	9451.9
55°	6157.7	6277.6	6577.0	6873.5	7304.4	7639.3	7723.7	8088.4	9233.2	10485.4	9989.3
57.5°	5323.8	5518.6	5787.3	6387.0	7112.5	7928.1	8593.1	8903.1	9709.1	11012.2	10551.6
60°	3894.0	4155.0	4489.0	5381.4	6440.8	7773.6	9332.9	10154.4	10385.6	11694.5	11283.8
62.5°	2492.0	2653.3	2960.3	3800.9	5018.6	6982.0	9559.4	11718.5	11532.3	12813.4	12381.6
65°	1706.1	1809.8	2090.9	2563.1	3244.4	5197.1	8953.0	12891.1	13353.6	14586.7	14258.5
67.5°	1239.8	1318.5	1558.4	1972.0	2114.0	3075.5	6947.4	12837.4	15124.1	16413.7	15903.2
70°	903.9	959.6	1161.1	1558.4	1626.5	1710.9	4208.8	10912.4	15085.7	16899.3	16288.0
72.5°	669.8	708.2	843.5	1209.1	1316.6	1155.3	2083.3	7931.0	12963.1	15285.3	14794.9
75°	484.6	513.4	613.2	925.0	1053.6	879.9	1039.2	4634.8	9042.2	10752.2	10838.5
77.5°	370.4	392.5	457.7	677.5	843.5	660.2	644.8	2132.2	4287.4	4308.5	4550.4
80°	297.5	311.9	347.4	476.9	646.8	494.2	420.3	860.8	1354.9	1146.7	1203.3
82.5°	218.8	242.8	293.6	334.9	462.5	340.7	256.2	434.7	515.3	443.3	447.2
85°	124.7	141.1	177.5	239.9	295.6	208.2	146.8	192.9	239.9	196.7	175.6
87.5°	44.1	57.6	62.4	94.0	128.6	86.4	56.6	55.7	78.7	58.5	48.9
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°	2651.3	2651.3	2651.3	2651.3	2651.3	2651.3	2651.3	2651.3	2651.3	2651.3	2651.3
2.5°	2670.5	2665.7	2646.5	2620.6	2593.8	2567.9	2559.2	2541.0	2528.5	2521.8	2529.5
5°	2724.3	2708.9	2663.8	2606.2	2545.8	2480.5	2434.5	2392.3	2361.5	2332.8	2344.3
7.5°	2801.0	2774.2	2696.4	2595.7	2488.2	2379.8	2299.2	2237.8	2196.5	2169.6	2175.4
10°	2890.3	2849.0	2730.0	2579.4	2413.4	2257.9	2162.9	2110.1	2084.2	2069.8	2073.7
12.5°	2993.0	2934.4	2764.6	2541.9	2299.2	2121.6	2056.4	2041.0	2042.0	2043.0	2044.9
15°	3119.6	3038.1	2792.4	2460.4	2150.4	2017.1	2005.5	2030.5	2056.4	2068.9	2067.9
17.5°	3262.6	3147.4	2797.2	2326.0	2004.6	1949.9	1986.3	2040.1	2079.4	2096.7	2100.5
20°	3416.1	3258.8	2762.7	2136.0	1884.6	1895.2	1960.4	2029.5	2072.7	2094.8	2100.5
22.5°	3591.7	3377.7	2680.1	1936.4	1786.8	1835.7	1912.5	1979.6	2024.7	2046.8	2052.6
25°	3792.3	3511.1	2550.6	1768.5	1702.3	1768.5	1845.3	1900.9	1937.4	1957.6	1963.3
27.5°	4014.9	3650.3	2377.9	1635.1	1628.4	1699.4	1762.8	1805.9	1825.1	1840.5	1846.2
30°	4238.5	3776.9	2168.7	1534.4	1564.1	1631.3	1676.4	1695.6	1701.3	1704.2	1710.9
32.5°	4480.3	3886.3	1948.9	1450.9	1502.7	1565.1	1592.0	1600.6	1573.7	1555.5	1561.2
35°	4773.0	4003.4	1734.0	1384.7	1442.3	1496.0	1504.6	1497.0	1465.3	1427.9	1429.8
37.5°	5134.8	4149.3	1562.2	1337.7	1385.6	1421.1	1410.6	1408.7	1411.6	1367.4	1370.3
40°	5578.1	4339.3	1436.5	1301.2	1339.6	1347.3	1317.5	1333.8	1348.2	1281.0	1283.0
42.5°	6070.4	4568.6	1356.9	1276.3	1301.2	1283.0	1236.9	1255.1	1253.2	1164.9	1164.0
45°	6572.2	4818.1	1329.0	1258.0	1265.7	1229.2	1178.4	1183.2	1142.9	1063.2	1066.1
47.5°	7071.2	5085.8	1346.3	1242.7	1221.6	1180.3	1140.9	1119.8	1060.3	1000.8	1000.8
50°	7560.6	5367.0	1409.6	1212.0	1161.1	1137.1	1108.3	1070.9	1007.6	956.7	952.9
52.5°	8014.5	5650.1	1480.6	1161.1	1085.3	1099.7	1081.5	1038.3	975.9	924.1	925.0
55°	8444.4	5933.1	1508.5	1091.1	1014.3	1067.1	1056.5	976.9	902.0	859.8	856.0
57.5°	8912.6	6273.8	1477.8	1001.8	956.7	1029.6	989.3	901.1	857.9	826.2	823.3
60°	9561.3	6808.3	1411.6	891.5	902.0	974.0	904.9	868.4	821.4	785.9	784.0
62.5°	10638.9	7805.3	1305.0	782.1	837.7	891.5	864.6	828.1	780.1	745.6	745.6
65°	12231.9	9190.9	1104.5	696.7	765.8	810.9	821.4	784.9	735.0	698.6	700.5
67.5°	13575.3	10060.3	835.8	625.7	691.9	745.6	775.3	739.8	687.1	651.6	652.5
70°	13501.4	9428.9	638.1	555.6	626.6	681.3	719.7	691.9	635.2	601.7	604.5
72.5°	11992.0	7887.8	516.3	484.6	560.4	614.1	660.2	639.1	581.5	548.9	548.9
75°	8810.0	5599.2	412.6	412.6	477.9	544.1	594.9	581.5	528.7	505.7	499.0
77.5°	3713.6	2349.1	323.4	342.6	397.3	467.3	530.7	535.4	489.4	518.2	470.2
80°	987.4	647.7	246.6	269.6	311.9	385.8	461.6	459.6	409.7	382.9	356.0
82.5°	376.2	255.3	175.6	190.0	225.5	295.6	365.6	377.1	327.2	283.1	283.1
85°	144.9	109.4	108.4	114.2	131.5	195.8	276.4	286.0	246.6	209.2	215.9
87.5°	37.4	32.6	40.3	38.4	60.5	104.6	158.3	164.1	150.7	87.3	124.7
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)