

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: P882587

Luminaire Tested: **NAV-SB2C-740-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882587
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-SB2C-740-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16305 lumens
Efficiency: N/A
Efficacy: 161.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

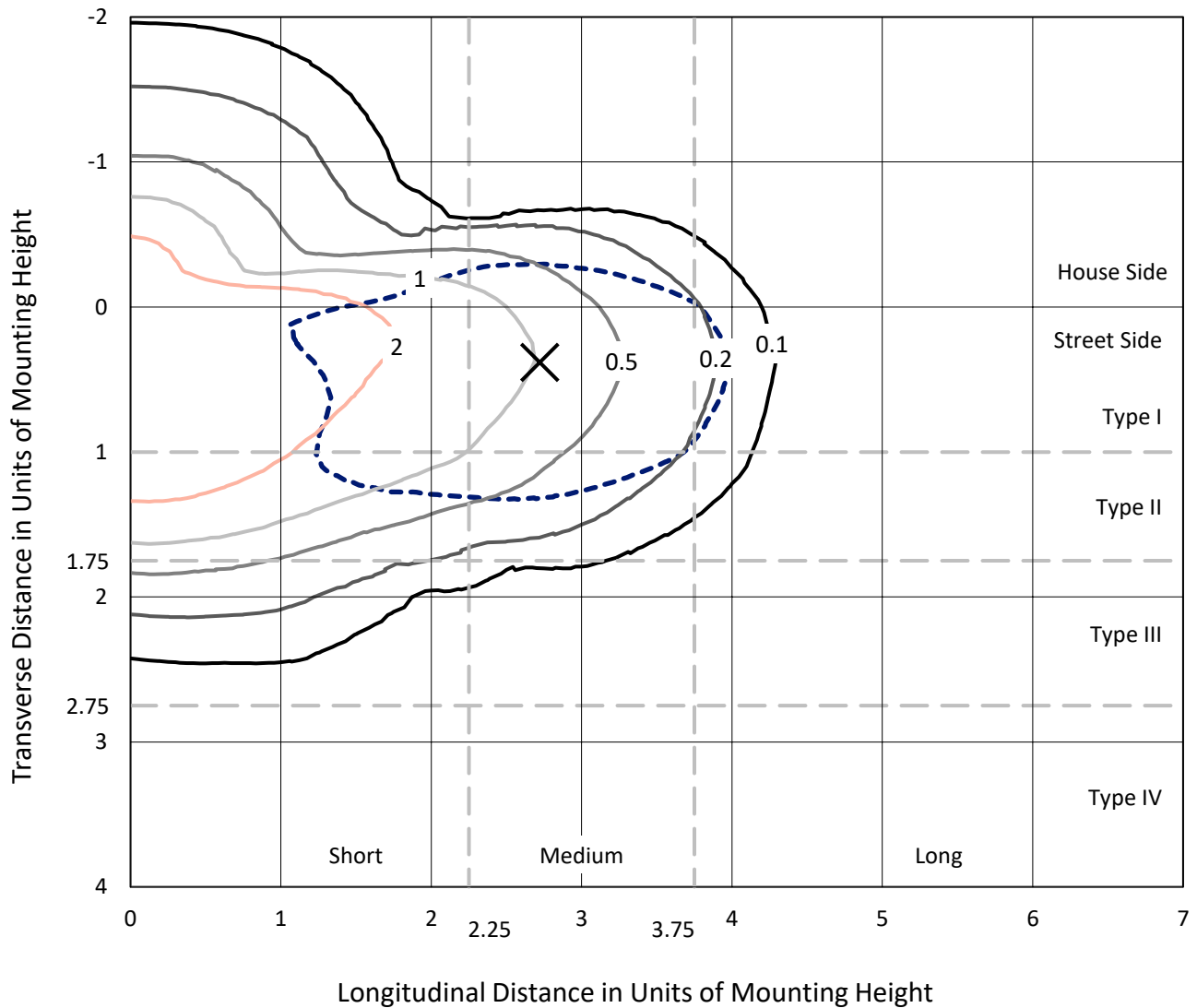
Input Watts (W): 100.9
Input Voltage (V): 120.0
Input Current (Ain): 0.857
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

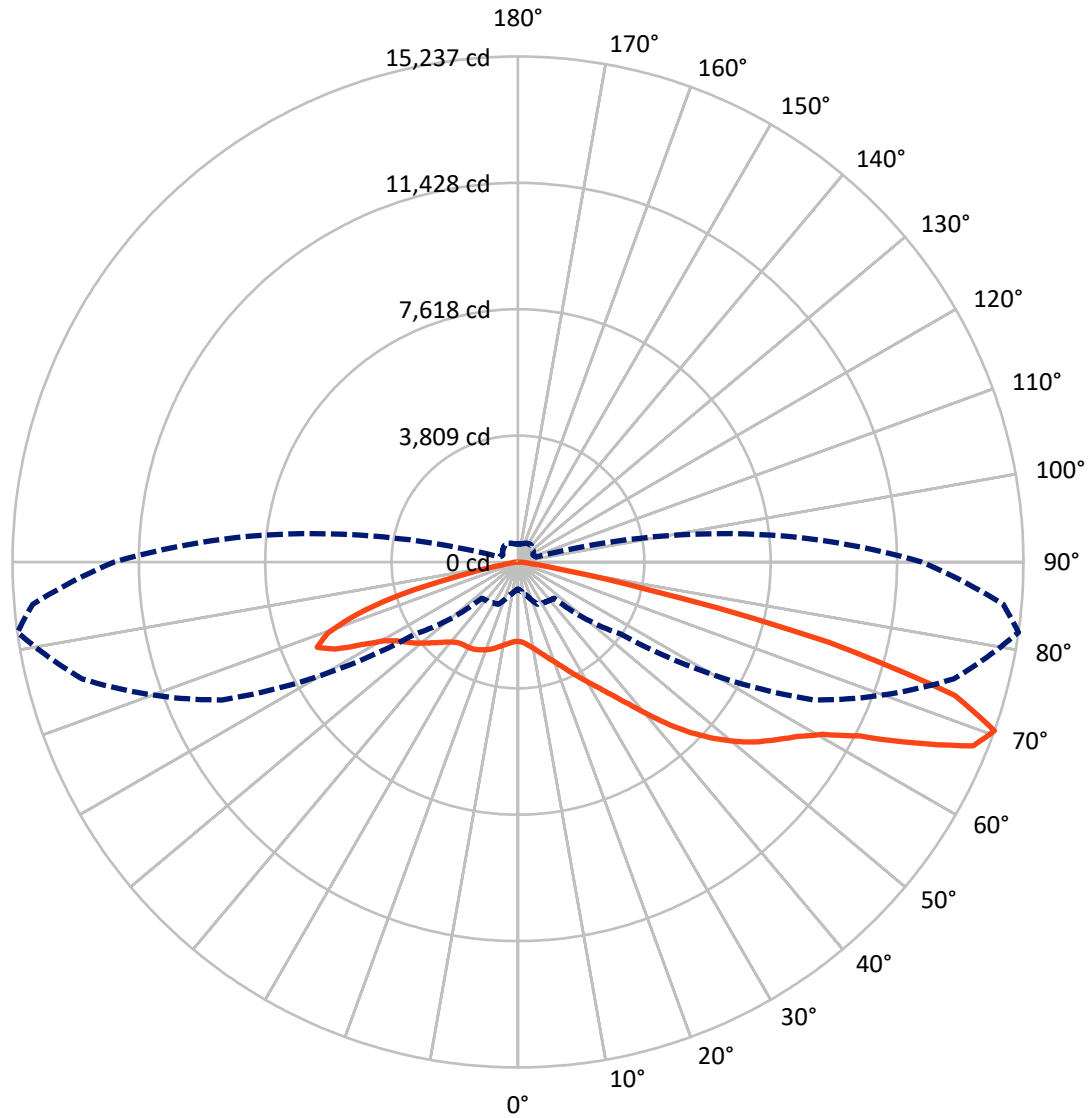
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc
 Type 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	4019.6	0.0	4019.6
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	12285.4	0.0	12285.4
	% Fixture	75.3	0.0	75.3
Total	Lumens	16305.0	0.0	16305.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.7	1.4
10°-20°	648.5	4.0
20°-30°	1084.8	6.7
30°-40°	1694.8	10.4
40°-50°	2699.1	16.6
50°-60°	3756.2	23.0
60°-70°	3929.1	24.1
70°-80°	2053.6	12.6
80°-90°	213.2	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°	16305.0	100.0
0°-180°	16305.0	100.0

Coefficient of Utilization



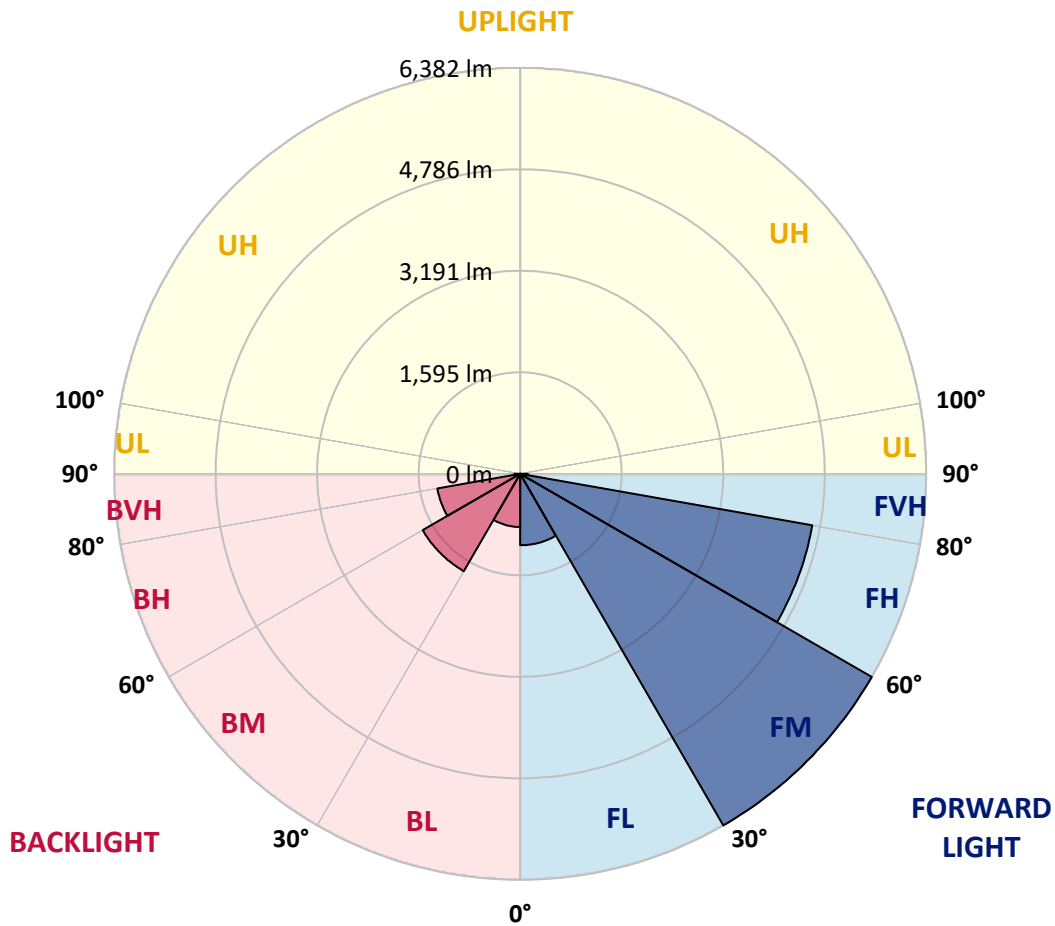
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1122.8	6.9			
FM (30°-60°)	6381.6	39.1			
FH (60°-80°)	4661.6	28.6			G2/5000
FVH (80°-90°)	119.4	0.7			G2/225
BL (0°-30°)	836.2	5.1	B2/1000		
BM (30°-60°)	1768.5	10.8	B2/2500		
BH (60°-80°)	1321.0	8.1	B3/2500		G3/2500
BVH (80°-90°)	93.9	0.6			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2390.5	2390.5	2390.5	2390.5	2390.5	2390.5	2390.5	2390.5	2390.5	2390.5	2390.5
2.5°	2447.6	2461.5	2457.1	2452.8	2452.8	2446.8	2445.9	2437.2	2430.3	2419.1	2416.5
5°	2478.8	2493.5	2491.7	2495.2	2506.5	2509.0	2511.6	2506.5	2492.6	2478.8	2472.7
7.5°	2451.1	2467.5	2472.7	2493.5	2528.1	2559.2	2582.6	2592.1	2579.1	2559.2	2549.7
10°	2357.6	2375.8	2394.0	2443.3	2504.7	2578.3	2640.6	2677.8	2675.2	2656.1	2639.7
12.5°	2168.2	2187.2	2226.1	2322.2	2434.6	2564.4	2680.4	2758.2	2785.0	2771.2	2742.6
15°	2016.8	2033.2	2062.6	2161.2	2307.5	2504.7	2695.1	2846.5	2914.8	2907.0	2872.4
17.5°	2012.4	2019.4	2037.5	2084.2	2196.7	2411.3	2679.5	2933.0	3063.6	3062.8	3019.5
20°	2088.6	2091.2	2101.5	2111.1	2175.1	2340.3	2639.7	3004.8	3230.6	3230.6	3183.9
22.5°	2194.1	2192.4	2202.8	2194.1	2225.3	2334.3	2614.6	3068.0	3416.6	3430.5	3371.6
25°	2352.4	2343.8	2341.2	2321.3	2327.4	2390.5	2642.3	3139.8	3637.3	3665.8	3592.3
27.5°	2563.6	2549.7	2540.2	2494.3	2478.8	2506.5	2727.1	3226.3	3883.0	3932.3	3838.8
30°	2838.7	2813.6	2799.8	2720.2	2663.9	2668.2	2855.1	3341.4	4139.9	4219.5	4101.0
32.5°	3214.2	3175.2	3138.0	3007.4	2904.4	2870.7	3020.4	3500.6	4418.5	4545.7	4393.4
35°	3634.7	3603.5	3563.7	3362.1	3203.8	3125.9	3243.6	3722.9	4744.7	4946.3	4748.2
37.5°	4039.6	4012.7	4031.8	3760.1	3555.9	3442.6	3536.0	4021.4	5147.0	5444.6	5192.9
40°	4458.3	4437.6	4440.1	4180.6	3942.7	3815.5	3890.8	4396.0	5608.2	6037.3	5727.6
42.5°	4913.4	4897.8	4845.9	4615.8	4348.4	4229.9	4299.1	4828.6	6103.0	6712.1	6314.1
45°	5423.0	5413.5	5365.0	5101.2	4794.9	4661.6	4755.1	5306.2	6600.5	7347.2	6903.3
47.5°	5863.4	5871.2	5865.1	5642.8	5325.2	5129.7	5241.3	5804.6	7063.4	7944.2	7468.3
50°	6075.4	6116.0	6175.7	6106.5	5909.2	5710.2	5731.9	6285.6	7504.6	8503.9	8009.9
52.5°	5964.6	6041.6	6204.3	6315.0	6391.2	6349.6	6291.7	6763.2	7919.9	9009.2	8522.1
55°	5551.9	5660.1	5930.0	6197.3	6585.8	6887.8	6963.9	7292.7	8324.8	9453.9	9006.6
57.5°	4800.1	4975.7	5218.0	5758.7	6412.8	7148.2	7747.8	8027.2	8754.0	9928.9	9513.6
60°	3510.9	3746.3	4047.4	4852.0	5807.1	7008.9	8414.8	9155.4	9363.9	10544.1	10173.8
62.5°	2246.9	2392.2	2669.1	3427.0	4524.9	6295.1	8619.0	10565.7	10397.8	11552.9	11163.5
65°	1538.3	1631.7	1885.2	2310.9	2925.2	4685.9	8072.2	11622.9	12040.0	13151.7	12855.8
67.5°	1117.8	1188.8	1405.1	1778.0	1906.0	2772.9	6264.0	11574.5	13636.2	14799.1	14338.8
70°	815.0	865.2	1046.9	1405.1	1466.5	1542.6	3794.7	9838.9	13601.6	15236.8	14685.7
72.5°	603.9	638.5	760.5	1090.1	1187.0	1041.7	1878.3	7150.8	11687.8	13781.6	13339.5
75°	436.9	462.9	552.9	834.0	950.0	793.4	937.0	4178.9	8152.7	9694.4	9772.3
77.5°	334.0	353.9	412.7	610.8	760.5	595.2	581.4	1922.4	3865.7	3884.7	4102.7
80°	268.2	281.2	313.2	430.0	583.1	445.6	379.0	776.1	1221.6	1033.9	1084.9
82.5°	197.3	218.9	264.7	302.0	417.0	307.1	231.0	391.9	464.6	399.7	403.2
85°	112.5	127.2	160.1	216.3	266.5	187.7	132.4	173.9	216.3	177.4	158.3
87.5°	39.8	51.9	56.2	84.8	115.9	77.9	51.0	50.2	70.9	52.8	44.1
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°	2390.5	2390.5	2390.5	2390.5	2390.5	2390.5	2390.5	2390.5	2390.5	2390.5	2390.5
2.5°	2407.8	2403.5	2386.2	2362.8	2338.6	2315.2	2307.5	2291.0	2279.8	2273.7	2280.6
5°	2456.3	2442.4	2401.8	2349.9	2295.3	2236.5	2195.0	2156.9	2129.2	2103.3	2113.7
7.5°	2525.5	2501.3	2431.2	2340.3	2243.4	2145.7	2073.0	2017.6	1980.4	1956.2	1961.4
10°	2605.9	2568.7	2461.5	2325.6	2176.0	2035.8	1950.1	1902.6	1879.2	1866.2	1869.7
12.5°	2698.5	2645.7	2492.6	2291.9	2073.0	1912.9	1854.1	1840.3	1841.1	1842.0	1843.7
15°	2812.7	2739.2	2517.7	2218.3	1938.9	1818.6	1808.2	1830.7	1854.1	1865.3	1864.5
17.5°	2941.6	2837.8	2522.0	2097.2	1807.4	1758.1	1790.9	1839.4	1874.9	1890.4	1893.9
20°	3080.1	2938.2	2490.9	1925.9	1699.2	1708.7	1767.6	1829.9	1868.8	1888.7	1893.9
22.5°	3238.4	3045.5	2416.5	1746.0	1611.0	1655.1	1724.3	1784.9	1825.5	1845.4	1850.6
25°	3419.2	3165.7	2299.7	1594.5	1534.8	1594.5	1663.8	1713.9	1746.8	1765.0	1770.2
27.5°	3620.0	3291.2	2143.9	1474.3	1468.2	1532.2	1589.4	1628.3	1645.6	1659.4	1664.6
30°	3821.5	3405.4	1955.3	1383.4	1410.3	1470.8	1511.5	1528.8	1534.0	1536.6	1542.6
32.5°	4039.6	3504.0	1757.2	1308.2	1354.9	1411.1	1435.3	1443.1	1418.9	1402.5	1407.7
35°	4303.4	3609.6	1563.4	1248.5	1300.4	1348.8	1356.6	1349.7	1321.1	1287.4	1289.1
37.5°	4629.6	3741.1	1408.5	1206.1	1249.3	1281.3	1271.8	1270.1	1272.7	1232.9	1235.5
40°	5029.3	3912.4	1295.2	1173.2	1207.8	1214.7	1187.9	1202.6	1215.6	1155.0	1156.8
42.5°	5473.2	4119.2	1223.4	1150.7	1173.2	1156.8	1115.2	1131.7	1129.9	1050.3	1049.5
45°	5925.7	4344.1	1198.3	1134.3	1141.2	1108.3	1062.5	1066.8	1030.4	958.6	961.2
47.5°	6375.6	4585.5	1213.9	1120.4	1101.4	1064.2	1028.7	1009.7	956.0	902.4	902.4
50°	6816.8	4839.0	1271.0	1092.7	1046.9	1025.2	999.3	965.6	908.4	862.6	859.1
52.5°	7226.1	5094.2	1335.0	1046.9	978.5	991.5	975.1	936.1	879.9	833.2	834.0
55°	7613.7	5349.5	1360.1	983.7	914.5	962.1	952.6	880.8	813.3	775.2	771.7
57.5°	8035.9	5656.6	1332.4	903.3	862.6	928.3	892.0	812.4	773.5	744.9	742.3
60°	8620.7	6138.5	1272.7	803.8	813.3	878.2	815.9	783.0	740.6	708.6	706.9
62.5°	9592.3	7037.4	1176.7	705.1	755.3	803.8	779.5	746.7	703.4	672.3	672.3
65°	11028.6	8286.8	995.8	628.1	690.4	731.1	740.6	707.7	662.7	629.9	631.6
67.5°	12239.8	9070.6	753.6	564.1	623.8	672.3	699.1	667.1	619.5	587.5	588.3
70°	12173.2	8501.3	575.4	500.9	565.0	614.3	648.9	623.8	572.8	542.5	545.1
72.5°	10812.3	7111.9	465.5	436.9	505.3	553.7	595.2	576.2	524.3	494.9	494.9
75°	7943.3	5048.4	372.0	372.0	430.9	490.6	536.4	524.3	476.7	456.0	449.9
77.5°	3348.3	2118.0	291.6	308.9	358.2	421.3	478.4	482.8	441.2	467.2	423.9
80°	890.3	584.0	222.4	243.1	281.2	347.8	416.2	414.4	369.4	345.2	321.0
82.5°	339.2	230.1	158.3	171.3	203.3	266.5	329.6	340.0	295.0	255.2	255.2
85°	130.6	98.6	97.8	103.0	118.5	176.5	249.2	257.8	222.4	188.6	194.7
87.5°	33.7	29.4	36.3	34.6	54.5	94.3	142.8	147.9	135.8	78.7	112.5
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)