

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: P883091

Luminaire Tested: **NAV-SB3B-735-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883091
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-735-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16694 lumens
Efficiency: N/A
Efficacy: 152.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G3

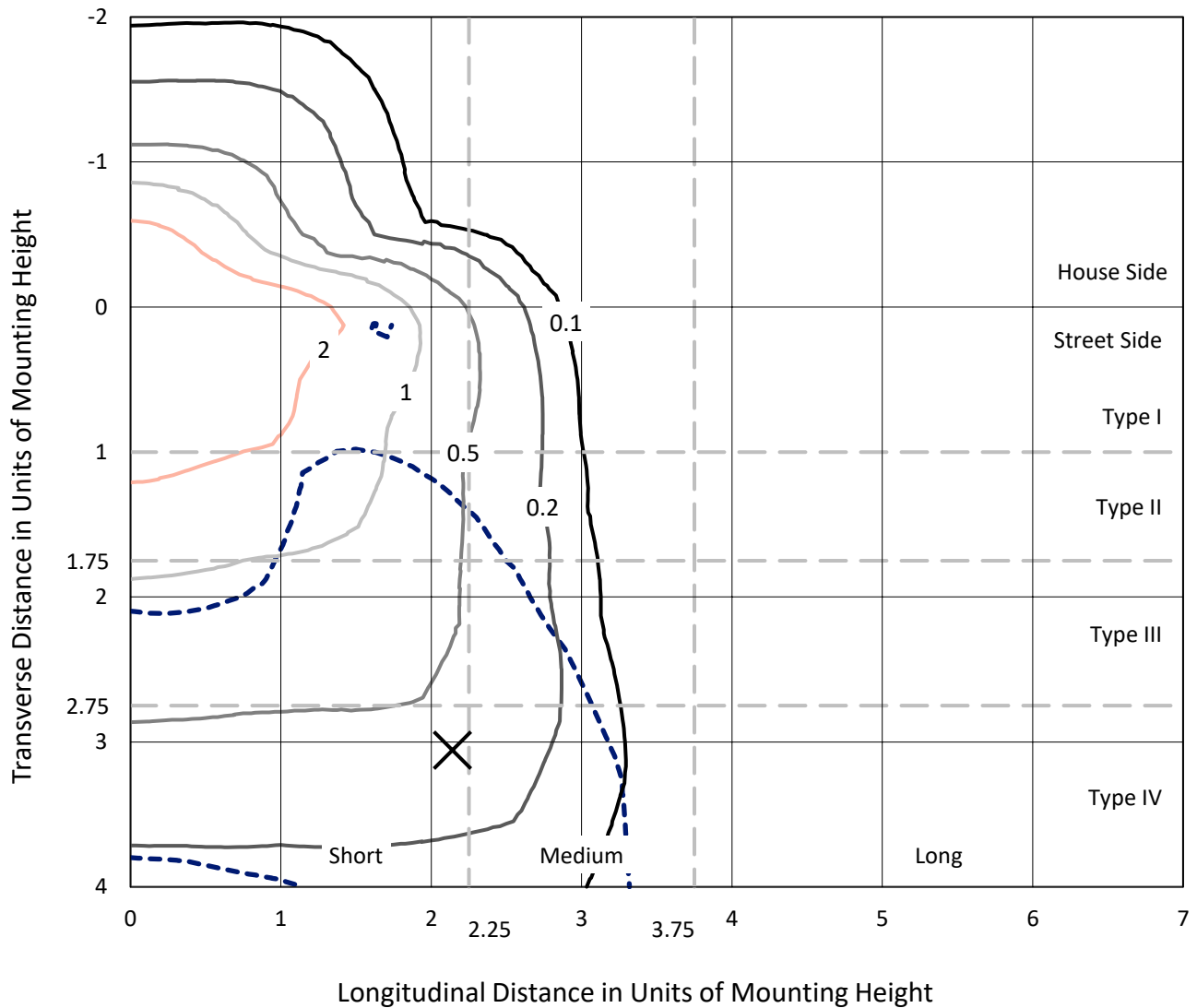
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

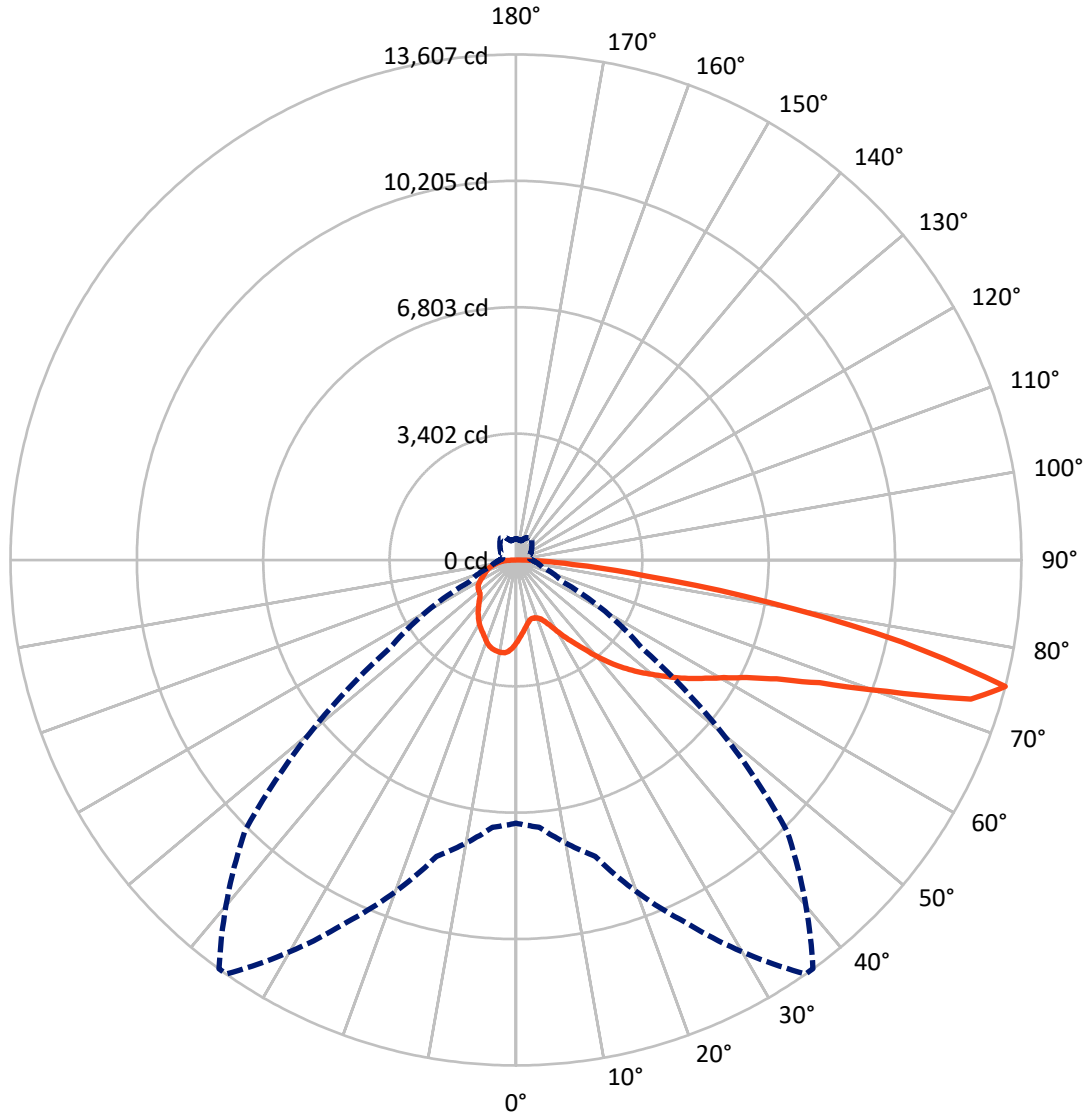
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3972.7	0.0	3972.7
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	12721.2	0.0	12721.2
	% Fixture	76.2	0.0	76.2
Total	Lumens	16694.0	0.0	16694.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.6	1.3
10°-20°	607.5	3.6
20°-30°	1020.2	6.1
30°-40°	1585.5	9.5
40°-50°	2353.4	14.1
50°-60°	3249.0	19.5
60°-70°	3941.7	23.6
70°-80°	3257.5	19.5
80°-90°	468.5	2.8
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°	16694.0	100.0
0°-180°	16694.0	100.0



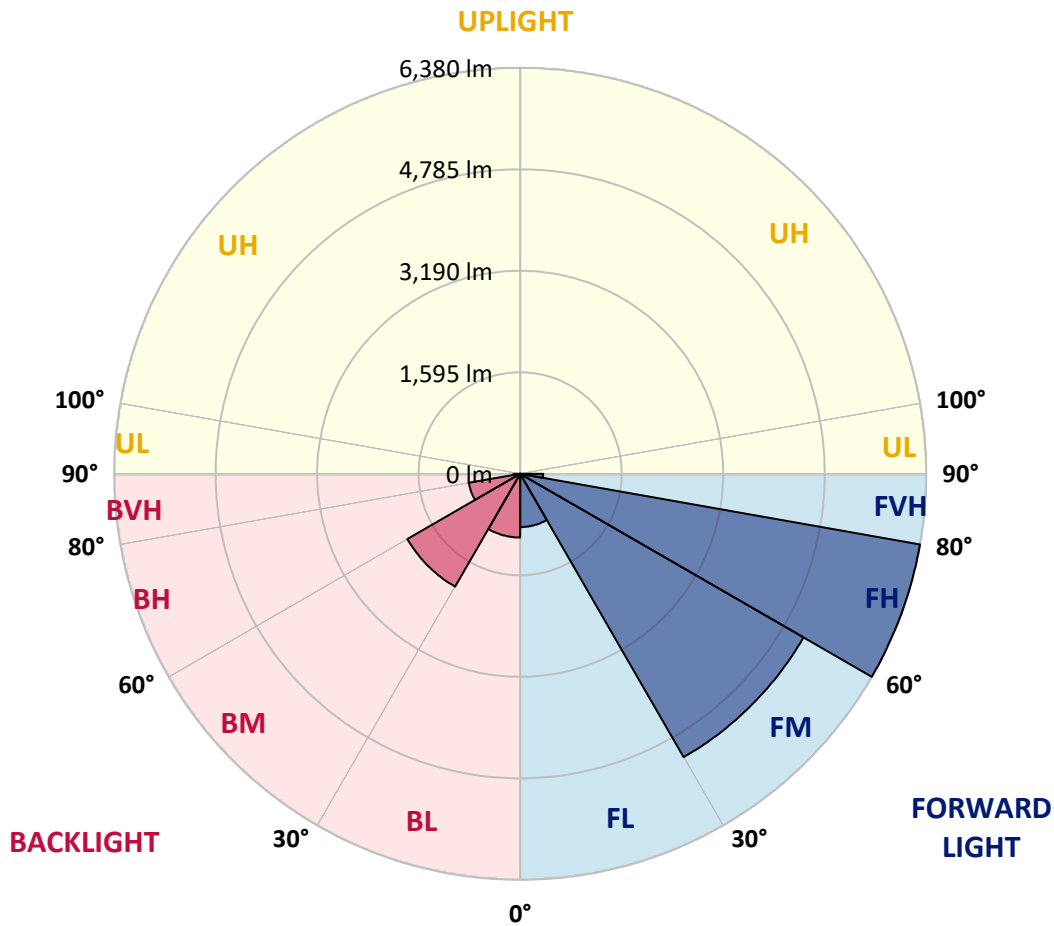
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	837.2	5.0			
FM (30°-60°)	5140.8	30.8			
FH (60°-80°)	6380.2	38.2			G3/7500
FVH (80°-90°)	363.0	2.2			G3/500
BL (0°-30°)	1001.2	6.0	B3/2500		
BM (30°-60°)	2047.0	12.3	B2/2500		
BH (60°-80°)	819.1	4.9	B2/1000		G2/1000
BVH (80°-90°)	105.5	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	2224.6	2224.6	2224.6	2224.6	2224.6	2224.6	2224.6	2224.6	2224.6	2224.6	2224.6
2.5°	2051.3	2063.9	2069.4	2066.7	2080.2	2078.4	2097.3	2120.8	2153.3	2184.9	2230.9
5°	1893.4	1906.9	1918.7	1929.5	1955.7	1963.8	1993.6	2038.7	2098.2	2158.7	2234.5
7.5°	1746.3	1758.0	1776.1	1795.9	1840.1	1848.3	1897.9	1968.3	2051.3	2139.8	2244.4
10°	1626.3	1638.0	1656.9	1679.5	1734.5	1744.5	1807.6	1901.5	2009.8	2121.7	2255.3
12.5°	1574.8	1578.4	1589.2	1611.8	1659.6	1666.0	1735.4	1842.8	1969.2	2108.2	2271.5
15°	1572.1	1579.3	1580.2	1592.0	1631.7	1634.4	1698.4	1804.9	1943.9	2105.5	2295.9
17.5°	1599.2	1604.6	1596.5	1603.7	1637.1	1641.6	1692.1	1786.9	1935.8	2117.2	2337.4
20°	1671.4	1675.9	1651.5	1641.6	1666.0	1669.6	1719.2	1798.6	1943.9	2141.6	2394.3
22.5°	1824.8	1827.5	1767.9	1727.3	1729.1	1730.9	1774.3	1846.5	1975.5	2185.8	2466.5
25°	2063.9	2062.1	1967.4	1888.9	1843.7	1833.8	1862.7	1924.1	2028.8	2244.4	2559.4
27.5°	2343.7	2330.2	2235.4	2118.1	2019.7	2005.3	1999.0	2025.1	2104.6	2322.1	2673.1
30°	2659.6	2646.9	2545.0	2391.5	2255.3	2231.8	2172.2	2158.7	2217.4	2427.6	2831.0
32.5°	3006.1	2998.0	2876.2	2690.3	2508.0	2480.9	2380.7	2344.6	2390.6	2587.4	3051.3
35°	3296.7	3289.5	3188.4	2997.1	2774.2	2740.8	2638.8	2598.2	2621.7	2792.2	3339.1
37.5°	3559.3	3555.7	3469.1	3318.4	3088.3	3047.6	2933.0	2919.5	2915.0	3062.1	3688.4
40°	3803.0	3794.0	3703.7	3624.3	3453.8	3416.8	3315.7	3303.9	3269.6	3394.2	4083.7
42.5°	4072.8	4049.4	3918.5	3881.5	3835.5	3804.8	3744.3	3746.2	3670.3	3768.7	4502.4
45°	4293.0	4279.5	4145.0	4123.4	4173.0	4160.4	4212.7	4226.3	4079.2	4161.3	4937.4
47.5°	4529.5	4516.9	4403.2	4387.8	4522.3	4525.9	4710.9	4715.4	4478.1	4569.2	5373.3
50°	4821.0	4802.9	4690.1	4709.1	4859.8	4873.3	5211.8	5181.1	4845.4	4983.4	5805.6
52.5°	5013.2	5024.1	4999.7	5030.4	5236.1	5248.8	5704.5	5626.0	5209.1	5392.3	6229.8
55°	5154.9	5176.6	5252.4	5322.8	5633.2	5645.9	6169.3	6049.3	5510.5	5771.3	6628.6
57.5°	5337.2	5306.5	5448.2	5585.4	6010.4	6043.8	6621.4	6457.2	5777.6	6098.0	6902.1
60°	5598.9	5577.3	5687.4	5890.4	6432.8	6486.1	7099.7	6824.5	5973.4	6357.0	6955.3
62.5°	6129.6	6075.4	6092.6	6272.2	6965.3	7035.7	7639.4	7144.9	6070.9	6458.1	6670.2
65°	6922.8	6829.9	6743.3	6867.8	7715.2	7784.7	8248.6	7396.6	6034.8	6262.2	5913.0
67.5°	7921.9	7829.8	7723.3	7840.7	8819.8	8874.9	9000.3	7538.3	5750.5	5507.8	4574.6
70°	8745.8	8711.5	8838.8	9321.6	10584.2	10586.0	9964.2	7421.0	4971.7	3905.0	2646.9
72.5°	8636.6	8615.9	9286.4	10779.1	12807.9	12760.0	10876.6	6533.0	3349.1	1761.6	991.8
75°	7085.3	7219.8	8258.5	10752.9	13606.5	13600.2	10317.9	4153.2	1385.3	730.1	512.6
77.5°	3799.4	4012.4	5361.6	7939.0	10622.1	10781.8	7254.1	1453.0	594.7	467.5	354.7
80°	1239.1	1425.0	2137.0	4042.2	6902.1	6872.3	3109.0	570.4	407.0	331.2	245.5
82.5°	526.1	547.8	954.8	1908.7	3542.2	3487.1	990.0	327.6	286.1	226.5	151.6
85°	205.8	230.1	421.5	882.6	1534.2	1500.8	357.4	162.4	183.2	148.0	90.2
87.5°	67.7	82.1	150.7	302.3	477.4	460.3	87.5	56.0	79.4	67.7	32.5
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°	2224.6	2224.6	2224.6	2224.6	2224.6	2224.6	2224.6	2224.6	2224.6	2224.6	2224.6
2.5°	2243.5	2258.0	2275.1	2300.4	2322.1	2340.1	2359.1	2370.8	2375.3	2388.8	2387.9
5°	2259.8	2291.4	2333.8	2375.3	2415.9	2440.3	2461.9	2472.8	2482.7	2489.9	2491.7
7.5°	2286.9	2327.5	2394.3	2448.4	2482.7	2502.5	2517.0	2513.4	2517.0	2518.8	2521.5
10°	2310.3	2367.2	2446.6	2498.0	2524.2	2525.1	2521.5	2508.9	2502.5	2503.5	2505.3
12.5°	2338.3	2401.5	2487.2	2530.5	2537.7	2517.9	2502.5	2480.9	2472.8	2469.2	2467.4
15°	2376.2	2448.4	2531.4	2547.7	2529.6	2504.4	2478.2	2443.0	2424.9	2410.5	2415.0
17.5°	2422.2	2501.6	2565.7	2554.0	2515.2	2473.7	2431.3	2378.0	2341.0	2325.7	2326.6
20°	2486.3	2557.6	2591.9	2540.5	2481.8	2418.6	2346.4	2281.4	2247.2	2231.8	2230.0
22.5°	2563.9	2632.5	2617.2	2517.0	2434.0	2332.9	2242.6	2194.8	2177.7	2166.8	2168.6
25°	2656.9	2715.5	2635.2	2482.7	2355.4	2219.2	2149.7	2134.3	2126.2	2118.1	2118.1
27.5°	2777.8	2809.4	2648.7	2432.2	2232.7	2098.2	2073.0	2075.7	2073.0	2059.4	2062.1
30°	2937.5	2931.2	2661.4	2350.0	2091.9	1989.0	1990.8	2002.6	2004.4	1995.4	1999.9
32.5°	3147.8	3083.7	2667.7	2243.5	1957.5	1893.4	1895.2	1907.8	1916.8	1901.5	1908.7
35°	3402.3	3261.5	2657.8	2110.0	1853.7	1802.2	1788.7	1792.3	1795.0	1780.6	1790.5
37.5°	3699.2	3461.0	2613.6	1962.0	1767.9	1712.9	1684.0	1659.6	1645.2	1631.7	1640.7
40°	4025.0	3678.5	2532.3	1817.6	1672.3	1618.1	1574.8	1528.8	1480.1	1462.0	1470.1
42.5°	4366.1	3902.3	2434.0	1679.5	1562.2	1518.0	1471.9	1405.1	1332.0	1295.0	1299.6
45°	4719.9	4131.5	2337.4	1543.2	1449.4	1430.4	1377.2	1296.8	1217.4	1170.5	1166.9
47.5°	5066.5	4348.1	2195.7	1406.0	1343.8	1364.5	1323.0	1249.0	1160.6	1086.6	1078.5
50°	5397.7	4551.2	1963.8	1267.1	1258.0	1344.7	1305.0	1198.5	1097.4	1002.6	994.5
52.5°	5726.2	4715.4	1666.9	1140.7	1212.0	1339.3	1281.5	1164.2	1040.5	941.3	930.4
55°	6005.0	4800.2	1380.8	1032.4	1145.2	1293.2	1253.5	1123.6	960.2	854.6	845.6
57.5°	6163.9	4731.6	1142.5	925.9	1053.2	1217.4	1205.7	1036.9	864.6	783.3	772.5
60°	6095.3	4453.7	947.6	833.0	965.6	1135.3	1122.7	951.2	791.5	714.8	703.9
62.5°	5717.1	3923.9	793.3	751.8	886.2	1051.4	1039.6	885.3	735.5	661.5	649.8
65°	4955.5	3192.0	673.2	684.1	805.9	950.3	967.4	830.3	691.3	619.1	607.4
67.5°	3779.5	2312.1	579.4	625.4	727.4	851.0	900.7	790.6	654.3	585.7	574.9
70°	2154.2	1313.1	500.0	568.6	657.9	759.0	849.2	759.0	614.6	557.7	550.5
72.5°	816.7	602.8	432.3	511.7	591.1	681.4	792.4	709.3	568.6	526.1	518.9
75°	435.9	367.3	363.7	444.9	514.4	605.6	721.1	660.6	534.3	555.9	574.0
77.5°	296.9	259.9	304.1	380.8	430.5	521.6	645.3	586.6	463.0	461.2	425.1
80°	205.8	184.1	247.3	306.8	333.0	438.6	563.1	503.6	377.2	352.0	336.6
82.5°	123.6	120.0	185.0	229.2	235.5	338.4	466.6	422.4	308.6	268.9	270.7
85°	67.7	71.3	118.2	134.5	137.2	236.4	365.5	326.7	237.3	199.4	201.3
87.5°	19.0	24.4	43.3	53.2	65.9	122.7	217.5	194.0	119.1	83.0	83.0
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)