

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: P964189

Luminaire Tested: **NAV-SB3B-830-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964189
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-830-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15425.2 lumens
Efficiency: N/A
Efficacy: 141.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G3

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



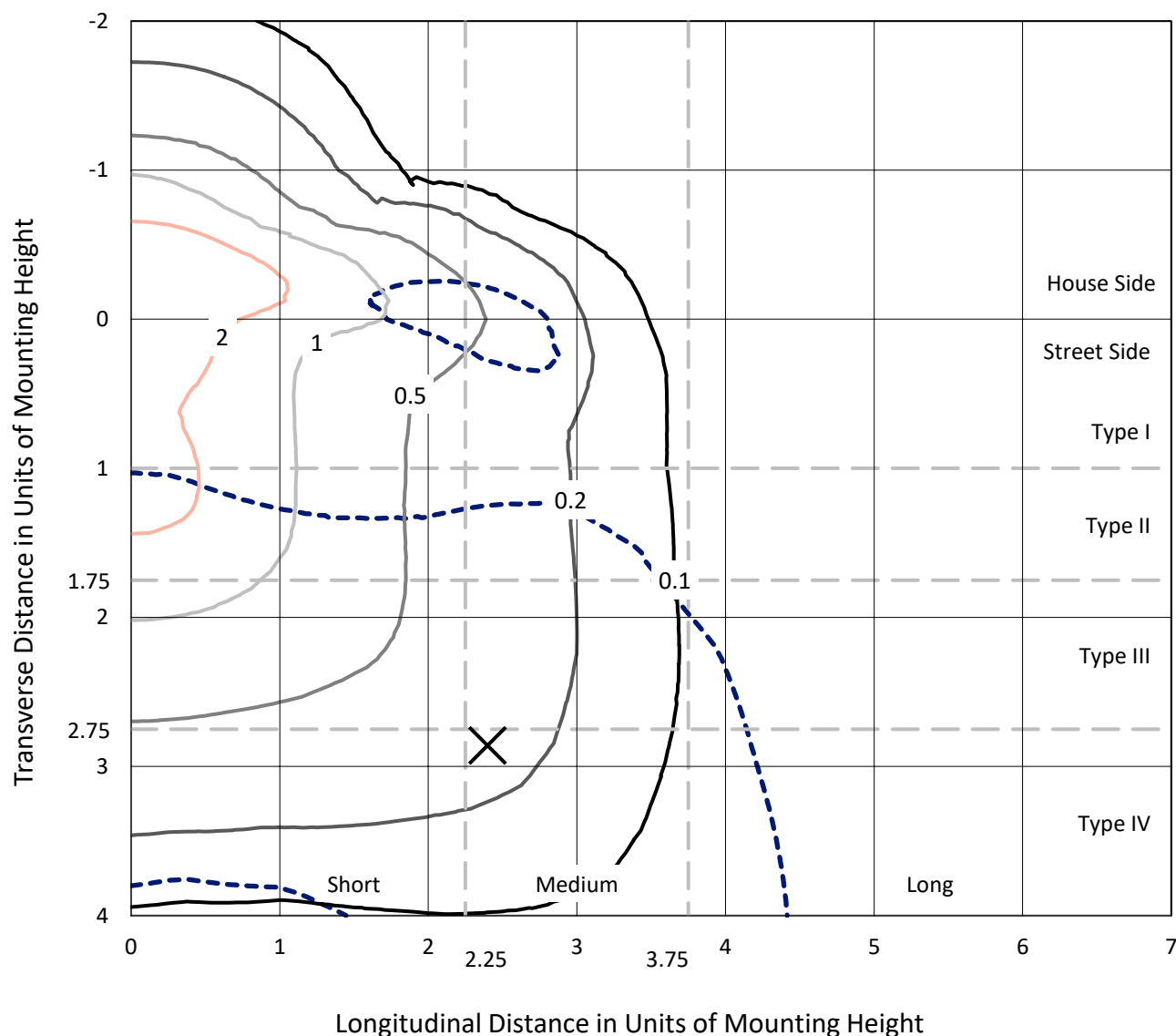
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

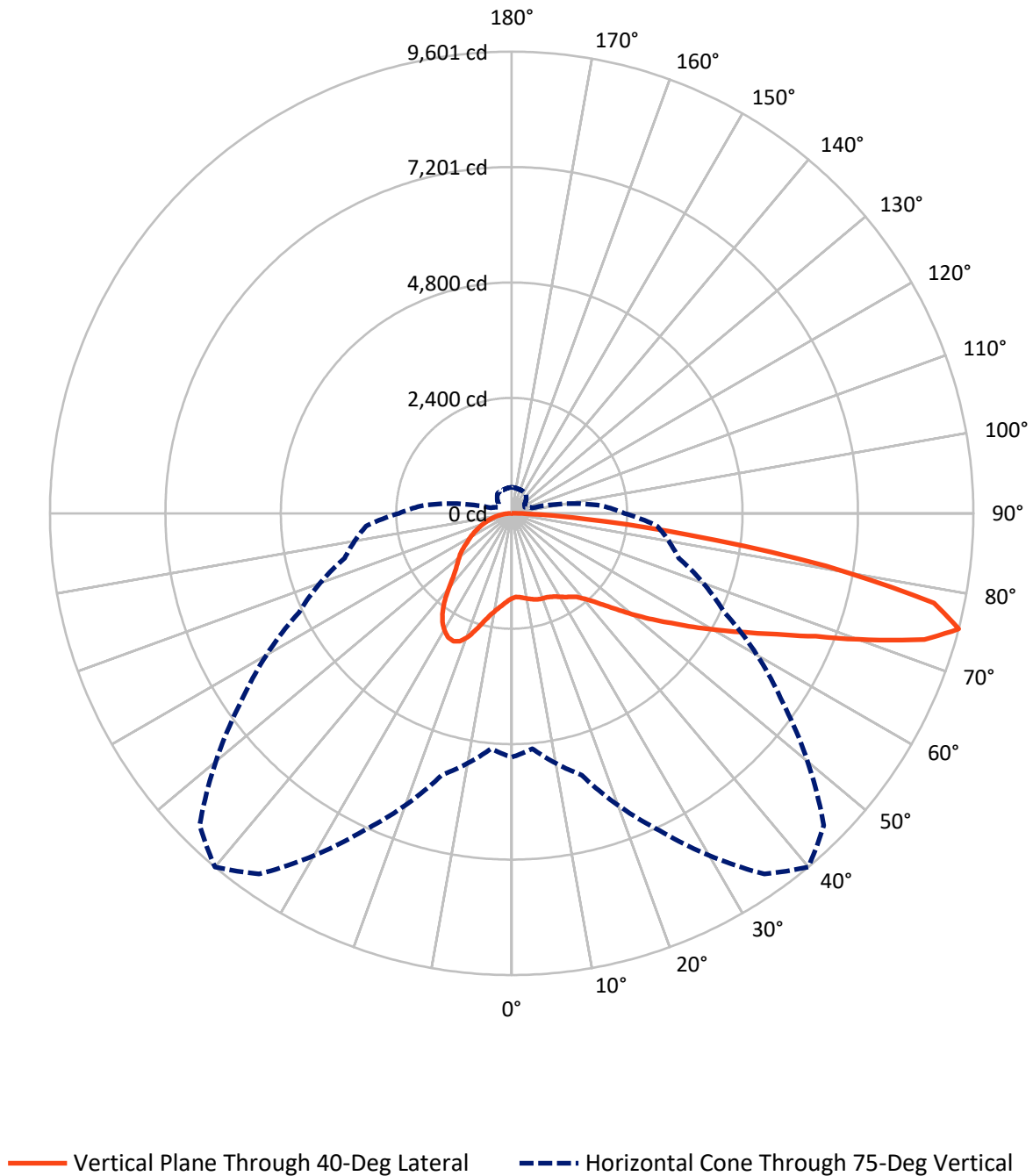
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4779.3	0.0	4779.3
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	10646.0	0.0	10646.0
	% Fixture	69.0	0.0	69.0
Total	Lumens	15425.2	0.0	15425.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.1	1.1
10°-20°	591.1	3.8
20°-30°	1079.4	7.0
30°-40°	1530.9	9.9
40°-50°	2067.1	13.4
50°-60°	2780.9	18.0
60°-70°	3529.5	22.9
70°-80°	3203.3	20.8
80°-90°	466.9	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°	15425.2	100.0
0°-180°	15425.2	100.0

Coefficient of Utilization



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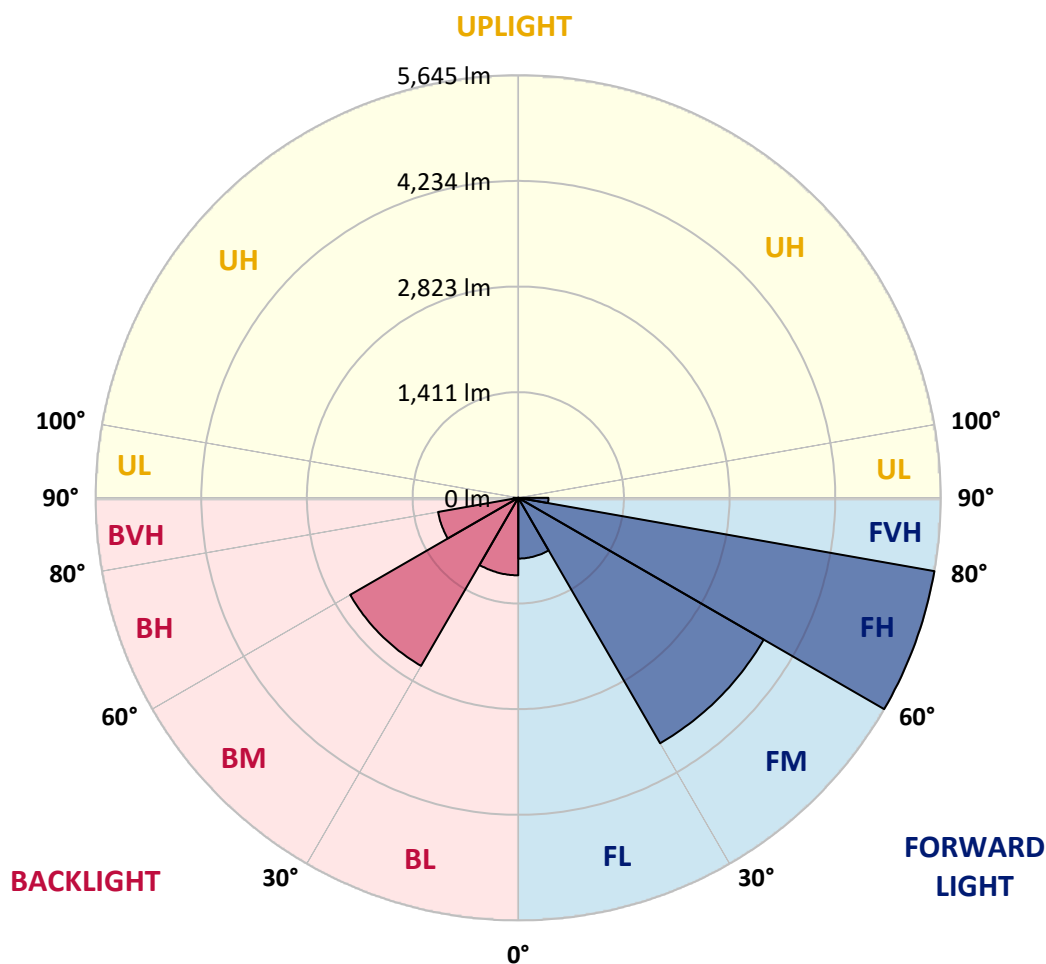
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	811.4	5.3			
FM	(30°-60°)	3786.5	24.5			
FH	(60°-80°)	5645.4	36.6			G3/7500
FVH	(80°-90°)	402.7	2.6			G3/500
BL	(0°-30°)	1035.2	6.7	B3/2500		
BM	(30°-60°)	2592.3	16.8	B3/5000		
BH	(60°-80°)	1087.4	7.0	B3/2500		G3/2500
BVH	(80°-90°)	64.3	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°	1763.9	1763.9	1763.9	1763.9	1763.9	1763.9	1763.9	1763.9	1763.9	1763.9	1763.9
2.5°	1736.9	1746.7	1744.2	1741.0	1741.0	1741.8	1741.0	1746.7	1752.4	1758.2	1767.2
5°	1754.9	1764.7	1759.8	1755.7	1752.4	1751.6	1749.2	1748.3	1751.6	1759.0	1771.3
7.5°	1790.1	1799.9	1792.5	1785.1	1778.6	1775.3	1772.1	1767.2	1764.7	1768.8	1786.0
10°	1829.3	1839.2	1830.1	1817.1	1806.5	1802.4	1799.1	1794.2	1790.9	1793.3	1812.2
12.5°	1868.6	1878.4	1866.1	1848.2	1834.2	1831.8	1827.7	1826.0	1825.2	1824.4	1843.3
15°	1905.5	1913.6	1898.1	1876.8	1862.1	1858.0	1853.9	1856.4	1860.5	1865.3	1886.6
17.5°	1934.1	1942.3	1919.3	1891.5	1877.6	1876.0	1873.5	1881.7	1893.2	1905.5	1931.6
20°	1960.2	1968.4	1939.0	1901.4	1885.0	1885.0	1885.8	1903.0	1919.3	1937.4	1973.3
22.5°	1997.1	2003.6	1967.6	1916.0	1892.4	1894.0	1900.6	1917.7	1938.2	1962.7	2012.6
25°	2051.8	2056.8	2012.6	1943.9	1916.9	1921.8	1927.5	1935.7	1955.3	1984.0	2051.0
27.5°	2140.2	2144.3	2086.3	1993.0	1952.1	1960.2	1968.4	1962.7	1971.7	1996.3	2082.2
30°	2264.6	2267.1	2193.4	2069.9	2011.8	2015.9	2017.5	1993.8	1976.6	1996.3	2104.2
32.5°	2411.8	2411.0	2323.5	2163.2	2079.7	2075.6	2061.7	2015.0	1975.0	1992.2	2123.9
35°	2640.1	2631.1	2518.2	2294.1	2156.6	2131.3	2098.5	2038.8	1983.2	1988.1	2141.0
37.5°	3018.1	2990.2	2834.0	2508.4	2271.1	2206.5	2158.2	2077.3	2001.1	1986.4	2161.5
40°	3444.3	3409.2	3237.4	2802.1	2443.0	2339.0	2261.4	2132.1	2030.6	1993.8	2191.8
42.5°	3949.9	3900.0	3715.1	3148.2	2660.6	2510.0	2393.1	2201.6	2074.0	2017.5	2232.7
45°	4570.9	4504.7	4242.9	3538.4	2934.7	2734.2	2578.0	2307.2	2140.2	2063.3	2294.1
47.5°	5198.4	5214.8	4842.5	3985.1	3263.5	3010.7	2809.4	2465.8	2236.8	2136.9	2393.1
50°	5865.2	5876.6	5439.0	4480.1	3636.6	3323.3	3069.7	2643.4	2370.9	2241.7	2541.1
52.5°	6385.5	6387.2	5980.6	4998.0	4025.2	3666.8	3350.2	2846.3	2526.4	2380.8	2738.3
55°	6711.2	6707.1	6360.1	5488.1	4471.9	4027.6	3661.1	3076.9	2716.2	2544.4	2986.2
57.5°	6947.6	6935.4	6622.0	5909.3	4948.1	4453.9	4013.0	3338.8	2940.4	2739.1	3312.6
60°	7037.5	7030.2	6799.5	6273.4	5448.8	4925.1	4418.8	3631.7	3194.8	2969.0	3732.3
62.5°	7072.0	7085.8	6973.8	6626.0	5984.7	5447.2	4864.6	3981.8	3481.2	3229.2	4174.9
65°	7193.0	7218.4	7195.5	7087.5	6590.0	6058.3	5456.2	4398.3	3793.7	3508.2	4637.2
67.5°	7432.8	7458.1	7467.9	7639.7	7329.7	6819.9	6194.1	4917.0	4159.3	3797.7	4984.9
70°	7427.0	7419.7	7593.1	8079.0	8255.8	7874.6	7188.9	5555.1	4595.5	4038.3	5029.1
72.5°	6760.3	6701.3	7111.2	8074.1	9026.5	8975.7	8403.9	6378.2	4971.8	4067.7	4363.9
75°	5071.6	4914.6	5638.5	7276.5	9154.9	9600.8	9176.2	6888.7	4882.6	3594.1	3036.9
77.5°	2168.9	2010.9	2864.3	5386.6	8193.6	8974.9	8467.6	6010.0	3897.6	2376.7	1491.5
80°	567.7	566.9	865.6	2442.2	5572.3	6627.6	5814.5	3881.3	2226.9	849.2	411.5
82.5°	234.8	229.1	318.3	949.9	2722.7	3719.2	3035.2	1731.1	804.2	229.9	136.6
85°	87.5	86.7	154.7	328.1	960.5	1534.0	1110.2	442.6	200.5	112.1	61.4
87.5°	24.5	23.7	33.5	113.7	234.0	355.1	189.8	72.8	56.5	44.2	18.0
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°	1763.9	1763.9	1763.9	1763.9	1763.9	1763.9	1763.9	1763.9	1763.9	1763.9	1763.9
2.5°	1769.7	1773.8	1781.0	1786.8	1794.2	1802.4	1813.8	1821.1	1828.5	1833.4	1830.1
5°	1776.9	1786.0	1804.8	1823.6	1845.7	1866.1	1889.9	1907.1	1921.0	1925.1	1926.7
7.5°	1793.3	1808.1	1840.0	1871.9	1907.1	1940.6	1975.0	2004.4	2028.2	2037.2	2038.0
10°	1821.9	1841.6	1886.6	1931.6	1978.2	2029.8	2074.0	2116.5	2150.0	2164.0	2164.8
12.5°	1858.0	1882.5	1941.5	2003.6	2068.2	2139.4	2196.7	2249.1	2290.8	2309.6	2309.6
15°	1904.7	1936.5	2011.8	2095.2	2190.1	2289.1	2361.9	2420.0	2466.7	2489.6	2488.0
17.5°	1955.3	1997.9	2092.7	2218.8	2354.6	2484.7	2569.8	2612.3	2660.6	2682.6	2681.8
20°	2004.4	2056.8	2192.6	2375.8	2556.7	2694.9	2763.6	2775.1	2778.4	2780.8	2787.4
22.5°	2055.1	2125.5	2317.7	2573.9	2767.7	2863.4	2873.3	2824.2	2755.5	2723.5	2732.5
25°	2110.8	2204.1	2481.4	2792.3	2949.3	2960.8	2885.6	2766.1	2636.0	2576.3	2585.3
27.5°	2164.8	2294.9	2677.7	3000.9	3080.2	2979.7	2817.6	2648.3	2491.3	2428.2	2435.6
30°	2218.8	2398.8	2894.6	3183.3	3140.0	2933.0	2710.5	2521.5	2363.5	2297.3	2304.7
32.5°	2273.6	2519.9	3144.1	3315.1	3129.3	2834.0	2577.2	2379.1	2240.0	2170.5	2179.5
35°	2335.8	2668.8	3380.6	3387.1	3058.2	2688.4	2401.3	2209.0	2087.9	2032.3	2044.5
37.5°	2416.7	2857.7	3589.1	3405.0	2933.9	2474.9	2182.7	2007.7	1907.9	1882.5	1900.6
40°	2517.4	3085.1	3748.7	3376.5	2749.8	2215.5	1943.9	1804.0	1747.5	1753.3	1772.9
42.5°	2648.3	3339.7	3860.8	3302.8	2493.6	1948.0	1734.4	1672.3	1699.2	1722.2	1743.4
45°	2818.4	3603.9	3930.4	3177.6	2204.1	1721.4	1610.9	1625.6	1646.0	1648.5	1664.9
47.5°	3036.0	3871.4	3976.1	2988.6	1908.8	1561.8	1532.4	1535.7	1531.6	1514.3	1527.5
50°	3307.7	4131.6	4017.1	2738.3	1657.5	1462.0	1422.7	1411.3	1354.8	1299.2	1306.6
52.5°	3616.9	4370.5	4034.2	2427.4	1462.0	1378.5	1314.8	1242.7	1137.2	1120.0	1125.8
55°	3960.6	4591.4	3990.0	2045.3	1297.5	1271.4	1174.9	1088.1	1076.7	1061.9	1064.4
57.5°	4371.3	4829.4	3900.0	1619.1	1129.0	1146.2	1052.2	1061.9	1041.5	1018.5	1014.4
60°	4820.5	5075.7	3742.2	1230.5	954.8	989.9	1020.2	1019.4	1013.6	994.9	988.3
62.5°	5224.6	5237.6	3431.3	942.5	801.8	868.9	951.5	950.7	945.8	935.1	931.0
65°	5465.1	5213.2	2912.5	742.0	675.8	769.1	858.2	864.8	865.6	864.8	864.8
67.5°	5422.6	4925.9	2200.8	590.7	571.8	667.6	765.8	774.8	781.4	783.0	784.6
70°	4941.5	4295.2	1435.0	471.3	479.4	578.4	678.2	687.3	693.0	699.5	702.7
72.5°	3851.7	3158.0	821.4	381.3	398.4	501.5	591.5	602.2	605.5	617.7	622.6
75°	2347.2	1857.2	443.4	300.2	327.3	428.7	505.6	517.8	523.6	538.3	540.0
77.5°	1115.9	804.2	252.8	234.0	263.4	350.1	427.0	441.0	425.5	433.6	427.0
80°	377.2	298.6	159.5	178.4	201.3	273.3	341.9	355.9	323.2	321.5	318.3
82.5°	131.7	121.1	101.5	118.6	130.1	195.6	258.5	276.5	240.6	239.7	228.3
85°	51.6	49.1	56.5	64.7	77.7	120.2	170.1	179.2	148.1	119.4	117.8
87.5°	10.7	11.5	13.9	14.8	23.7	41.7	61.4	75.2	59.8	50.7	46.6
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)