

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: P964084

Luminaire Tested: **NAV-SB3B-740-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964084
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-740-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18286 lumens
Efficiency: N/A
Efficacy: 167.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

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

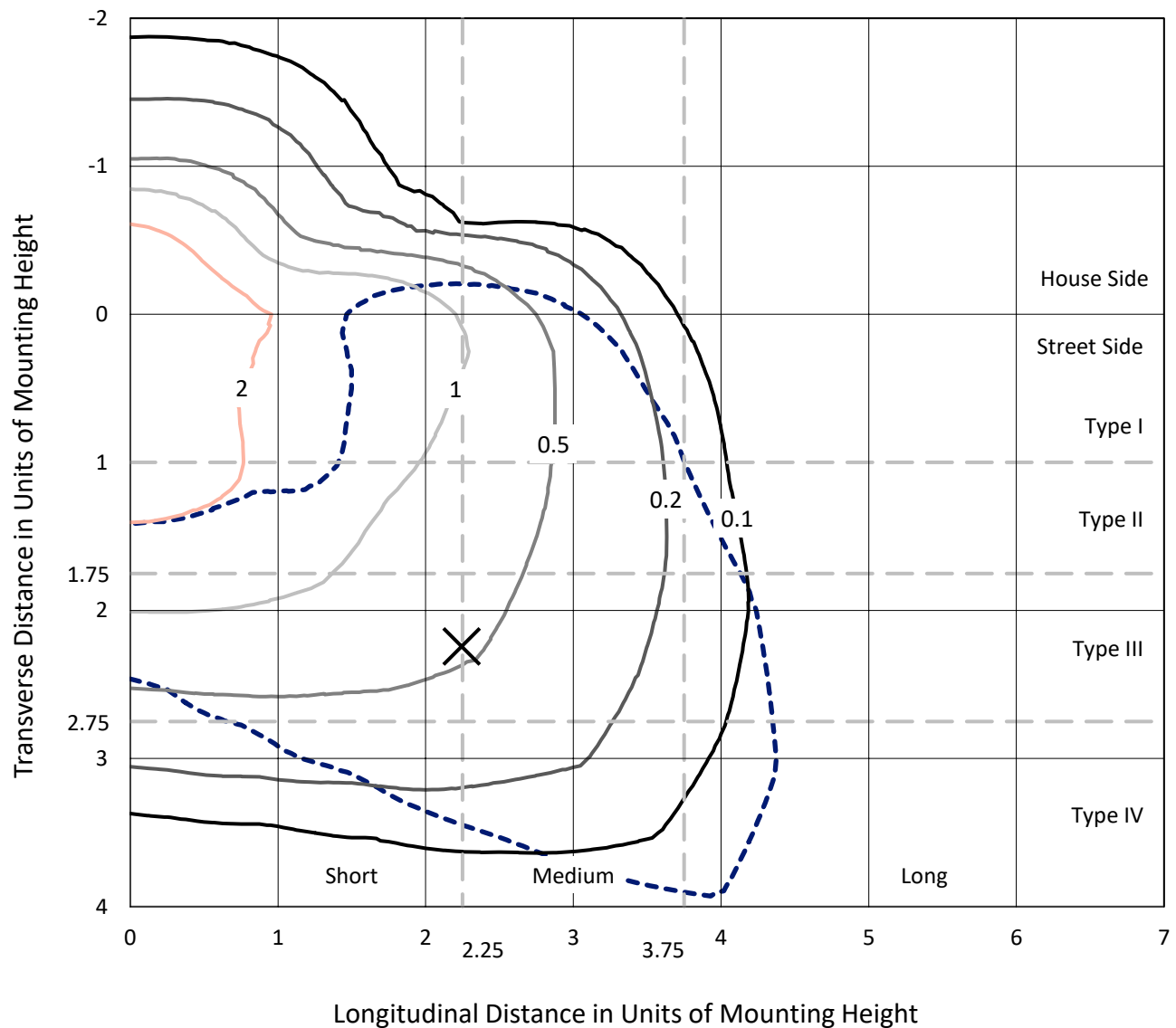


REPORT NUMBER: P964084

CATALOG NUMBER: NAV-SB3B-740-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

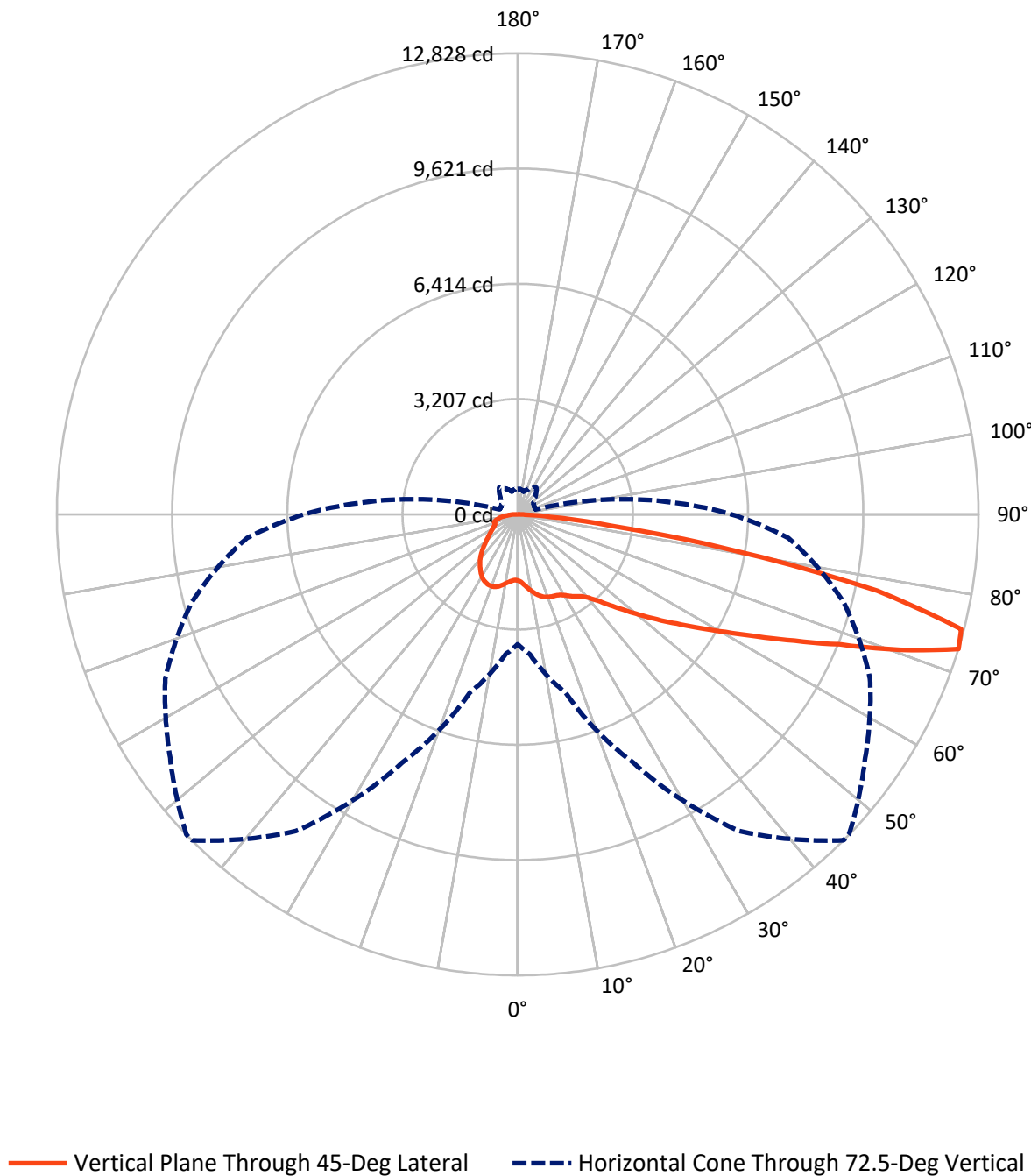


Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
Type IV - Short - N/A

REPORT NUMBER: P964084

CATALOG NUMBER: NAV-SB3B-740-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P964084

CATALOG NUMBER: NAV-SB3B-740-U-T4W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4133.8	0.0	4133.8
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	14152.2	0.0	14152.2
	% Fixture	77.4	0.0	77.4
Total	Lumens	18286.0	0.0	18286.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.8	1.0
10°-20°	626.0	3.4
20°-30°	1089.0	6.0
30°-40°	1561.1	8.5
40°-50°	2198.1	12.0
50°-60°	3366.8	18.4
60°-70°	4877.3	26.7
70°-80°	3894.9	21.3
80°-90°	485.1	2.7
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°	18286.0	100.0
0°-180°	18286.0	100.0

Coefficient of Utilization



REPORT NUMBER: P964084

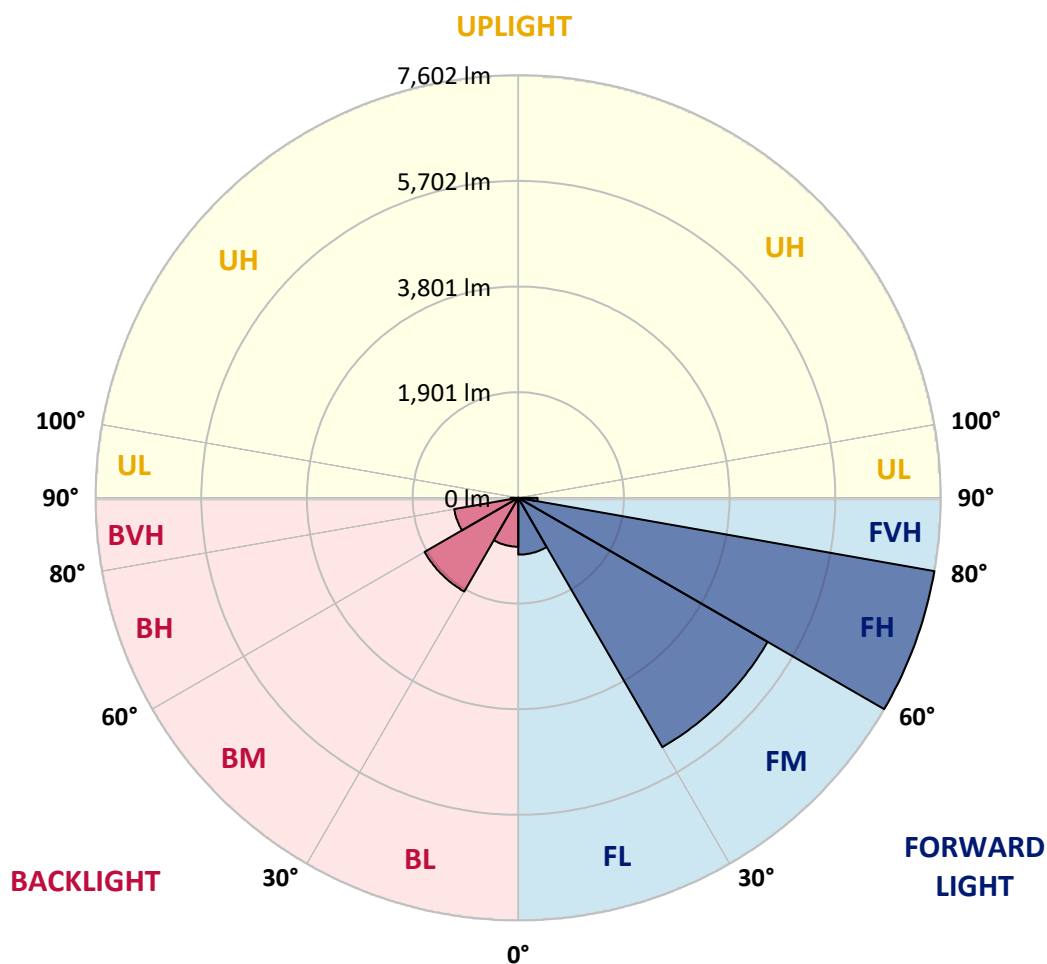
CATALOG NUMBER: NAV-SB3B-740-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1022.6	5.6			
FM	(30°-60°)	5179.6	28.3			
FH	(60°-80°)	7602.0	41.6			G4/12000
FVH	(80°-90°)	348.0	1.9			G3/500
BL	(0°-30°)	880.1	4.8	B2/1000		
BM	(30°-60°)	1946.5	10.6	B2/2500		
BH	(60°-80°)	1170.2	6.4	B3/2500		G3/2500
BVH	(80°-90°)	137.1	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Short



REPORT NUMBER: P964084

CATALOG NUMBER: NAV-SB3B-740-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1844.7	1844.7	1844.7	1844.7	1844.7	1844.7	1844.7	1844.7	1844.7	1844.7	1844.7
2.5°	1917.0	1929.5	1917.9	1907.3	1902.5	1890.0	1889.0	1881.3	1876.5	1863.0	1859.1
5°	2050.8	2067.2	2048.0	2026.7	2007.5	1976.7	1972.8	1950.7	1925.7	1896.8	1880.4
7.5°	2202.1	2216.6	2194.4	2162.5	2128.8	2077.8	2076.9	2036.4	1996.9	1947.8	1919.8
10°	2334.0	2353.3	2323.5	2280.1	2237.7	2180.0	2173.2	2127.0	2076.9	2013.3	1970.9
12.5°	2450.6	2464.1	2435.2	2382.2	2333.1	2275.3	2266.6	2215.5	2159.7	2087.4	2033.5
15°	2543.1	2560.4	2521.9	2465.0	2413.1	2356.2	2348.5	2302.3	2246.4	2170.3	2100.9
17.5°	2603.8	2618.3	2578.7	2515.1	2465.0	2417.9	2412.0	2373.6	2324.4	2247.3	2173.2
20°	2626.9	2642.3	2600.8	2536.4	2490.1	2453.5	2450.6	2422.7	2389.0	2318.7	2243.5
22.5°	2650.0	2664.5	2610.5	2543.1	2502.6	2479.5	2478.6	2460.2	2446.8	2389.0	2315.8
25°	2743.4	2747.3	2675.0	2577.8	2520.0	2499.8	2498.7	2497.8	2503.6	2458.4	2393.8
27.5°	2824.4	2823.4	2761.8	2670.2	2580.6	2538.3	2537.3	2546.9	2565.3	2527.6	2474.7
30°	2942.9	2932.2	2859.0	2763.7	2681.8	2616.3	2610.5	2601.9	2616.3	2586.5	2555.6
32.5°	3194.3	3160.6	3042.1	2872.6	2765.7	2715.5	2707.8	2653.8	2659.7	2641.3	2625.9
35°	3554.5	3510.2	3352.3	3078.7	2869.7	2798.4	2794.5	2726.1	2714.5	2698.2	2704.0
37.5°	3983.3	3928.3	3744.3	3377.3	3048.9	2894.7	2888.9	2827.3	2780.1	2762.7	2795.5
40°	4413.8	4344.5	4192.2	3741.5	3312.8	3055.5	3037.3	2943.8	2889.9	2861.0	2930.4
42.5°	4831.8	4774.0	4644.1	4149.8	3638.3	3290.6	3250.2	3090.3	3049.8	3022.8	3148.1
45°	5201.8	5149.7	5054.4	4586.3	4019.8	3610.5	3570.9	3309.8	3297.3	3297.3	3478.4
47.5°	5502.3	5490.7	5389.7	5031.3	4469.7	3974.5	3906.2	3615.3	3648.9	3701.0	3947.6
50°	5835.6	5803.9	5695.9	5469.6	4998.5	4391.6	4335.8	3989.9	4116.1	4258.7	4625.7
52.5°	6141.9	6159.3	6038.9	5926.1	5595.8	4856.9	4758.7	4432.1	4704.8	4940.7	5420.4
55°	6457.0	6457.9	6424.2	6408.8	6221.9	5371.3	5263.4	4963.9	5397.3	5690.2	6347.1
57.5°	6752.7	6754.5	6804.7	6940.5	6948.2	5964.7	5842.4	5616.9	6167.0	6465.6	7302.7
60°	7016.6	7030.1	7166.9	7484.8	7586.8	6644.8	6529.1	6388.5	6962.6	7263.3	8307.4
62.5°	7105.2	7154.4	7458.7	7910.5	8217.8	7479.0	7365.3	7281.5	7798.8	8078.1	9147.4
65°	6954.9	7067.7	7656.2	8262.1	8867.1	8470.2	8357.5	8266.0	8667.7	8930.6	9837.1
67.5°	6586.0	6731.5	7644.7	8631.1	9655.1	9662.8	9557.8	9343.0	9599.2	9700.3	10061.6
70°	5614.0	5831.7	6971.3	8768.9	10559.6	11293.7	11192.5	10639.5	10528.8	10039.5	9429.7
72.5°	3617.1	3910.0	5133.4	7635.0	10761.0	12828.2	12822.3	11809.9	10822.6	9380.5	7562.8
75°	1319.7	1498.9	2385.1	4792.4	9032.8	12750.1	12787.7	11609.6	9879.5	7245.8	4711.4
77.5°	480.7	525.9	778.4	1841.8	5555.3	10230.1	10308.2	9281.3	7032.0	3636.4	1866.8
80°	252.4	277.5	398.8	714.7	2380.3	6075.5	6197.8	5515.8	3305.0	1095.2	559.6
82.5°	139.7	151.2	223.4	388.2	1072.1	2598.0	2671.3	2178.9	1162.7	464.3	231.2
85°	75.1	79.9	105.0	212.0	524.0	900.7	920.9	651.2	463.3	272.6	111.7
87.5°	22.1	27.0	34.6	67.4	205.2	202.3	207.2	129.0	183.1	137.8	36.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P964084

CATALOG NUMBER: NAV-SB3B-740-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1844.7	1844.7	1844.7	1844.7	1844.7	1844.7	1844.7	1844.7	1844.7	1844.7	1844.7
2.5°	1853.4	1850.4	1839.9	1835.1	1829.3	1828.3	1833.1	1834.1	1835.1	1836.1	1839.9
5°	1870.7	1861.1	1851.5	1845.6	1847.6	1848.6	1858.2	1864.9	1869.7	1873.6	1875.5
7.5°	1904.4	1896.8	1880.4	1879.3	1882.3	1890.9	1903.4	1918.9	1927.5	1934.3	1936.2
10°	1954.5	1940.0	1920.8	1923.7	1929.5	1942.0	1968.0	1980.5	1995.0	2007.5	2004.6
12.5°	2005.6	1993.0	1970.9	1972.8	1982.5	2004.6	2029.6	2045.1	2054.7	2064.4	2068.1
15°	2072.0	2049.9	2025.8	2025.8	2043.1	2067.2	2078.8	2091.3	2097.0	2107.7	2111.5
17.5°	2140.4	2111.5	2079.7	2077.8	2099.0	2110.6	2117.3	2119.3	2121.1	2132.7	2136.6
20°	2208.9	2177.0	2131.8	2127.9	2132.7	2130.8	2129.8	2127.9	2130.8	2145.2	2151.1
22.5°	2276.2	2239.6	2177.0	2159.7	2146.2	2127.9	2127.0	2126.0	2127.9	2142.4	2152.0
25°	2355.2	2311.0	2227.1	2175.2	2129.8	2104.8	2107.7	2108.6	2110.6	2122.2	2137.5
27.5°	2440.9	2391.8	2273.3	2170.3	2088.4	2071.1	2066.3	2069.2	2075.9	2094.2	2112.5
30°	2526.7	2468.9	2315.8	2151.1	2036.4	2012.3	1996.9	2003.7	2024.9	2043.1	2063.3
32.5°	2604.7	2546.9	2349.5	2108.6	1969.9	1932.3	1912.1	1920.8	1942.0	1948.7	1972.8
35°	2696.3	2630.8	2364.0	2041.2	1897.7	1839.9	1812.9	1800.4	1811.0	1804.2	1825.4
37.5°	2798.4	2730.0	2362.0	1952.6	1812.9	1746.4	1708.9	1661.6	1639.5	1616.4	1630.9
40°	2949.6	2851.3	2338.8	1845.6	1708.0	1647.3	1579.8	1499.9	1449.8	1404.5	1407.3
42.5°	3155.8	3020.0	2296.5	1728.2	1589.5	1532.6	1441.0	1347.7	1268.6	1193.5	1186.7
45°	3463.1	3240.5	2243.5	1602.9	1461.3	1405.5	1306.3	1201.2	1111.6	1015.3	1003.8
47.5°	3906.2	3537.2	2193.4	1460.3	1326.5	1275.4	1185.8	1088.6	982.6	889.1	878.5
50°	4514.9	3963.0	2147.2	1321.6	1193.5	1155.0	1083.7	984.5	877.6	802.4	797.7
52.5°	5289.4	4541.9	2127.9	1187.8	1069.3	1054.8	997.9	905.5	804.3	740.8	735.9
55°	6178.5	5234.5	2127.9	1059.6	960.4	965.2	925.7	840.0	752.3	695.5	689.7
57.5°	7085.9	5935.8	2089.4	941.2	868.0	888.2	863.2	788.0	709.0	650.3	640.6
60°	7922.1	6523.4	1933.4	833.2	786.1	817.8	801.4	736.9	640.6	591.4	583.7
62.5°	8564.6	6854.8	1632.8	747.5	718.6	755.2	746.5	669.5	628.0	607.8	601.1
65°	8886.3	6800.9	1248.4	671.4	661.7	718.6	700.3	697.4	664.7	641.5	633.9
67.5°	8688.9	6336.5	905.5	615.5	629.0	684.9	755.2	766.8	706.1	660.8	653.1
70°	7822.9	5496.6	674.3	562.5	587.6	685.8	861.2	802.4	692.6	639.6	631.0
72.5°	5951.3	4098.8	523.1	506.7	533.6	690.6	908.4	786.1	654.1	707.0	701.3
75°	3403.3	2250.3	420.0	438.3	466.3	645.4	884.3	743.6	624.2	649.2	649.2
77.5°	1297.5	865.0	346.8	370.8	374.7	563.5	845.7	740.8	594.4	579.9	528.8
80°	449.9	338.1	287.1	294.8	290.0	500.9	811.1	644.4	486.5	435.4	421.0
82.5°	184.0	168.6	227.3	217.7	206.1	389.2	655.1	527.0	397.8	351.6	347.8
85°	79.9	106.9	150.3	132.0	119.4	269.7	525.0	446.0	336.2	290.0	288.9
87.5°	16.4	40.5	63.6	59.8	61.6	180.1	372.8	316.9	237.9	178.2	139.7
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)