

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: P883740

Luminaire Tested: **NAV-SB4B-722-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883740  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB4B-722-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

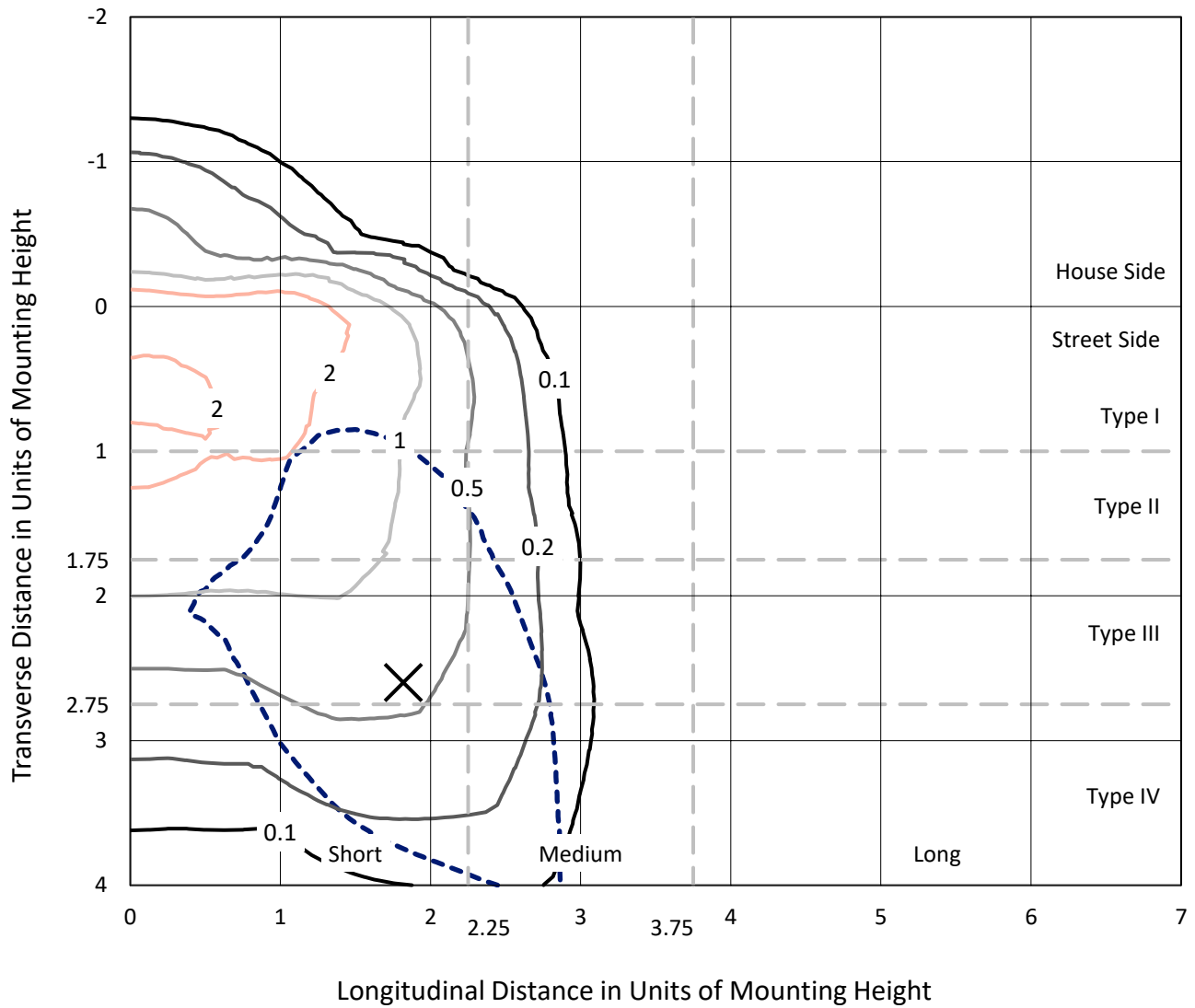
Lumens per Lamp: N/A  
Luminaire Lumens: 13769 lumens  
Efficiency: N/A  
Efficacy: 93.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G3  
  
Input Watts (W): 147  
Input Voltage (V): 120.0  
Input Current (Ain): 1.255  
Voltage Rise (V): NR  
Power Factor: 0.988  
Total Harmonic Distortion (THDi): 13.593  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P883740  
 CATALOG NUMBER: NAV-SB4B-722-U-T4FT-HSS

### Iso-Footcandle Lines of Horizontal Illumination

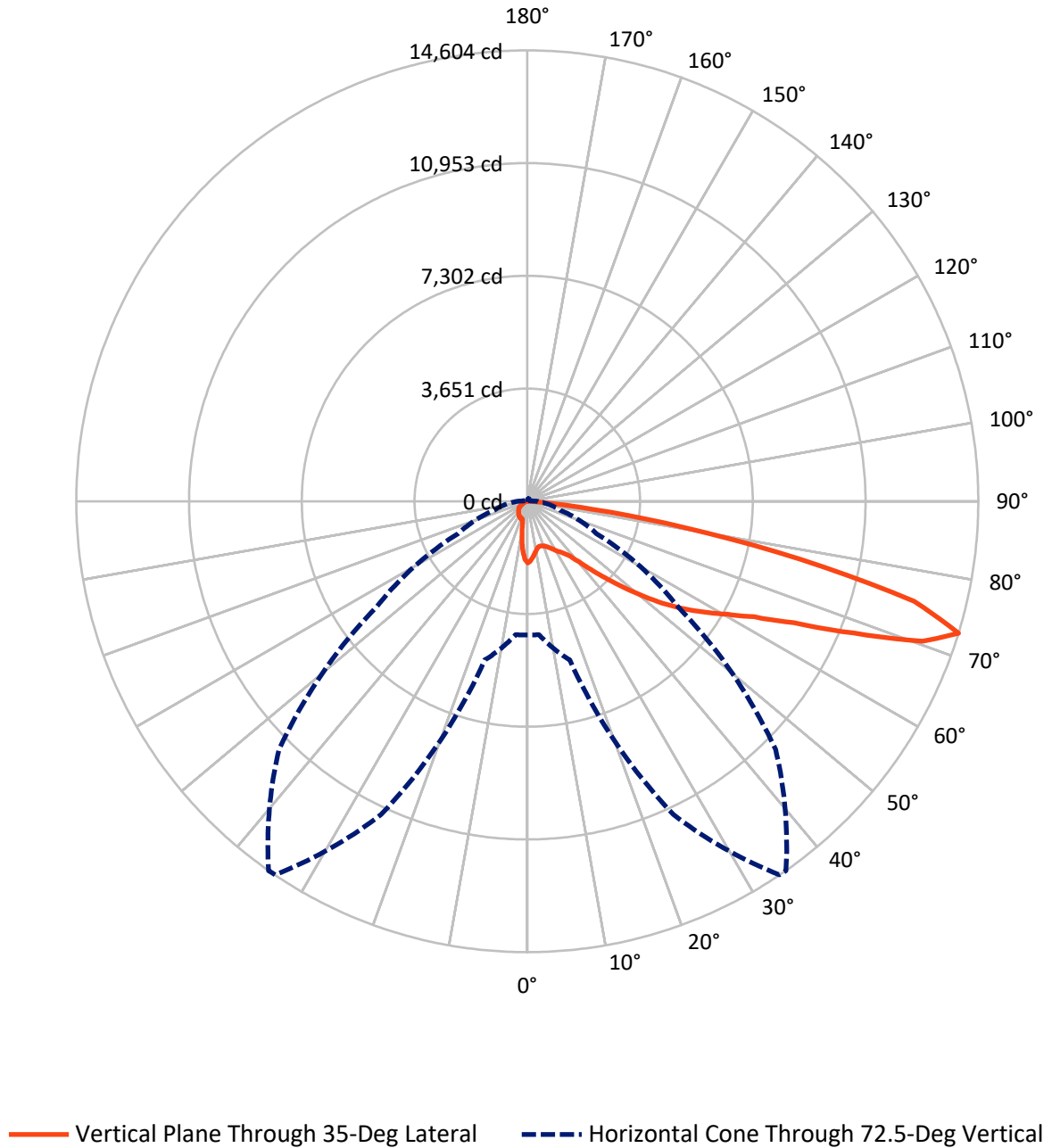
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc  
 Type IV - Short - N/A

REPORT NUMBER: P883740  
CATALOG NUMBER: NAV-SB4B-722-U-T4FT-HSS

### Luminous Intensity Polar Plot



REPORT NUMBER: P883740  
 CATALOG NUMBER: NAV-SB4B-722-U-T4FT-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1549.6	0.0	1549.6
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	12219.4	0.0	12219.4
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	13769.0	0.0	13769.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.0	1.2
10°-20°	383.6	2.8
20°-30°	623.2	4.5
30°-40°	1039.8	7.6
40°-50°	1967.3	14.3
50°-60°	3126.0	22.7
60°-70°	3867.1	28.1
70°-80°	2403.8	17.5
80°-90°	194.3	1.4
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°	13769.0	100.0
0°-180°	13769.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P883740

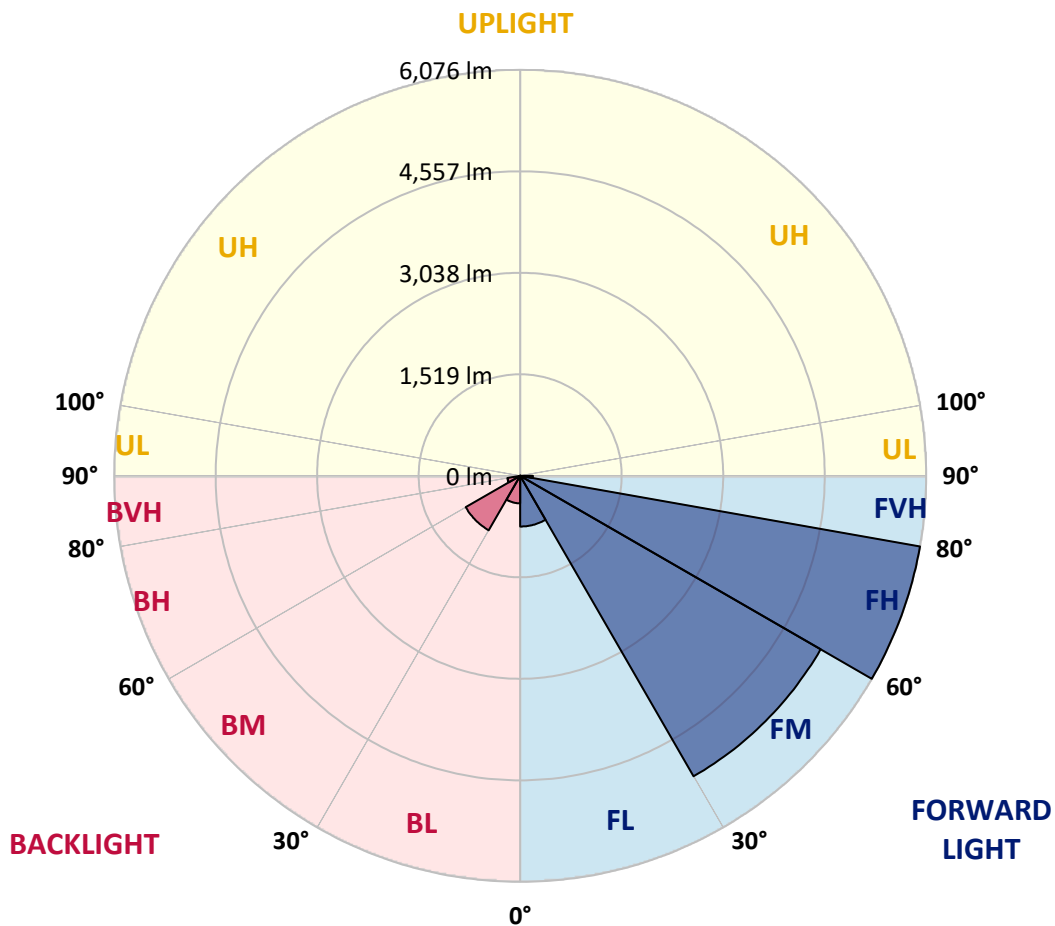
CATALOG NUMBER: NAV-SB4B-722-U-T4FT-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	759.0	5.5			
FM (30°-60°)	5192.3	37.7			
FH (60°-80°)	6076.4	44.1			G3/7500
FVH (80°-90°)	191.6	1.4			G2/225
BL (0°-30°)	411.8	3.0	B1/500		
BM (30°-60°)	940.8	6.8	B1/1000		
BH (60°-80°)	194.5	1.4	B1/500		G1/500
BVH (80°-90°)	2.6	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**

Type IV Short



REPORT NUMBER: P883740

CATALOG NUMBER: NAV-SB4B-722-U-T4FT-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	1995.6	1995.6	1995.6	1995.6	1995.6	1995.6	1995.6	1995.6	1995.6	1995.6	1995.6
2.5°	1906.8	1922.9	1926.0	1931.0	1931.0	1937.1	1947.2	1961.3	1984.5	1996.6	2004.7
5°	1757.5	1769.6	1784.7	1796.8	1820.0	1823.1	1862.4	1900.8	1954.2	1994.6	2022.8
7.5°	1607.2	1621.3	1641.5	1670.7	1701.0	1710.1	1769.6	1834.2	1918.9	1994.6	2042.0
10°	1501.2	1502.2	1520.4	1549.7	1598.1	1609.2	1681.8	1773.6	1879.6	1982.5	2060.2
12.5°	1441.7	1448.8	1456.8	1479.0	1525.4	1532.5	1610.2	1718.1	1840.2	1975.4	2081.3
15°	1441.7	1446.8	1451.8	1462.9	1500.2	1506.3	1574.9	1682.8	1820.0	1978.4	2115.6
17.5°	1456.8	1464.9	1460.9	1474.0	1513.3	1517.4	1577.9	1672.7	1819.0	1997.6	2168.1
20°	1493.2	1499.2	1491.1	1499.2	1538.6	1546.6	1609.2	1691.9	1836.2	2030.9	2233.7
22.5°	1550.7	1553.7	1534.5	1540.6	1580.9	1591.0	1663.7	1746.4	1877.5	2084.4	2321.5
25°	1623.3	1629.4	1600.1	1607.2	1645.5	1657.6	1741.3	1828.1	1943.1	2158.0	2433.4
27.5°	1707.0	1710.1	1684.9	1683.8	1733.3	1750.4	1835.2	1929.0	2030.9	2250.8	2574.7
30°	1802.9	1812.0	1787.8	1783.7	1846.3	1860.4	1944.1	2053.1	2160.0	2390.1	2775.5
32.5°	1878.6	1885.6	1871.5	1881.6	1945.1	1956.2	2076.3	2228.6	2362.8	2587.8	3048.9
35°	1987.5	1991.6	1959.3	1977.4	2050.1	2078.3	2256.9	2474.8	2618.1	2836.0	3406.0
37.5°	2382.0	2382.0	2244.8	2155.0	2224.6	2249.8	2504.1	2784.5	2932.9	3168.9	3856.0
40°	2927.8	2918.7	2718.0	2534.3	2525.3	2574.7	2856.2	3175.0	3339.4	3568.5	4362.5
42.5°	3509.9	3495.8	3222.4	3040.8	3010.5	3027.7	3262.8	3656.2	3823.7	4055.7	4907.3
45°	4026.5	4022.5	3772.2	3528.1	3473.6	3528.1	3770.2	4219.2	4339.2	4583.4	5451.0
47.5°	4459.3	4459.3	4276.7	4117.3	4089.0	4121.3	4457.3	4843.7	4832.6	5145.4	5980.7
50°	4957.7	4953.7	4780.1	4711.5	4740.8	4786.2	5248.3	5501.5	5343.1	5697.2	6453.9
52.5°	5306.8	5331.0	5271.5	5260.4	5409.7	5488.4	6051.3	6145.2	5800.1	6220.8	6808.0
55°	5583.2	5611.5	5680.1	5757.8	6045.3	6148.2	6829.2	6755.5	6182.5	6674.8	7011.8
57.5°	5974.7	5934.3	6040.2	6193.6	6658.7	6782.8	7582.8	7331.6	6490.2	7043.1	7034.0
60°	6449.9	6455.9	6474.1	6667.8	7271.1	7430.5	8325.4	7876.4	6687.9	7269.1	6787.8
62.5°	7020.9	7030.0	7067.3	7364.9	8093.3	8243.7	9116.4	8322.4	6778.8	7205.5	6152.2
65°	6981.5	7019.9	7436.5	8454.5	9343.4	9491.7	10039.5	8635.1	6641.5	6624.4	5009.2
67.5°	6360.1	6422.6	7119.8	9756.0	11228.0	11393.4	11155.3	8696.7	6049.3	5151.4	3267.8
70°	5544.9	5567.1	6405.5	10926.3	13410.2	13577.7	12154.1	8019.7	4590.5	2873.3	1463.9
72.5°	4330.2	4335.2	5318.9	11197.7	14594.6	14603.7	11370.2	5953.5	2468.8	1103.7	508.5
75°	3093.3	3063.0	3562.4	9081.0	12840.2	12943.1	8524.1	2792.6	943.3	521.6	253.2
77.5°	1658.6	1691.9	2015.8	5385.5	8870.2	9045.7	4651.0	805.1	480.2	355.1	167.5
80°	512.5	540.8	826.3	2465.7	5024.3	5130.2	1724.2	358.2	335.0	253.2	110.0
82.5°	161.4	167.5	385.4	1036.1	2085.4	2133.8	499.4	202.8	229.0	167.5	64.6
85°	46.4	47.4	171.5	386.4	515.5	525.6	140.2	78.7	131.2	103.9	33.3
87.5°	5.0	16.1	64.6	64.6	45.4	44.4	15.1	17.2	37.3	13.1	6.1
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: P883740  
 CATALOG NUMBER: NAV-SB4B-722-U-T4FT-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1995.6	1995.6	1995.6	1995.6	1995.6	1995.6	1995.6	1995.6	1995.6	1995.6	1995.6
2.5°	1999.6	2000.6	1987.5	1965.3	1941.1	1920.9	1895.7	1875.5	1861.4	1857.4	1864.4
5°	2013.7	2006.7	1969.4	1901.8	1821.1	1751.4	1673.8	1612.2	1571.9	1554.7	1560.8
7.5°	2034.9	2014.8	1933.0	1799.9	1645.5	1508.3	1369.1	1261.1	1192.5	1158.2	1163.3
10°	2053.1	2012.7	1872.5	1652.6	1416.5	1208.7	1021.0	890.9	818.2	783.9	784.9
12.5°	2070.2	2011.7	1793.8	1478.0	1158.2	904.0	729.4	664.9	644.7	637.6	635.6
15°	2102.5	2014.8	1694.9	1278.3	900.9	683.0	619.5	618.5	622.5	620.5	619.5
17.5°	2146.9	2017.8	1583.0	1066.4	695.1	602.3	599.3	608.4	614.4	611.4	610.4
20°	2204.4	2029.9	1463.9	856.5	597.3	582.1	589.2	597.3	602.3	597.3	596.3
22.5°	2285.1	2051.1	1333.8	688.1	566.0	570.0	576.1	585.2	590.2	583.1	582.1
25°	2384.0	2084.4	1205.6	598.3	550.9	555.9	565.0	575.1	581.1	574.1	573.1
27.5°	2512.1	2137.8	1087.6	578.1	535.7	538.7	551.9	567.0	575.1	566.0	566.0
30°	2697.8	2225.6	985.7	587.2	526.6	519.6	537.7	558.9	568.0	559.9	558.9
32.5°	2943.9	2349.7	923.1	601.3	522.6	497.4	514.5	541.8	556.9	551.9	551.9
35°	3266.8	2538.4	898.9	617.4	519.6	474.2	486.3	515.5	541.8	546.8	546.8
37.5°	3658.2	2800.7	906.0	624.5	510.5	455.0	461.1	486.3	520.6	536.7	540.8
40°	4103.2	3106.4	946.3	617.4	500.4	438.9	439.9	459.0	489.3	513.5	521.6
42.5°	4562.2	3463.5	1021.0	591.2	491.3	424.7	421.7	434.8	455.0	472.2	479.2
45°	4999.1	3830.8	1094.6	554.9	480.2	410.6	403.6	408.6	412.6	419.7	423.7
47.5°	5380.4	4089.0	1073.5	521.6	465.1	394.5	382.4	380.4	368.2	367.2	366.2
50°	5643.7	4145.5	953.4	488.3	442.9	376.3	357.1	345.0	323.9	313.8	314.8
52.5°	5727.5	3922.6	778.9	455.0	406.6	352.1	324.9	305.7	279.5	270.4	269.4
55°	5616.5	3485.7	622.5	414.7	356.1	319.8	289.6	264.3	243.1	232.0	232.0
57.5°	5345.1	2929.8	492.3	367.2	302.7	283.5	253.2	228.0	209.8	198.8	196.7
60°	4895.1	2326.5	389.4	310.7	258.3	244.2	212.9	196.7	180.6	167.5	164.4
62.5°	4212.1	1660.6	305.7	246.2	215.9	199.8	181.6	169.5	150.3	132.2	129.1
65°	3287.0	1016.0	236.1	180.6	173.5	165.5	154.4	143.3	120.1	101.9	98.9
67.5°	2073.3	481.2	168.5	136.2	137.2	133.2	128.1	119.0	101.9	85.8	83.7
70°	913.0	233.1	111.0	103.9	101.9	101.9	105.9	102.9	86.8	71.6	68.6
72.5°	310.7	125.1	82.7	78.7	73.6	72.6	88.8	85.8	69.6	55.5	52.5
75°	162.4	83.7	60.5	56.5	44.4	53.5	70.6	66.6	49.4	36.3	33.3
77.5°	105.9	59.5	41.4	36.3	25.2	35.3	52.5	46.4	29.3	18.2	16.1
80°	66.6	39.3	24.2	17.2	12.1	19.2	28.2	20.2	11.1	4.0	3.0
82.5°	35.3	20.2	9.1	6.1	5.0	6.1	7.1	5.0	2.0	0.0	0.0
85°	14.1	7.1	3.0	2.0	1.0	0.0	2.0	1.0	0.0	0.0	0.0
87.5°	5.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)