

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: P883100

Luminaire Tested: **NAV-SB3B-740-U-T4FT-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883100
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-SB3B-740-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 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: 13787 lumens
Efficiency: N/A
Efficacy: 126.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

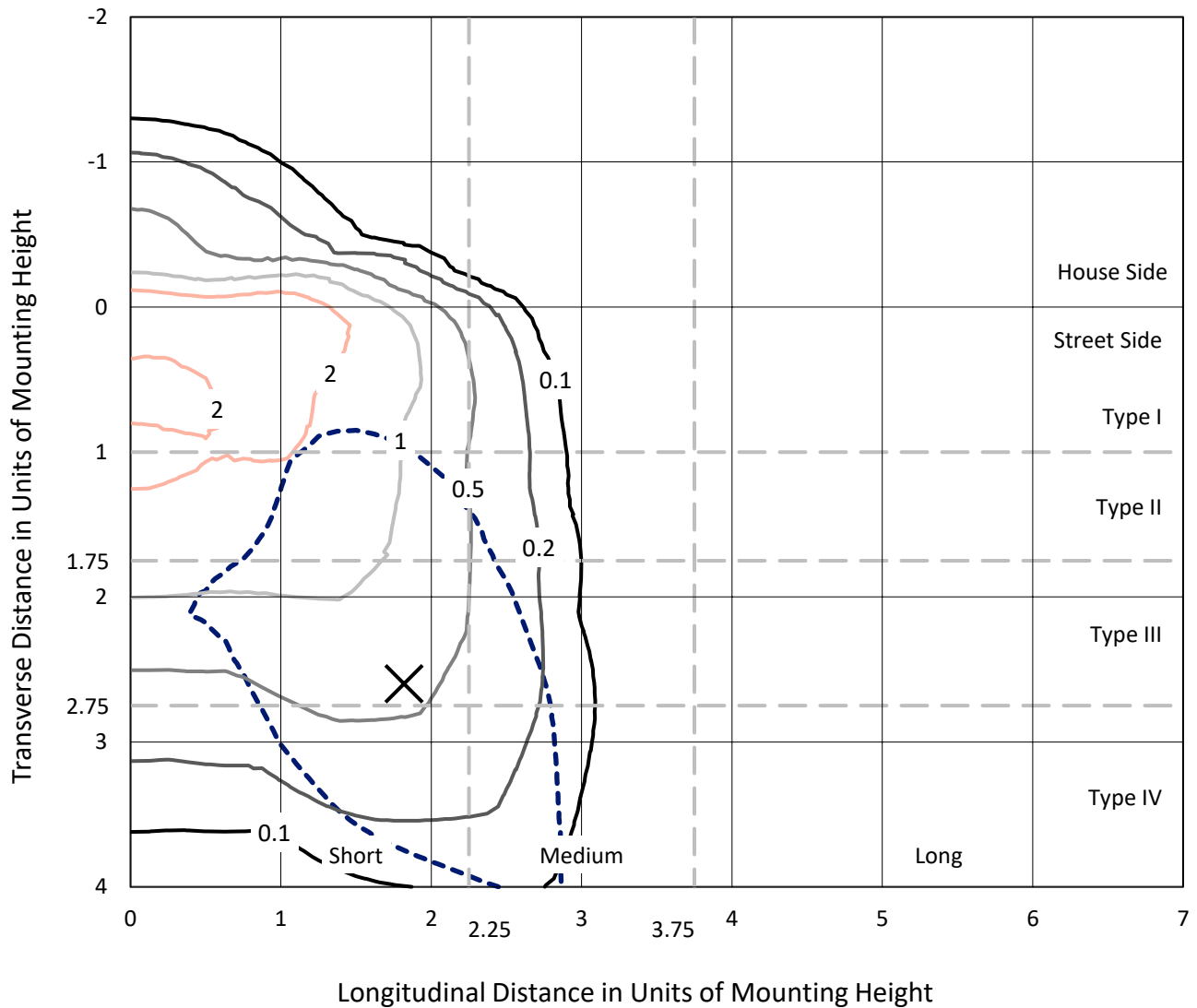
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P883100
 CATALOG NUMBER: NAV-SB3B-740-U-T4FT-HSS

Iso-Footcandle Lines of Horizontal Illumination

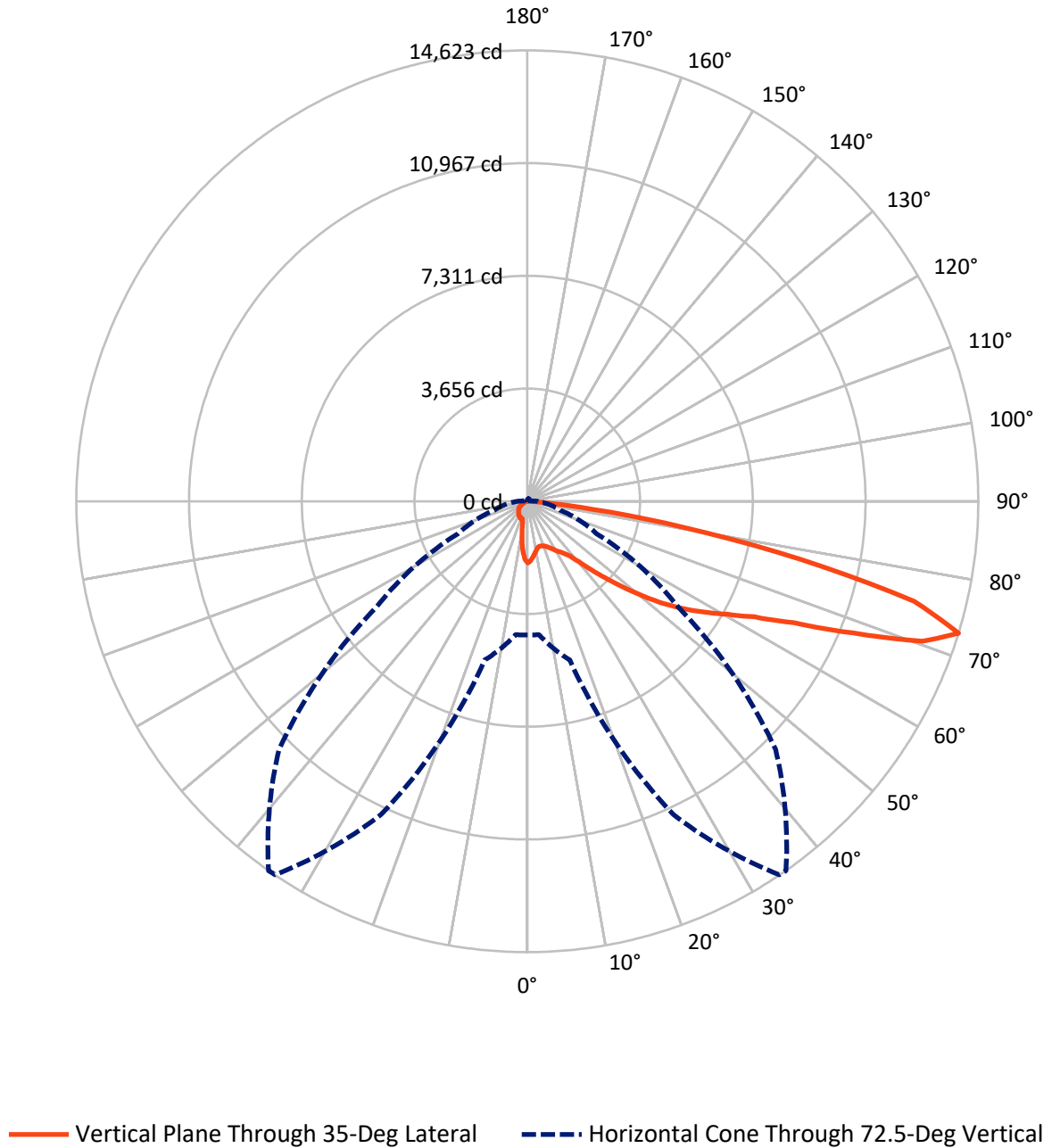
× Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P883100
CATALOG NUMBER: NAV-SB3B-740-U-T4FT-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P883100
 CATALOG NUMBER: NAV-SB3B-740-U-T4FT-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1551.7	0.0	1551.7
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	12235.3	0.0	12235.3
	% Fixture	88.7	0.0	88.7
Total	Lumens	13787.0	0.0	13787.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.2	1.2
10°-20°	384.1	2.8
20°-30°	624.0	4.5
30°-40°	1041.1	7.6
40°-50°	1969.9	14.3
50°-60°	3130.1	22.7
60°-70°	3872.1	28.1
70°-80°	2406.9	17.5
80°-90°	194.5	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°	13787.0	100.0
0°-180°	13787.0	100.0

Coefficient of Utilization



REPORT NUMBER: P883100

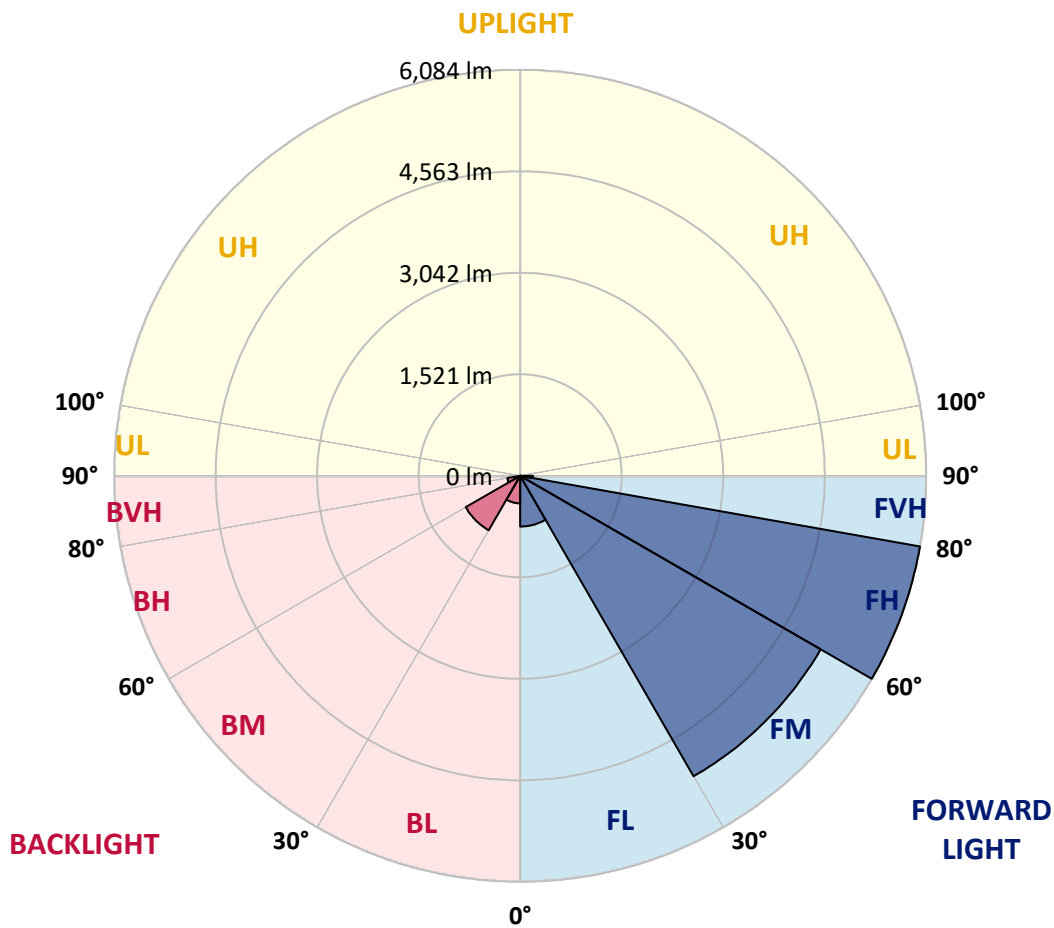
CATALOG NUMBER: NAV-SB3B-740-U-T4FT-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	760.0	5.5			
FM (30°-60°)	5199.1	37.7			
FH (60°-80°)	6084.4	44.1			G3/7500
FVH (80°-90°)	191.9	1.4			G2/225
BL (0°-30°)	412.3	3.0	B1/500		
BM (30°-60°)	942.0	6.8	B1/1000		
BH (60°-80°)	194.7	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: P883100

CATALOG NUMBER: NAV-SB3B-740-U-T4FT-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	1998.2	1998.2	1998.2	1998.2	1998.2	1998.2	1998.2	1998.2	1998.2	1998.2	1998.2
2.5°	1909.3	1925.5	1928.5	1933.5	1933.5	1939.6	1949.7	1963.9	1987.1	1999.2	2007.3
5°	1759.8	1771.9	1787.1	1799.2	1822.4	1825.5	1864.9	1903.2	1956.8	1997.2	2025.5
7.5°	1609.3	1623.4	1643.6	1672.9	1703.2	1712.3	1771.9	1836.6	1921.4	1997.2	2044.7
10°	1503.2	1504.2	1522.4	1551.7	1600.2	1611.3	1684.0	1776.0	1882.0	1985.1	2062.9
12.5°	1443.6	1450.7	1458.7	1481.0	1527.4	1534.5	1612.3	1720.4	1842.6	1978.0	2084.1
15°	1443.6	1448.6	1453.7	1464.8	1502.2	1508.2	1576.9	1685.0	1822.4	1981.0	2118.4
17.5°	1458.7	1466.8	1462.8	1475.9	1515.3	1519.4	1580.0	1674.9	1821.4	2000.2	2170.9
20°	1495.1	1501.2	1493.1	1501.2	1540.6	1548.7	1611.3	1694.1	1838.6	2033.6	2236.6
22.5°	1552.7	1555.7	1536.5	1542.6	1583.0	1593.1	1665.8	1748.7	1880.0	2087.1	2324.5
25°	1625.4	1631.5	1602.2	1609.3	1647.7	1659.8	1743.6	1830.5	1945.7	2160.8	2436.6
27.5°	1709.3	1712.3	1687.1	1686.0	1735.5	1752.7	1837.6	1931.5	2033.6	2253.8	2578.1
30°	1805.2	1814.3	1790.1	1786.1	1848.7	1862.8	1946.7	2055.8	2162.9	2393.2	2779.1
32.5°	1881.0	1888.1	1873.9	1884.0	1947.7	1958.8	2079.0	2231.6	2365.9	2591.2	3052.9
35°	1990.1	1994.2	1961.8	1980.0	2052.7	2081.0	2259.8	2478.0	2621.5	2839.7	3410.5
37.5°	2385.1	2385.1	2247.7	2157.8	2227.5	2252.8	2507.3	2788.2	2936.7	3173.1	3861.0
40°	2931.6	2922.5	2721.5	2537.7	2528.6	2578.1	2859.9	3179.1	3343.8	3573.1	4368.2
42.5°	3514.5	3500.4	3226.6	3044.8	3014.5	3031.6	3267.0	3661.0	3828.7	4061.1	4913.7
45°	4031.8	4027.7	3777.2	3532.7	3478.2	3532.7	3775.2	4224.7	4344.9	4589.4	5458.2
47.5°	4465.1	4465.1	4282.3	4122.7	4094.4	4126.7	4463.1	4850.0	4838.9	5152.1	5988.5
50°	4964.2	4960.1	4786.4	4717.7	4747.0	4792.4	5255.1	5508.7	5350.1	5704.7	6462.3
52.5°	5313.7	5338.0	5278.4	5267.2	5416.8	5495.6	6059.2	6153.2	5807.7	6229.0	6816.9
55°	5590.5	5618.8	5687.5	5765.3	6053.2	6156.2	6838.1	6764.4	6190.6	6683.6	7021.0
57.5°	5982.5	5942.1	6048.1	6201.7	6667.4	6791.7	7592.8	7341.2	6498.7	7052.3	7043.2
60°	6458.3	6464.3	6482.5	6676.5	7280.6	7440.2	8336.3	7886.7	6696.7	7278.6	6796.7
62.5°	7030.1	7039.2	7076.5	7374.5	8103.9	8254.4	9128.3	8333.2	6787.6	7214.9	6160.3
65°	6990.7	7029.1	7446.3	8465.6	9355.6	9504.1	10052.6	8646.4	6650.2	6633.0	5015.7
67.5°	6368.4	6431.0	7129.1	9768.7	11242.6	11408.3	11169.9	8708.0	6057.2	5158.1	3272.1
70°	5552.1	5574.3	6413.8	10940.6	13427.7	13595.4	12170.0	8030.2	4596.5	2877.1	1465.8
72.5°	4335.8	4340.9	5325.8	11212.3	14613.7	14622.8	11385.1	5961.3	2472.0	1105.2	509.1
75°	3097.3	3067.0	3567.1	9092.9	12857.0	12960.0	8535.3	2796.3	944.5	522.3	253.6
77.5°	1660.8	1694.1	2018.4	5392.5	8881.8	9057.6	4657.1	806.1	480.9	355.6	167.7
80°	513.2	541.5	827.4	2469.0	5030.9	5136.9	1726.5	358.6	335.4	253.6	110.1
82.5°	161.6	167.7	385.9	1037.5	2088.1	2136.6	500.1	203.1	229.3	167.7	64.7
85°	46.5	47.5	171.7	386.9	516.2	526.3	140.4	78.8	131.3	104.1	33.3
87.5°	5.1	16.2	64.7	64.7	45.5	44.4	15.2	17.2	37.4	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: P883100

CATALOG NUMBER: NAV-SB3B-740-U-T4FT-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1998.2	1998.2	1998.2	1998.2	1998.2	1998.2	1998.2	1998.2	1998.2	1998.2	1998.2
2.5°	2002.2	2003.2	1990.1	1967.9	1943.6	1923.4	1898.2	1878.0	1863.8	1859.8	1866.9
5°	2016.4	2009.3	1971.9	1904.2	1823.4	1753.7	1675.9	1614.3	1573.9	1556.7	1562.8
7.5°	2037.6	2017.4	1935.6	1802.2	1647.7	1510.3	1370.9	1262.8	1194.1	1159.7	1164.8
10°	2055.8	2015.4	1875.0	1654.7	1418.3	1210.2	1022.3	892.0	819.3	784.9	785.9
12.5°	2073.0	2014.4	1796.2	1480.0	1159.7	905.1	730.4	665.7	645.5	638.5	636.4
15°	2105.3	2017.4	1697.2	1279.9	902.1	683.9	620.3	619.3	623.3	621.3	620.3
17.5°	2149.7	2020.4	1585.0	1067.8	696.0	603.1	600.1	609.2	615.2	612.2	611.2
20°	2207.3	2032.5	1465.8	857.7	598.0	582.9	590.0	598.0	603.1	598.0	597.0
22.5°	2288.1	2053.8	1335.5	689.0	566.7	570.8	576.8	585.9	591.0	583.9	582.9
25°	2387.1	2087.1	1207.2	599.1	551.6	556.6	565.7	575.8	581.9	574.8	573.8
27.5°	2515.4	2140.6	1089.0	578.9	536.4	539.5	552.6	567.7	575.8	566.7	566.7
30°	2701.3	2228.5	987.0	587.9	527.3	520.3	538.4	559.7	568.7	560.7	559.7
32.5°	2947.8	2352.8	924.3	602.1	523.3	498.0	515.2	542.5	557.6	552.6	552.6
35°	3271.1	2541.7	900.1	618.2	520.3	474.8	486.9	516.2	542.5	547.5	547.5
37.5°	3663.0	2804.3	907.2	625.3	511.2	455.6	461.7	486.9	521.3	537.4	541.5
40°	4108.5	3110.4	947.6	618.2	501.1	439.4	440.5	459.6	490.0	514.2	522.3
42.5°	4568.2	3468.1	1022.3	592.0	492.0	425.3	422.3	435.4	455.6	472.8	479.9
45°	5005.6	3835.8	1096.1	555.6	480.9	411.2	404.1	409.1	413.2	420.2	424.3
47.5°	5387.5	4094.4	1074.9	522.3	465.7	395.0	382.9	380.8	368.7	367.7	366.7
50°	5651.1	4151.0	954.6	488.9	443.5	376.8	357.6	345.5	324.3	314.2	315.2
52.5°	5735.0	3927.7	779.9	455.6	407.1	352.6	325.3	306.1	279.8	270.7	269.7
55°	5623.8	3490.3	623.3	415.2	356.6	320.2	289.9	264.7	243.5	232.3	232.3
57.5°	5352.1	2933.7	493.0	367.7	303.1	283.9	253.6	228.3	210.1	199.0	197.0
60°	4901.5	2329.5	389.9	311.1	258.6	244.5	213.2	197.0	180.8	167.7	164.7
62.5°	4217.6	1662.8	306.1	246.5	216.2	200.0	181.8	169.7	150.5	132.3	129.3
65°	3291.3	1017.3	236.4	180.8	173.8	165.7	154.6	143.5	120.2	102.0	99.0
67.5°	2076.0	481.9	168.7	136.4	137.4	133.3	128.3	119.2	102.0	85.9	83.8
70°	914.2	233.4	111.1	104.1	102.0	102.0	106.1	103.0	86.9	71.7	68.7
72.5°	311.1	125.3	82.8	78.8	73.7	72.7	88.9	85.9	69.7	55.6	52.5
75°	162.6	83.8	60.6	56.6	44.4	53.5	70.7	66.7	49.5	36.4	33.3
77.5°	106.1	59.6	41.4	36.4	25.3	35.4	52.5	46.5	29.3	18.2	16.2
80°	66.7	39.4	24.2	17.2	12.1	19.2	28.3	20.2	11.1	4.0	3.0
82.5°	35.4	20.2	9.1	6.1	5.1	6.1	7.1	5.1	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°	5.1	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)