

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: P964081

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

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964081
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
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: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13872.3 lumens
Efficiency: N/A
Efficacy: 127.0 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): 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



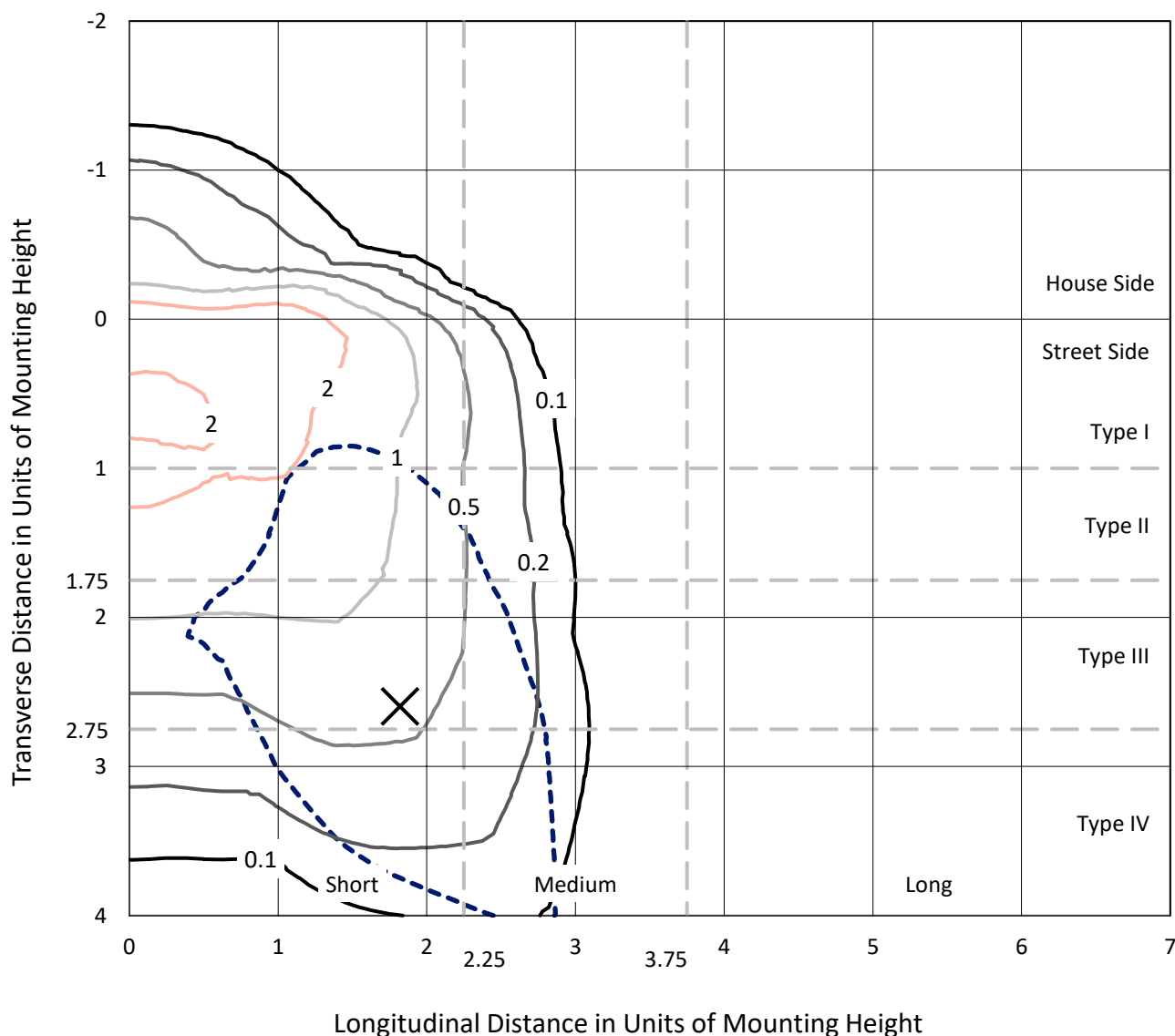
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

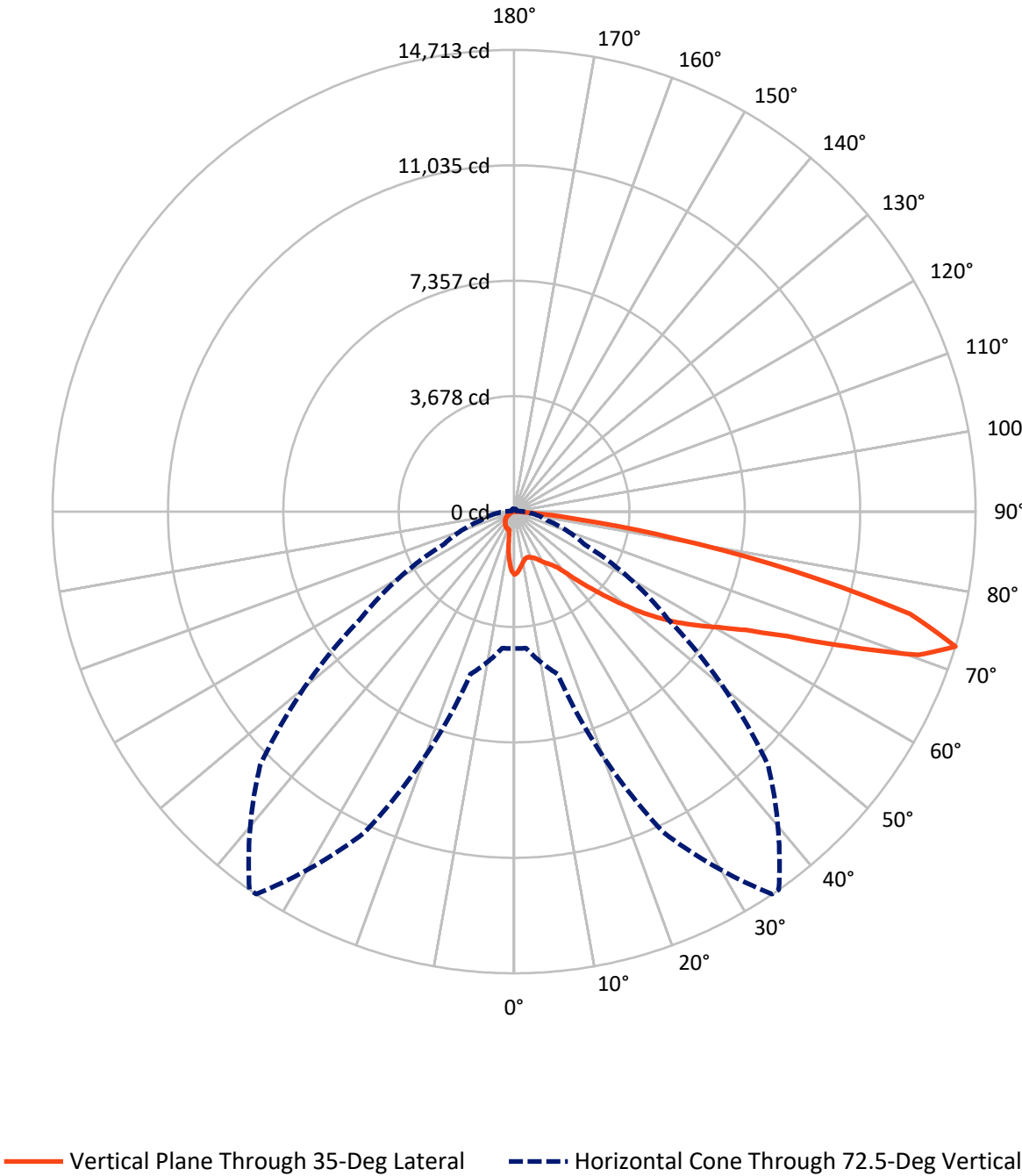
--- 1/2 Max cd



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

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1561.3	0.0	1561.3
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	12311.1	0.0	12311.1
	% Fixture	88.7	0.0	88.7
Total	Lumens	13872.3	0.0	13872.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.2	1.2
10°-20°	386.5	2.8
20°-30°	627.9	4.5
30°-40°	1047.6	7.6
40°-50°	1982.0	14.3
50°-60°	3149.5	22.7
60°-70°	3896.1	28.1
70°-80°	2421.9	17.5
80°-90°	195.7	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°	13872.3	100.0
0°-180°	13872.3	100.0

Coefficient of Utilization



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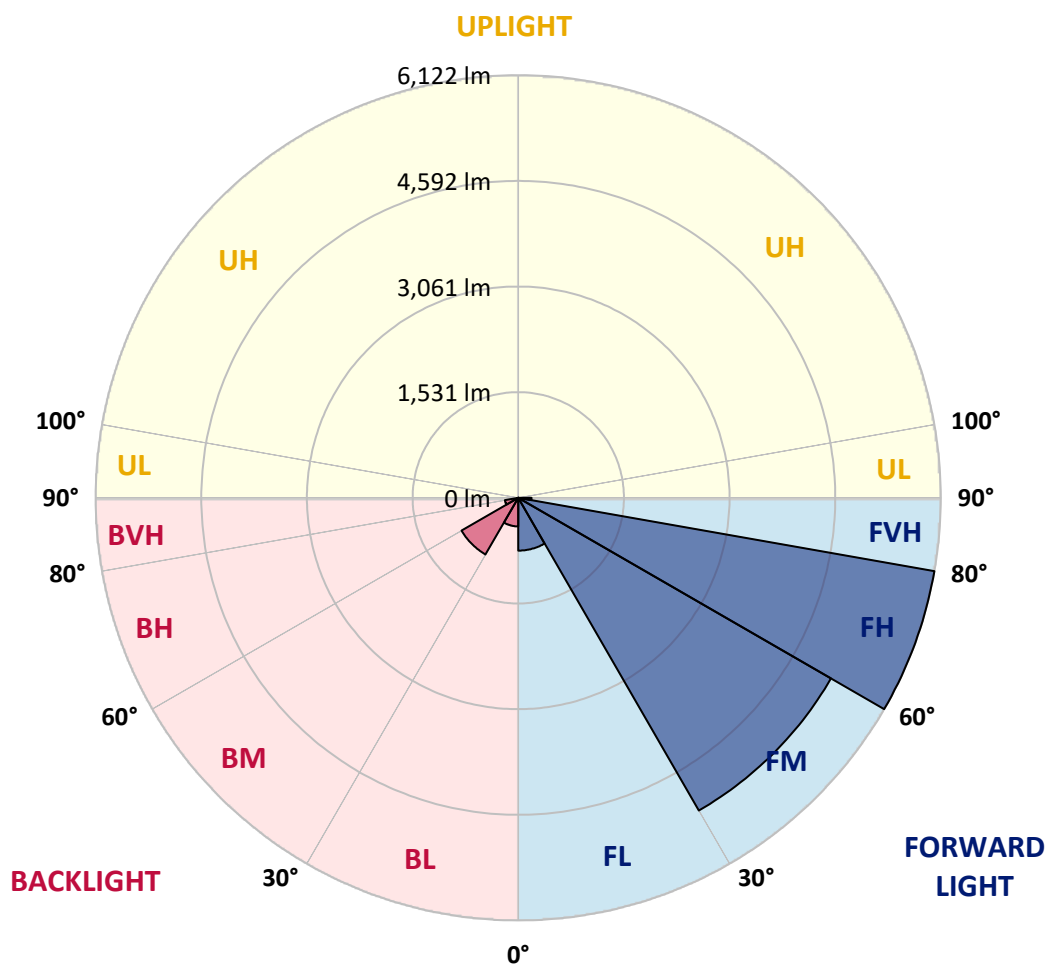
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	764.7	5.5			
FM	(30°-60°)	5231.3	37.7			
FH	(60°-80°)	6122.0	44.1			G3/7500
FVH	(80°-90°)	193.1	1.4			G2/225
BL	(0°-30°)	414.9	3.0	B1/500		
BM	(30°-60°)	947.8	6.8	B1/1000		
BH	(60°-80°)	195.9	1.4	B1/500		G1/500
BVH	(80°-90°)	2.7	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	2010.5	2010.5	2010.5	2010.5	2010.5	2010.5	2010.5	2010.5	2010.5	2010.5	2010.5
2.5°	1921.2	1937.4	1940.4	1945.6	1945.6	1951.6	1961.7	1976.0	1999.4	2011.6	2019.8
5°	1770.7	1782.9	1798.2	1810.4	1833.7	1836.8	1876.4	1915.0	1968.9	2009.5	2038.0
7.5°	1619.2	1633.4	1653.8	1683.3	1713.8	1722.9	1782.9	1848.0	1933.4	2009.5	2057.3
10°	1512.5	1513.5	1531.9	1561.3	1610.1	1621.2	1694.4	1787.0	1893.7	1997.3	2075.6
12.5°	1452.5	1459.6	1467.8	1490.1	1536.9	1544.1	1622.3	1731.0	1854.0	1990.2	2096.9
15°	1452.5	1457.7	1462.7	1473.8	1511.5	1517.6	1586.7	1695.5	1833.7	1993.3	2131.5
17.5°	1467.8	1475.9	1471.8	1485.0	1524.7	1528.8	1589.8	1685.3	1832.7	2012.6	2184.4
20°	1504.4	1510.4	1502.3	1510.4	1550.1	1558.2	1621.2	1704.6	1849.9	2046.1	2250.5
22.5°	1562.3	1565.4	1546.0	1552.2	1592.8	1603.0	1676.2	1759.5	1891.6	2100.0	2338.8
25°	1635.5	1641.6	1612.1	1619.2	1657.8	1670.0	1754.4	1841.8	1957.7	2174.2	2451.7
27.5°	1719.8	1722.9	1697.5	1696.5	1746.3	1763.6	1849.0	1943.5	2046.1	2267.7	2594.1
30°	1816.4	1825.5	1801.1	1797.1	1860.2	1874.3	1958.8	2068.6	2176.3	2408.0	2796.3
32.5°	1892.7	1899.7	1885.6	1895.7	1959.7	1971.0	2091.9	2245.4	2380.6	2607.2	3071.7
35°	2002.4	2006.5	1973.9	1992.3	2065.5	2093.9	2273.9	2493.4	2637.7	2857.3	3431.6
37.5°	2399.8	2399.8	2261.7	2171.2	2241.3	2266.7	2522.8	2805.4	2954.9	3192.7	3885.0
40°	2949.7	2940.6	2738.4	2553.4	2544.3	2594.1	2877.6	3198.8	3364.5	3595.2	4395.2
42.5°	3536.2	3522.0	3246.6	3063.6	3033.2	3050.4	3287.3	3683.6	3852.4	4086.2	4944.1
45°	4056.7	4052.6	3800.6	3554.6	3499.7	3554.6	3798.5	4250.9	4371.8	4617.8	5492.0
47.5°	4492.8	4492.8	4308.8	4148.2	4119.8	4152.3	4490.7	4880.0	4868.9	5183.9	6025.6
50°	4994.9	4990.8	4816.0	4746.9	4776.4	4822.1	5287.7	5542.8	5383.2	5740.0	6502.3
52.5°	5346.6	5371.0	5311.0	5299.9	5450.3	5529.6	6096.8	6191.3	5843.6	6267.6	6859.1
55°	5625.1	5653.6	5722.7	5801.0	6090.7	6194.4	6880.4	6806.2	6228.9	6724.9	7064.4
57.5°	6019.5	5978.8	6085.5	6240.1	6708.6	6833.7	7639.7	7386.7	6538.9	7096.0	7086.7
60°	6498.3	6504.3	6522.7	6717.8	7325.7	7486.3	8387.9	7935.6	6738.1	7323.6	6838.8
62.5°	7073.6	7082.7	7120.4	7420.2	8154.1	8305.6	9184.8	8384.8	6829.7	7259.6	6198.4
65°	7034.0	7072.6	7492.3	8518.0	9413.5	9562.9	10114.8	8699.9	6691.4	6674.1	5046.8
67.5°	6407.8	6470.8	7173.2	9829.2	11312.2	11479.0	11239.0	8761.9	6094.8	5190.1	3292.3
70°	5586.5	5608.9	6453.5	11008.3	13510.8	13679.5	12245.4	8079.9	4624.9	2894.9	1474.9
72.5°	4362.7	4367.7	5358.8	11281.8	14704.2	14713.4	11455.6	5998.2	2487.3	1112.0	512.3
75°	3116.5	3086.0	3589.1	9149.3	12936.5	13040.3	8588.2	2813.6	950.4	525.5	255.1
77.5°	1671.1	1704.6	2030.9	5425.9	8936.8	9113.6	4685.9	811.2	483.8	357.8	168.7
80°	516.4	544.8	832.5	2484.3	5062.0	5168.8	1737.2	360.8	337.4	255.1	110.8
82.5°	162.7	168.7	388.3	1043.9	2101.0	2149.8	503.2	204.3	230.7	168.7	65.1
85°	46.7	47.8	172.8	389.3	519.4	529.6	141.2	79.3	132.1	104.7	33.5
87.5°	5.1	16.3	65.1	65.1	45.7	44.7	15.3	17.3	37.6	13.2	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

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2010.5	2010.5	2010.5	2010.5	2010.5	2010.5	2010.5	2010.5	2010.5	2010.5	2010.5
2.5°	2014.6	2015.7	2002.4	1980.1	1955.7	1935.3	1910.0	1889.6	1875.3	1871.3	1878.4
5°	2028.9	2021.7	1984.1	1916.0	1834.7	1764.5	1686.3	1624.3	1583.6	1566.4	1572.5
7.5°	2050.2	2029.9	1947.5	1813.3	1657.8	1519.7	1379.3	1270.6	1201.5	1166.9	1172.0
10°	2068.6	2027.9	1886.5	1665.0	1427.1	1217.7	1028.7	897.5	824.3	789.8	790.8
12.5°	2085.8	2026.8	1807.3	1489.1	1166.9	910.7	734.9	669.8	649.5	642.4	640.4
15°	2118.3	2029.9	1707.6	1287.9	907.7	688.2	624.1	623.1	627.2	625.1	624.1
17.5°	2163.1	2032.9	1594.8	1074.4	700.4	606.8	603.8	612.9	619.0	616.0	615.0
20°	2221.0	2045.1	1474.9	862.9	601.8	586.5	593.6	601.8	606.8	601.8	600.8
22.5°	2302.3	2066.5	1343.8	693.2	570.2	574.3	580.4	589.6	594.6	587.5	586.5
25°	2401.9	2100.0	1214.6	602.8	555.0	560.1	569.2	579.4	585.5	578.4	577.4
27.5°	2531.0	2153.9	1095.7	582.4	539.8	542.8	556.0	571.2	579.4	570.2	570.2
30°	2718.0	2242.3	993.1	591.6	530.6	523.5	541.8	563.1	572.3	564.2	563.1
32.5°	2966.0	2367.3	930.1	605.8	526.5	501.1	518.4	545.8	561.1	556.0	556.0
35°	3291.3	2557.5	905.7	622.1	523.5	477.8	489.9	519.4	545.8	550.9	550.9
37.5°	3685.7	2821.7	912.8	629.1	514.3	458.4	464.5	489.9	524.5	540.8	544.8
40°	4133.9	3129.7	953.5	622.1	504.2	442.2	443.2	462.5	493.0	517.4	525.5
42.5°	4596.4	3489.5	1028.7	595.6	495.0	427.9	424.9	438.1	458.4	475.7	482.8
45°	5036.5	3859.5	1102.9	559.0	483.8	413.7	406.6	411.6	415.7	422.8	426.9
47.5°	5420.8	4119.8	1081.5	525.5	468.6	397.4	385.2	383.2	371.0	370.0	369.0
50°	5686.1	4176.7	960.5	492.0	446.2	379.1	359.9	347.7	326.3	316.1	317.1
52.5°	5770.4	3952.0	784.7	458.4	409.6	354.8	327.3	308.0	281.6	272.4	271.4
55°	5658.6	3511.9	627.2	417.8	358.9	322.3	291.7	266.3	245.0	233.8	233.8
57.5°	5385.2	2951.8	496.0	370.0	304.9	285.7	255.1	229.7	211.5	200.3	198.2
60°	4931.9	2344.0	392.4	313.0	260.2	246.0	214.4	198.2	181.9	168.7	165.6
62.5°	4243.7	1673.1	308.0	248.0	217.5	201.3	183.0	170.8	151.5	133.1	130.1
65°	3311.7	1023.6	237.9	181.9	174.9	166.7	155.5	144.3	121.0	102.7	99.6
67.5°	2088.8	484.8	169.7	137.2	138.3	134.2	129.0	119.9	102.7	86.4	84.4
70°	919.9	234.8	111.8	104.7	102.7	102.7	106.7	103.7	87.4	72.2	69.1
72.5°	313.0	126.1	83.3	79.3	74.2	73.2	89.5	86.4	70.1	55.9	52.9
75°	163.7	84.4	61.0	56.9	44.7	53.9	71.1	67.1	49.8	36.6	33.5
77.5°	106.7	60.0	41.7	36.6	25.4	35.6	52.9	46.7	29.5	18.3	16.3
80°	67.1	39.7	24.4	17.3	12.2	19.3	28.5	20.3	11.2	4.1	3.1
82.5°	35.6	20.3	9.1	6.1	5.1	6.1	7.1	5.1	2.0	0.0	0.0
85°	14.2	7.1	3.1	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)