

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: P883566

Luminaire Tested: **NAV-SB4A-722-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883566
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4A-722-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2200K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10578 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

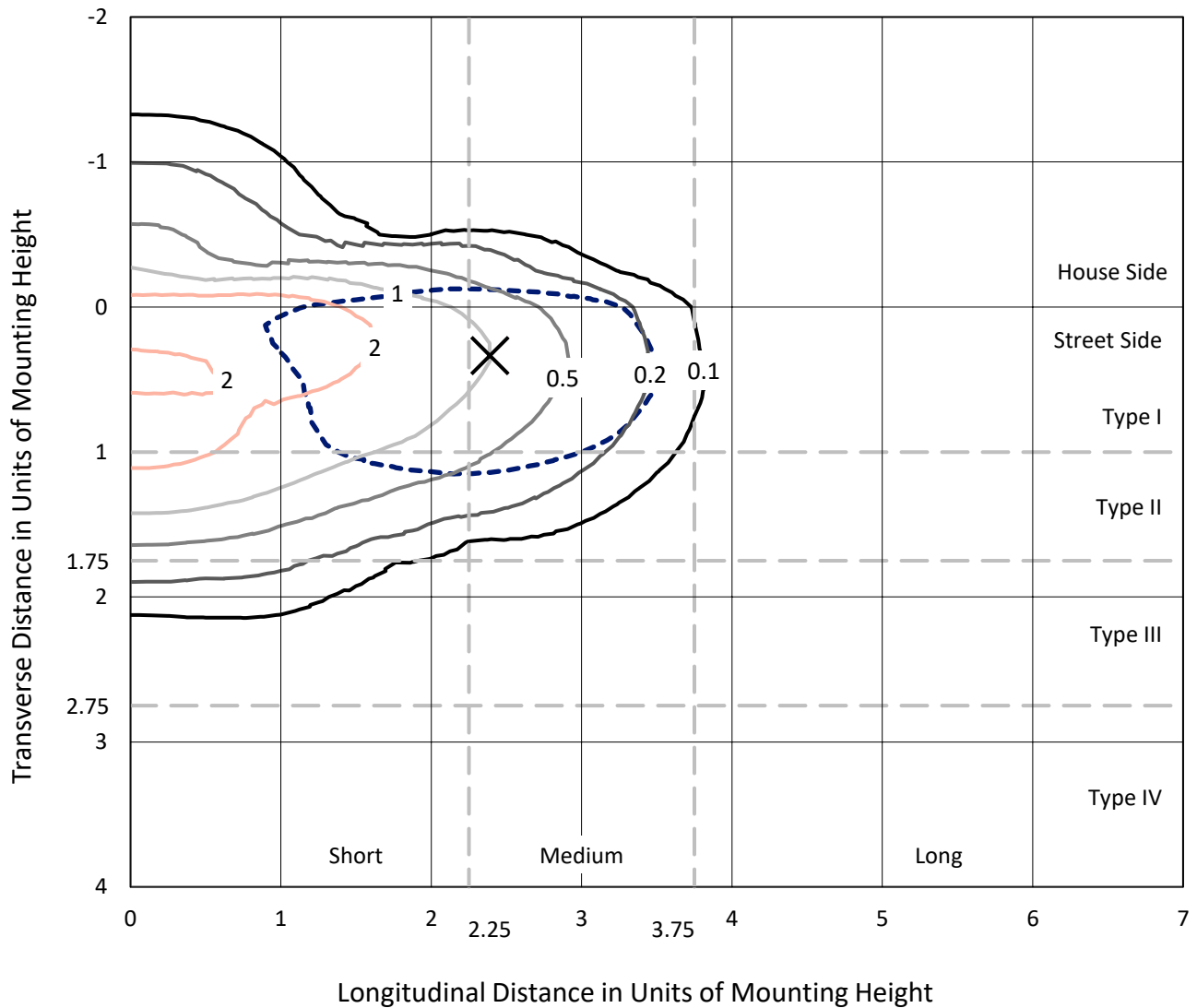
Input Watts (W): 114
Input Voltage (V): 120.0
Input Current (Ain): 0.952
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.206
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

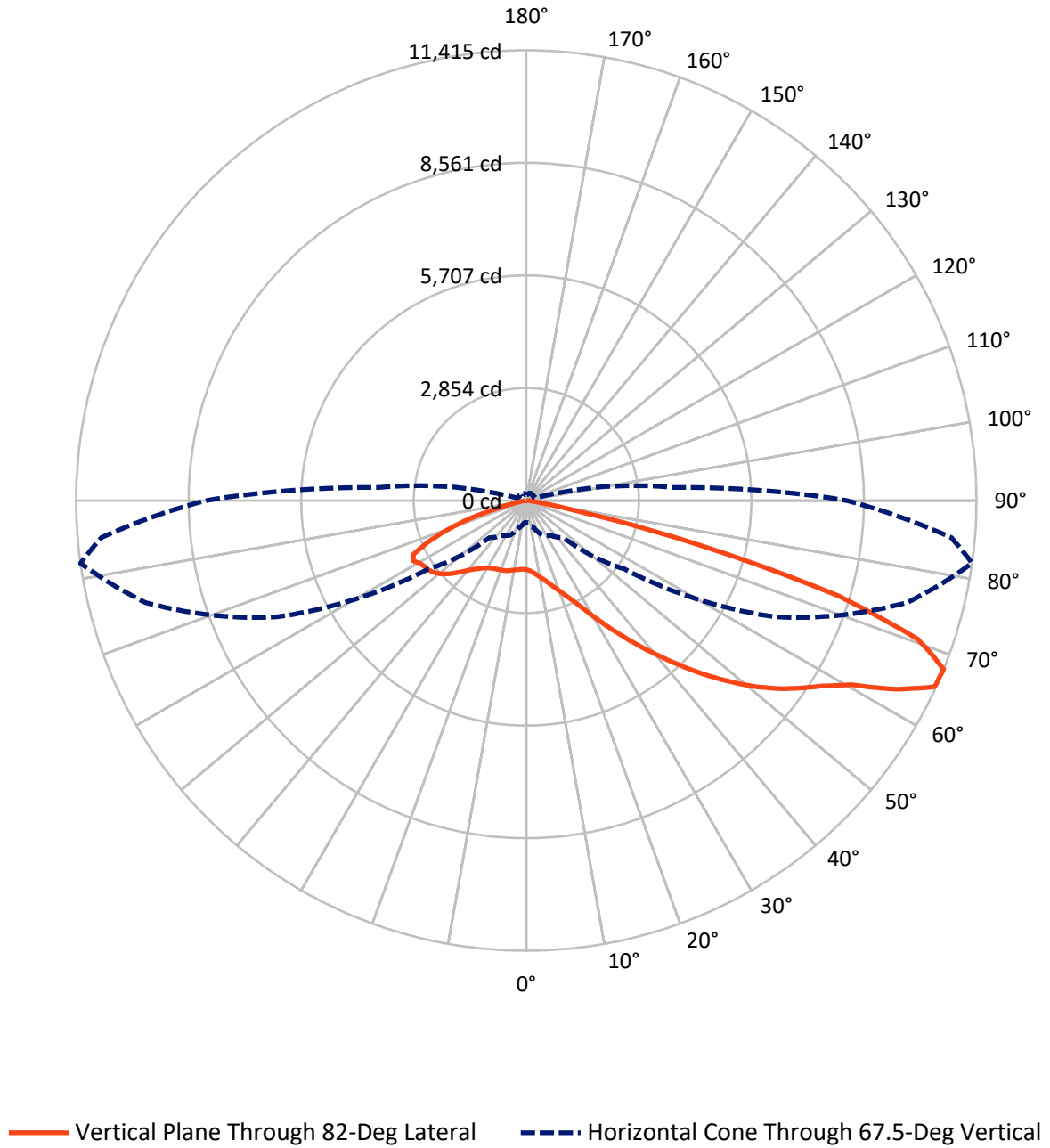
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1916.1	0.0	1916.1
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	8661.9	0.0	8661.9
	% Fixture	81.9	0.0	81.9
Total	Lumens	10578.0	0.0	10578.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.1	1.5
10°-20°	405.7	3.8
20°-30°	649.8	6.1
30°-40°	1149.1	10.9
40°-50°	2013.3	19.0
50°-60°	2685.2	25.4
60°-70°	2499.8	23.6
70°-80°	959.4	9.1
80°-90°	59.6	0.6
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°	10578.0	100.0
0°-180°	10578.0	100.0

Coefficient of Utilization



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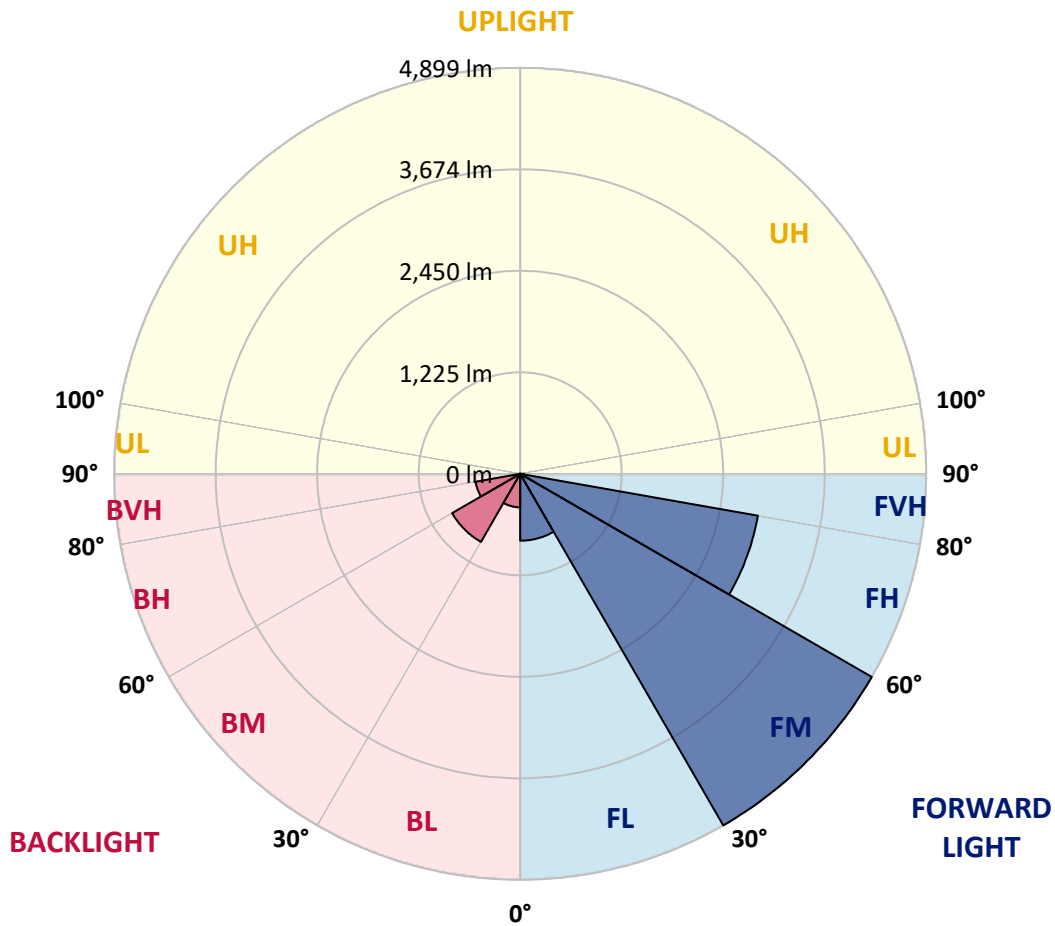
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	807.0	7.6			
FM (30°-60°)	4899.3	46.3			
FH (60°-80°)	2912.3	27.5			G2/5000
FVH (80°-90°)	43.3	0.4			G1/100
BL (0°-30°)	404.7	3.8	B1/500		
BM (30°-60°)	948.3	9.0	B1/1000		
BH (60°-80°)	546.9	5.2	B2/1000		G2/1000
BVH (80°-90°)	16.3	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1752.4	1752.4	1752.4	1752.4	1752.4	1752.4	1752.4	1752.4	1752.4	1752.4	1752.4
2.5°	1852.2	1862.8	1856.8	1853.7	1848.4	1840.8	1834.7	1815.6	1795.8	1782.9	1778.3
5°	1889.5	1900.2	1899.4	1902.4	1906.3	1908.5	1907.0	1885.7	1857.5	1835.4	1822.5
7.5°	1857.5	1869.7	1879.6	1894.8	1921.5	1949.7	1963.4	1958.8	1929.9	1899.4	1883.4
10°	1766.9	1779.8	1803.4	1839.2	1895.6	1956.5	2007.5	2031.2	2012.9	1979.4	1957.3
12.5°	1600.9	1613.8	1660.3	1737.9	1832.4	1938.2	2035.7	2098.9	2103.5	2070.0	2044.1
15°	1414.3	1427.2	1476.7	1574.2	1718.1	1888.0	2051.0	2170.5	2210.9	2182.0	2150.7
17.5°	1298.5	1309.9	1347.3	1425.7	1575.7	1787.4	2045.6	2246.7	2338.8	2316.0	2278.7
20°	1263.5	1273.4	1290.9	1345.7	1470.6	1683.1	2010.6	2318.3	2476.7	2463.7	2421.9
22.5°	1300.8	1309.9	1315.3	1339.6	1418.1	1614.6	1966.4	2391.4	2636.6	2638.1	2587.1
25°	1386.9	1396.0	1389.9	1405.1	1439.4	1593.2	1949.7	2477.4	2837.7	2854.4	2796.6
27.5°	1528.5	1529.3	1514.8	1514.0	1519.4	1625.2	1967.2	2569.6	3091.3	3122.5	3050.9
30°	1812.6	1801.2	1745.6	1685.4	1658.0	1721.2	2015.9	2678.5	3390.6	3446.2	3356.3
32.5°	2250.5	2233.7	2131.7	1987.7	1843.0	1875.8	2103.5	2802.6	3716.6	3817.1	3707.4
35°	2725.7	2721.2	2614.5	2400.5	2147.7	2095.9	2245.9	2965.6	4072.2	4232.2	4101.9
37.5°	3167.4	3165.2	3104.2	2852.2	2544.5	2402.8	2474.4	3178.9	4453.0	4684.5	4530.7
40°	3571.1	3577.9	3517.0	3291.6	2981.6	2796.6	2785.1	3442.4	4876.5	5177.3	4994.5
42.5°	3919.9	3927.5	3865.8	3699.0	3413.4	3232.2	3166.7	3765.3	5290.0	5706.6	5490.3
45°	4156.8	4204.0	4194.8	4061.6	3856.7	3668.6	3625.2	4170.5	5761.4	6267.9	6014.3
47.5°	4223.8	4267.2	4335.7	4354.0	4229.1	4044.0	4095.8	4658.6	6238.2	6829.9	6541.3
50°	4058.5	4098.9	4241.3	4430.9	4517.7	4460.6	4553.5	5181.9	6726.4	7390.5	7058.4
52.5°	3732.5	3773.7	3953.4	4253.5	4607.6	4787.3	5012.8	5697.4	7199.3	7921.3	7548.1
55°	3261.1	3304.5	3535.3	3875.0	4436.3	4922.2	5395.9	6212.3	7632.6	8398.8	7989.8
57.5°	2619.9	2651.9	2891.8	3367.0	4005.2	4788.1	5678.4	6774.3	8040.9	8867.9	8427.7
60°	1707.5	1735.7	2014.4	2544.5	3290.8	4340.3	5734.8	7401.1	8583.1	9478.0	9018.0
62.5°	1135.5	1154.6	1319.8	1709.0	2317.5	3480.5	5405.0	7901.5	9378.2	10539.6	10030.1
65°	779.1	798.1	963.4	1234.5	1497.3	2302.3	4456.8	7835.2	10098.7	11382.7	10780.3
67.5°	556.0	572.0	712.1	968.0	1083.7	1337.4	3021.2	6988.3	9995.1	11414.7	10820.7
70°	398.3	407.5	523.2	754.0	861.4	803.5	1680.1	5344.8	8751.4	10540.4	9996.6
72.5°	278.7	281.8	363.3	574.2	693.8	586.4	799.7	3563.5	6619.0	8273.1	7749.9
75°	188.9	192.7	244.5	421.2	556.7	447.8	423.4	1910.8	3885.6	4579.4	4105.0
77.5°	115.8	117.3	157.6	287.9	416.6	341.2	272.6	809.6	1503.4	1476.0	1258.1
80°	65.5	65.5	100.5	179.0	284.1	220.1	191.2	344.2	476.0	418.1	368.6
82.5°	36.6	37.3	73.1	111.2	188.1	130.2	105.1	159.2	205.6	182.0	158.4
85°	15.2	16.8	44.9	52.5	89.9	64.7	42.6	67.0	76.2	67.8	49.5
87.5°	1.5	2.3	13.7	9.9	10.7	12.9	6.1	12.9	10.7	10.7	7.6
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°	1752.4	1752.4	1752.4	1752.4	1752.4	1752.4	1752.4	1752.4	1752.4	1752.4	1752.4
2.5°	1763.8	1752.4	1723.5	1690.0	1645.8	1624.5	1595.5	1575.7	1559.0	1560.5	1545.3
5°	1798.1	1769.2	1704.4	1623.7	1523.2	1451.6	1375.4	1322.9	1280.2	1271.1	1250.5
7.5°	1845.3	1799.6	1686.2	1540.7	1370.9	1242.2	1127.2	1053.3	1000.7	984.0	967.2
10°	1906.3	1840.0	1662.5	1436.4	1191.9	1028.1	904.8	846.9	811.1	798.9	789.8
12.5°	1977.1	1886.5	1631.3	1309.2	1007.6	849.9	771.5	742.5	731.1	727.3	725.0
15°	2066.2	1944.3	1584.1	1158.4	851.5	741.0	707.5	703.7	705.2	703.7	702.9
17.5°	2172.1	2007.5	1507.2	1003.0	746.4	685.4	673.2	676.3	680.1	679.3	677.8
20°	2287.8	2070.0	1408.9	865.2	674.8	645.8	639.0	642.0	645.1	643.5	642.8
22.5°	2419.6	2137.0	1300.0	757.8	626.8	609.3	601.7	602.4	602.4	599.4	597.8
25°	2577.2	2210.9	1185.8	681.6	590.2	576.5	567.4	564.3	559.8	550.6	549.1
27.5°	2765.3	2289.3	1076.1	628.3	561.3	548.3	537.7	530.1	518.6	503.4	501.9
30°	2977.1	2384.5	983.2	594.8	538.4	525.5	513.3	501.9	485.1	466.1	464.6
32.5°	3226.1	2486.6	915.4	572.7	517.9	504.2	489.7	476.0	457.7	438.7	439.4
35°	3523.1	2610.0	875.8	557.5	501.9	483.6	467.6	452.4	438.7	421.9	420.4
37.5°	3845.3	2741.0	863.6	549.9	491.2	463.0	444.8	434.1	432.6	422.7	421.9
40°	4197.9	2896.3	872.8	545.3	479.8	443.2	423.4	421.2	425.0	407.5	408.2
42.5°	4571.1	3080.6	888.0	540.0	463.8	423.4	404.4	404.4	401.4	377.0	377.0
45°	4974.7	3293.1	903.2	527.0	444.8	403.6	389.2	383.8	370.9	347.3	346.5
47.5°	5381.4	3509.4	914.7	503.4	421.9	386.9	373.9	361.8	342.7	321.4	320.6
50°	5767.5	3703.6	902.5	468.4	396.0	370.9	357.2	340.4	319.9	305.4	303.1
52.5°	6112.5	3871.9	850.7	427.3	368.6	354.1	342.0	324.4	307.7	292.5	290.9
55°	6412.6	4008.2	759.3	388.4	344.2	339.7	327.5	305.4	282.5	269.6	268.1
57.5°	6700.5	4111.8	645.1	356.4	322.2	323.7	305.4	285.6	264.3	250.6	249.0
60°	7083.5	4250.4	529.3	326.7	298.5	303.1	283.3	268.8	242.2	224.7	222.4
62.5°	7695.9	4466.0	420.4	290.2	271.1	272.6	264.3	246.8	214.8	194.2	192.7
65°	8181.8	4386.8	331.3	250.6	239.9	242.2	242.2	223.1	188.9	165.3	163.0
67.5°	8126.9	3756.2	264.3	211.7	210.2	211.7	217.1	201.1	167.5	148.5	145.5
70°	7486.4	2987.7	211.7	175.9	182.8	179.0	194.2	183.5	150.8	131.8	129.5
72.5°	6108.7	2152.3	161.5	145.5	140.1	146.2	175.2	165.3	125.7	104.3	102.1
75°	3569.6	1148.5	120.3	115.0	101.3	121.9	155.4	140.9	96.0	76.9	74.6
77.5°	1162.2	400.6	88.3	84.5	75.4	98.2	132.5	118.8	78.4	60.9	58.6
80°	311.5	121.1	60.2	55.6	48.7	73.1	105.1	94.4	56.4	39.6	38.8
82.5°	124.9	51.0	35.0	31.2	26.7	50.3	83.0	76.2	41.9	25.1	25.1
85°	40.4	16.8	12.9	9.9	12.2	31.2	49.5	51.8	29.7	12.9	9.9
87.5°	5.3	2.3	2.3	3.0	2.3	5.3	15.2	14.5	8.4	1.5	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)