

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: P883141

Luminaire Tested: **NAV-SB3B-830-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883141
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-830-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14607 lumens
Efficiency: N/A
Efficacy: 133.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

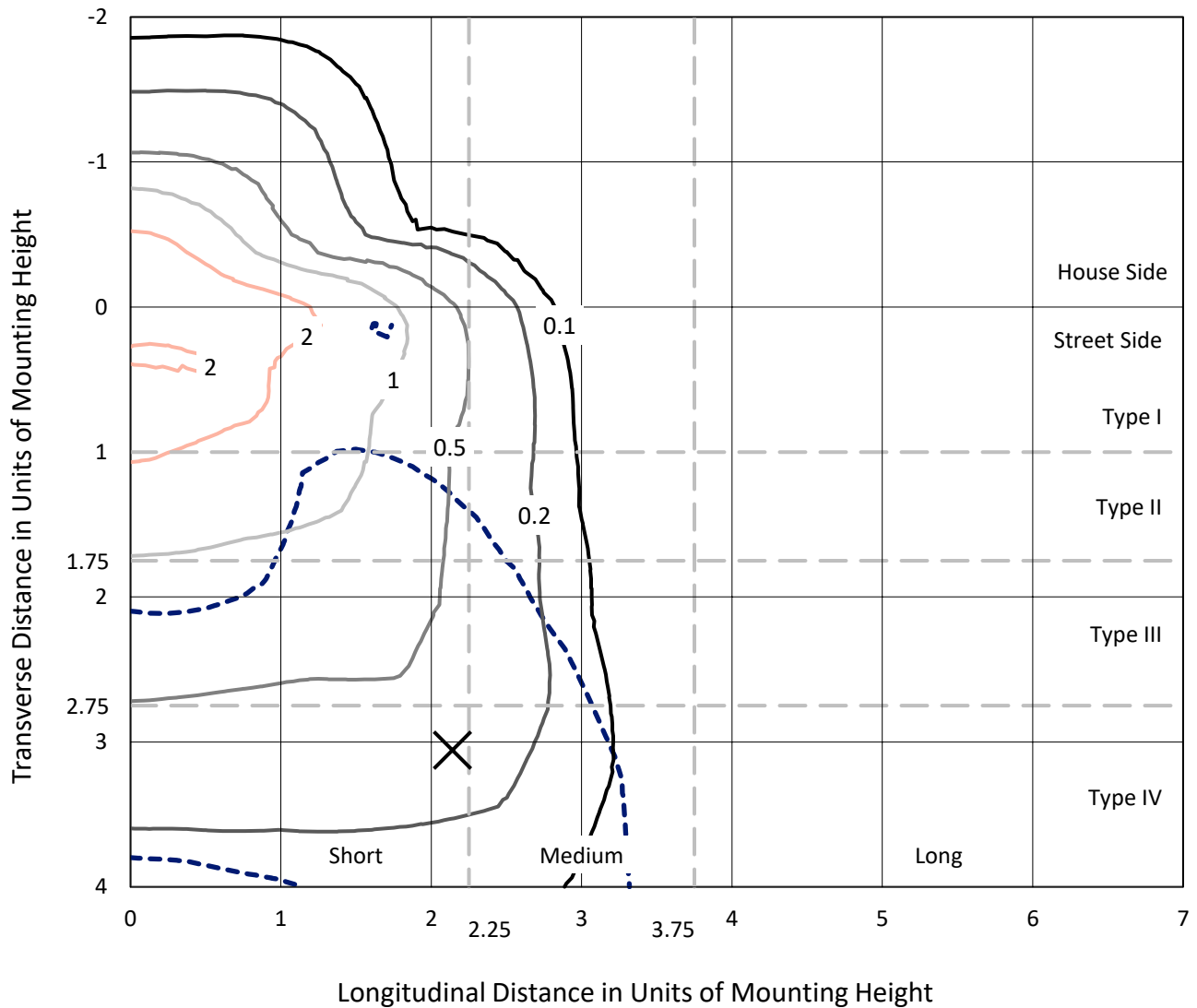
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

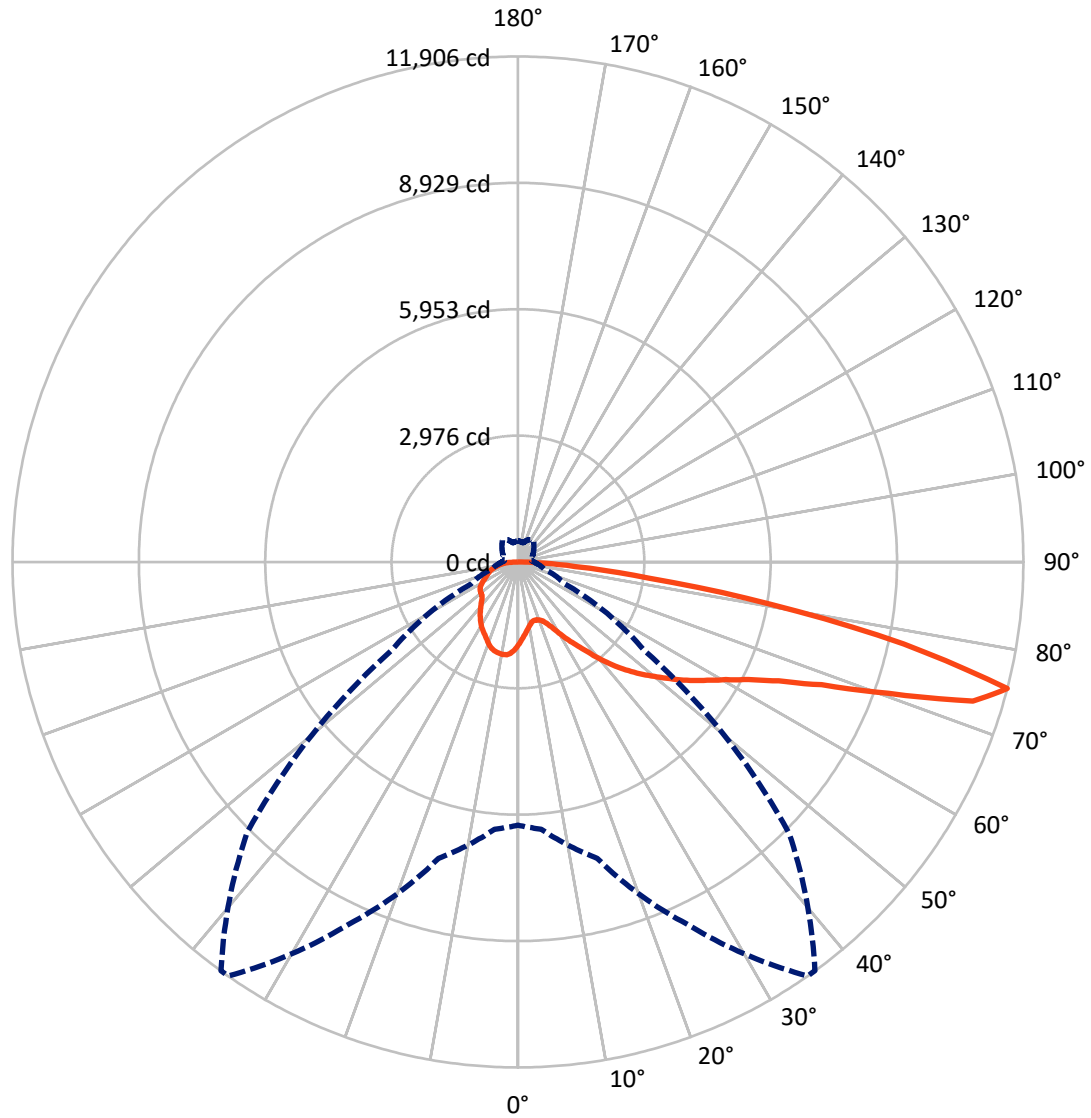
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type IV - Short - N/A

REPORT NUMBER: P883141
CATALOG NUMBER: NAV-SB3B-830-U-T4FT

Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3476.1	0.0	3476.1
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	11130.9	0.0	11130.9
	% Fixture	76.2	0.0	76.2
Total	Lumens	14607.0	0.0	14607.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.3	1.3
10°-20°	531.6	3.6
20°-30°	892.7	6.1
30°-40°	1387.3	9.5
40°-50°	2059.2	14.1
50°-60°	2842.8	19.5
60°-70°	3449.0	23.6
70°-80°	2850.3	19.5
80°-90°	410.0	2.8
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°	14607.0	100.0
0°-180°	14607.0	100.0



REPORT NUMBER: P883141

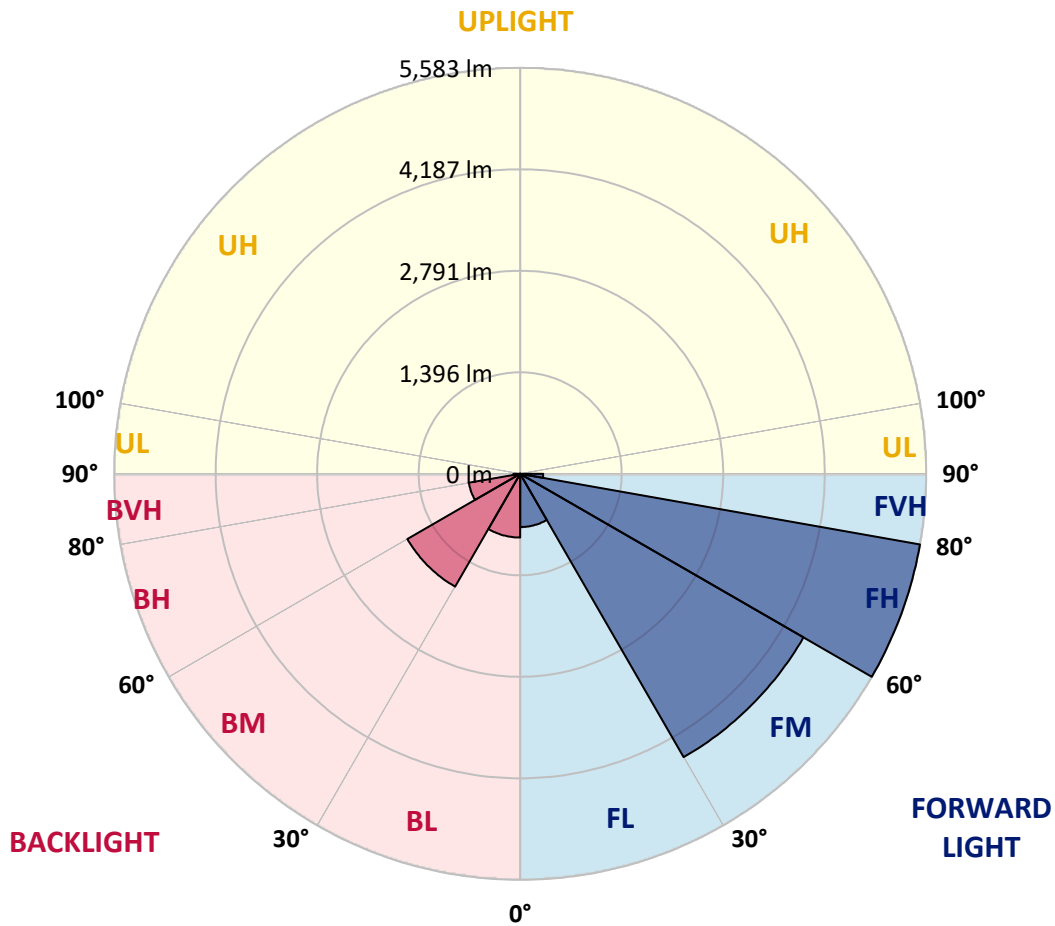
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	732.5	5.0			
FM (30°-60°)	4498.2	30.8			
FH (60°-80°)	5582.6	38.2			G3/7500
FVH (80°-90°)	317.6	2.2			G3/500
BL (0°-30°)	876.0	6.0	B2/1000		
BM (30°-60°)	1791.1	12.3	B2/2500		
BH (60°-80°)	716.7	4.9	B2/1000		G2/1000
BVH (80°-90°)	92.3	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short



REPORT NUMBER: P883141
 CATALOG NUMBER: NAV-SB3B-830-U-T4FT

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	1946.5	1946.5	1946.5	1946.5	1946.5	1946.5	1946.5	1946.5	1946.5	1946.5	1946.5
2.5°	1794.9	1805.9	1810.7	1808.3	1820.1	1818.6	1835.1	1855.7	1884.1	1911.7	1952.0
5°	1656.7	1668.5	1678.8	1688.3	1711.2	1718.3	1744.3	1783.8	1835.9	1888.8	1955.2
7.5°	1528.0	1538.2	1554.0	1571.4	1610.1	1617.2	1660.6	1722.2	1794.9	1872.3	1963.9
10°	1422.9	1433.2	1449.8	1469.5	1517.7	1526.4	1581.7	1663.8	1758.5	1856.5	1973.3
12.5°	1377.9	1381.1	1390.6	1410.3	1452.2	1457.7	1518.5	1612.5	1723.0	1844.6	1987.5
15°	1375.6	1381.9	1382.7	1392.9	1427.7	1430.1	1486.1	1579.3	1700.9	1842.2	2008.9
17.5°	1399.3	1404.0	1396.9	1403.2	1432.4	1436.4	1480.6	1563.5	1693.8	1852.5	2045.2
20°	1462.4	1466.4	1445.1	1436.4	1457.7	1460.8	1504.3	1573.8	1700.9	1873.8	2094.9
22.5°	1596.7	1599.0	1546.9	1511.4	1513.0	1514.5	1552.4	1615.6	1728.5	1912.5	2158.1
25°	1805.9	1804.3	1721.4	1652.7	1613.3	1604.6	1629.8	1683.5	1775.1	1963.9	2239.4
27.5°	2050.7	2038.9	1956.0	1853.3	1767.2	1754.6	1749.1	1772.0	1841.5	2031.8	2338.9
30°	2327.1	2316.0	2226.8	2092.6	1973.3	1952.8	1900.7	1888.8	1940.2	2124.2	2477.1
32.5°	2630.3	2623.2	2516.6	2353.9	2194.4	2170.7	2083.1	2051.5	2091.8	2263.9	2669.8
35°	2884.6	2878.3	2789.8	2622.4	2427.4	2398.2	2308.9	2273.4	2293.9	2443.2	2921.7
37.5°	3114.4	3111.2	3035.4	2903.5	2702.2	2666.6	2566.4	2554.5	2550.6	2679.3	3227.3
40°	3327.6	3319.7	3240.7	3171.2	3022.0	2989.6	2901.2	2890.9	2860.9	2969.9	3573.2
42.5°	3563.7	3543.1	3428.7	3396.3	3356.0	3329.2	3276.2	3277.8	3211.5	3297.6	3939.6
45°	3756.4	3744.5	3626.9	3607.9	3651.3	3640.3	3686.1	3697.9	3569.2	3641.1	4320.2
47.5°	3963.2	3952.2	3852.7	3839.3	3956.9	3960.1	4122.0	4125.9	3918.2	3998.0	4701.6
50°	4218.3	4202.5	4103.8	4120.4	4252.3	4264.1	4560.2	4533.4	4239.6	4360.4	5079.8
52.5°	4386.5	4396.0	4374.6	4401.5	4581.5	4592.6	4991.4	4922.7	4557.8	4718.1	5450.9
55°	4510.5	4529.4	4595.7	4657.3	4929.0	4940.0	5398.0	5293.0	4821.6	5049.8	5800.0
57.5°	4670.0	4643.1	4767.1	4887.1	5259.1	5288.3	5793.6	5649.9	5055.3	5335.6	6039.2
60°	4899.0	4880.0	4976.4	5154.0	5628.6	5675.2	6212.2	5971.3	5226.7	5562.3	6085.8
62.5°	5363.3	5315.9	5330.9	5488.1	6094.5	6156.1	6684.4	6251.6	5312.0	5650.7	5836.3
65°	6057.4	5976.1	5900.2	6009.2	6750.7	6811.5	7217.4	6472.0	5280.4	5479.4	5173.8
67.5°	6931.5	6851.0	6757.8	6860.5	7717.2	7765.4	7875.2	6595.9	5031.6	4819.2	4002.7
70°	7652.5	7622.5	7733.8	8156.3	9261.0	9262.6	8718.5	6493.3	4350.2	3416.8	2316.0
72.5°	7556.9	7538.8	8125.5	9431.6	11206.7	11164.8	9516.8	5716.3	2930.4	1541.4	867.8
75°	6199.5	6317.2	7226.1	9408.7	11905.5	11900.0	9028.0	3634.0	1212.1	638.8	448.5
77.5°	3324.4	3510.8	4691.3	6946.5	9294.2	9433.9	6347.2	1271.3	520.4	409.0	310.3
80°	1084.2	1246.9	1869.9	3536.8	6039.2	6013.2	2720.3	499.1	356.1	289.8	214.8
82.5°	460.4	479.3	835.4	1670.1	3099.4	3051.2	866.2	286.6	250.3	198.2	132.7
85°	180.0	201.4	368.8	772.3	1342.4	1313.2	312.7	142.1	160.3	129.5	79.0
87.5°	59.2	71.9	131.9	264.5	417.7	402.7	76.6	49.0	69.5	59.2	28.4
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: P883141
 CATALOG NUMBER: NAV-SB3B-830-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1946.5	1946.5	1946.5	1946.5	1946.5	1946.5	1946.5	1946.5	1946.5	1946.5	1946.5
2.5°	1963.1	1975.7	1990.7	2012.8	2031.8	2047.6	2064.1	2074.4	2078.4	2090.2	2089.4
5°	1977.3	2004.9	2042.0	2078.4	2113.9	2135.2	2154.2	2163.6	2172.3	2178.6	2180.2
7.5°	2001.0	2036.5	2094.9	2142.3	2172.3	2189.7	2202.3	2199.2	2202.3	2203.9	2206.3
10°	2021.5	2071.2	2140.7	2185.7	2208.6	2209.4	2206.3	2195.2	2189.7	2190.5	2192.1
12.5°	2046.0	2101.3	2176.3	2214.2	2220.5	2203.1	2189.7	2170.7	2163.6	2160.5	2158.9
15°	2079.1	2142.3	2215.0	2229.2	2213.4	2191.3	2168.4	2137.6	2121.8	2109.1	2113.1
17.5°	2119.4	2188.9	2245.0	2234.7	2200.7	2164.4	2127.3	2080.7	2048.3	2034.9	2035.7
20°	2175.5	2237.9	2267.9	2222.9	2171.5	2116.3	2053.1	1996.2	1966.2	1952.8	1951.2
22.5°	2243.4	2303.4	2290.0	2202.3	2129.7	2041.2	1962.3	1920.4	1905.4	1895.9	1897.5
25°	2324.7	2376.0	2305.8	2172.3	2061.0	1941.7	1880.9	1867.5	1860.4	1853.3	1853.3
27.5°	2430.5	2458.2	2317.6	2128.1	1953.6	1835.9	1813.8	1816.2	1813.8	1802.0	1804.3
30°	2570.3	2564.8	2328.7	2056.2	1830.4	1740.4	1742.0	1752.2	1753.8	1745.9	1749.9
32.5°	2754.3	2698.2	2334.2	1963.1	1712.7	1656.7	1658.3	1669.3	1677.2	1663.8	1670.1
35°	2977.0	2853.8	2325.5	1846.2	1621.9	1576.9	1565.1	1568.2	1570.6	1558.0	1566.7
37.5°	3236.8	3028.3	2286.8	1716.7	1546.9	1498.8	1473.5	1452.2	1439.5	1427.7	1435.6
40°	3521.8	3218.6	2215.8	1590.4	1463.2	1415.8	1377.9	1337.7	1295.0	1279.2	1286.3
42.5°	3820.3	3414.4	2129.7	1469.5	1366.9	1328.2	1287.9	1229.5	1165.5	1133.1	1137.1
45°	4129.9	3615.0	2045.2	1350.3	1268.2	1251.6	1205.0	1134.7	1065.2	1024.2	1021.0
47.5°	4433.1	3804.5	1921.2	1230.3	1175.8	1193.9	1157.6	1092.9	1015.5	950.7	943.6
50°	4722.9	3982.2	1718.3	1108.7	1100.8	1176.6	1141.8	1048.7	960.2	877.3	870.2
52.5°	5010.3	4125.9	1458.5	998.1	1060.5	1171.8	1121.3	1018.6	910.5	823.6	814.1
55°	5254.3	4200.1	1208.2	903.4	1002.1	1131.6	1096.8	983.1	840.2	747.8	739.9
57.5°	5393.3	4140.1	999.7	810.2	921.5	1065.2	1055.0	907.3	756.5	685.4	675.9
60°	5333.3	3896.9	829.1	728.8	844.9	993.4	982.3	832.3	692.5	625.4	615.9
62.5°	5002.4	3433.4	694.1	657.8	775.4	919.9	909.7	774.6	643.6	578.8	568.5
65°	4336.0	2793.0	589.1	598.6	705.2	831.5	846.5	726.5	604.9	541.7	531.4
67.5°	3307.0	2023.1	507.0	547.2	636.5	744.6	788.1	691.7	572.5	512.5	503.0
70°	1884.9	1148.9	437.5	497.5	575.7	664.1	743.1	664.1	537.8	488.0	481.7
72.5°	714.6	527.5	378.2	447.7	517.2	596.2	693.3	620.7	497.5	460.4	454.0
75°	381.4	321.4	318.2	389.3	450.1	529.9	630.9	578.0	467.5	486.4	502.2
77.5°	259.8	227.4	266.1	333.2	376.7	456.4	564.6	513.3	405.1	403.5	371.9
80°	180.0	161.1	216.4	268.5	291.4	383.8	492.7	440.6	330.1	308.0	294.5
82.5°	108.2	105.0	161.9	200.6	206.1	296.1	408.2	369.6	270.1	235.3	236.9
85°	59.2	62.4	103.4	117.7	120.0	206.9	319.8	285.9	207.7	174.5	176.1
87.5°	16.6	21.3	37.9	46.6	57.6	107.4	190.3	169.8	104.2	72.6	72.6
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)