

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: P883126

Luminaire Tested: **NAV-SB3B-827-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883126
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-SB3B-827-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 450mA 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: 10021 lumens
Efficiency: N/A
Efficacy: 91.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

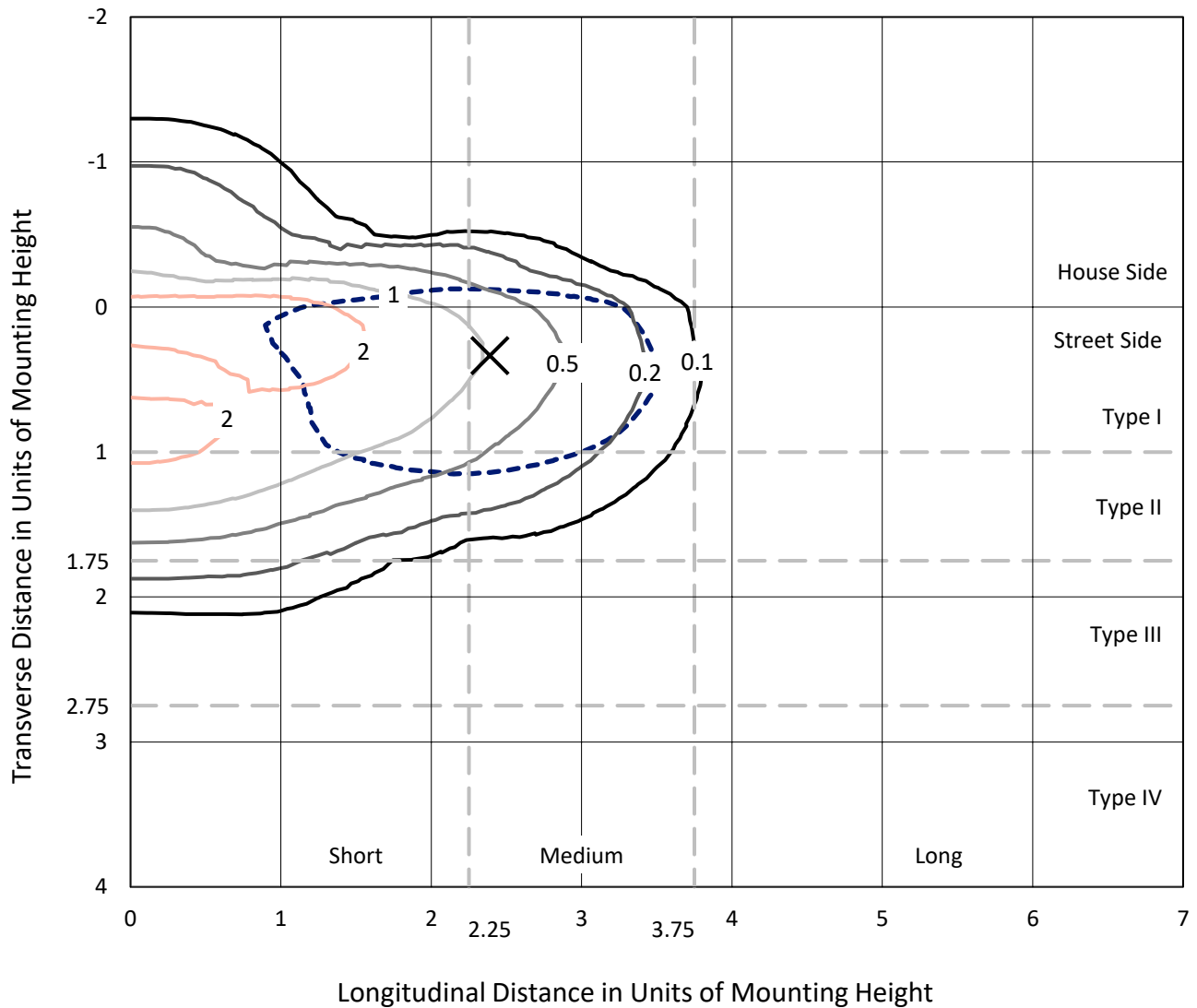
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P883126
 CATALOG NUMBER: NAV-SB3B-827-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

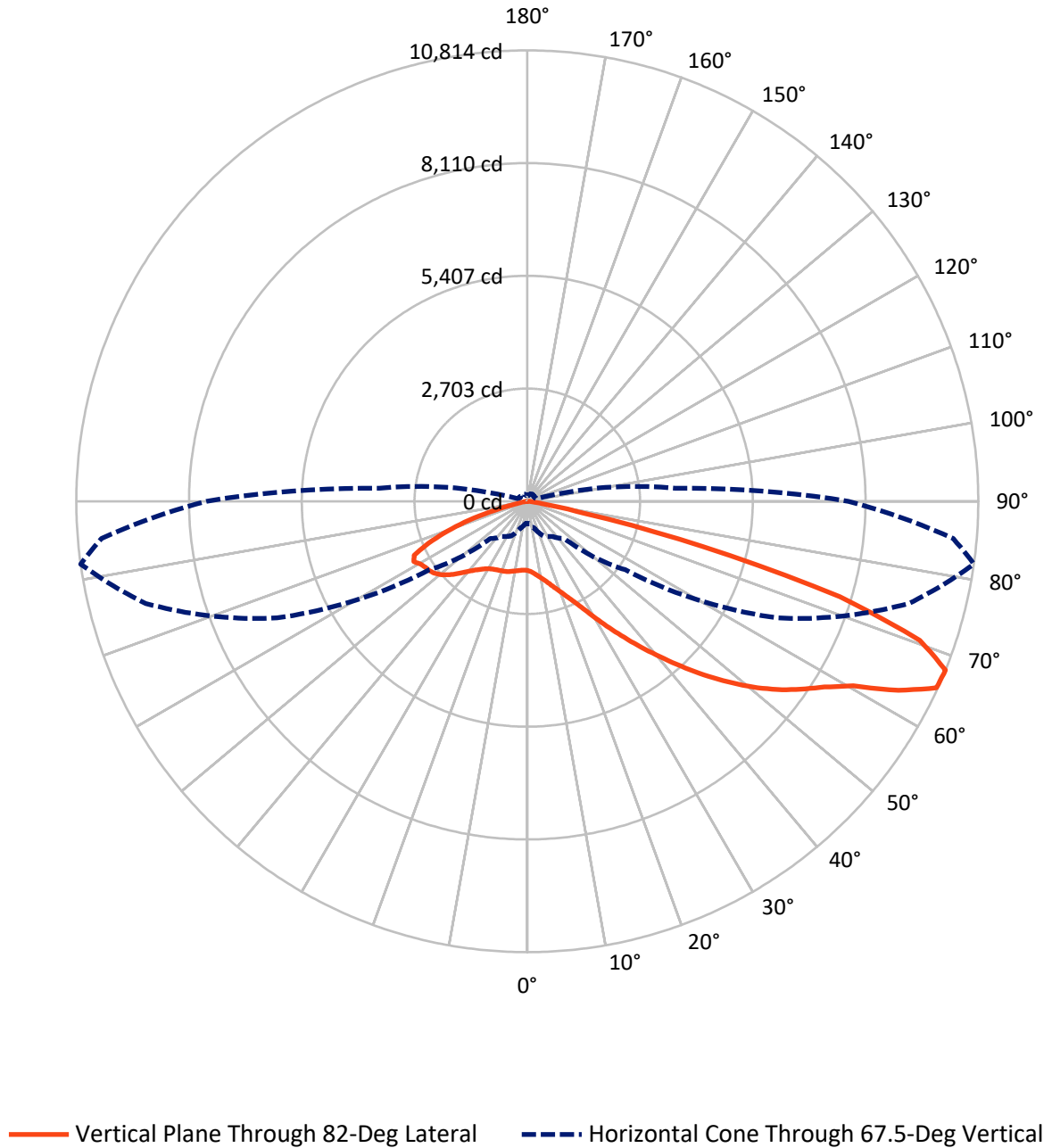
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type II - Medium - N/A

REPORT NUMBER: P883126
CATALOG NUMBER: NAV-SB3B-827-U-T2-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P883126

CATALOG NUMBER: NAV-SB3B-827-U-T2-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1815.2	0.0	1815.2
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	8205.8	0.0	8205.8
	% Fixture	81.9	0.0	81.9
Total	Lumens	10021.0	0.0	10021.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.9	1.5
10°-20°	384.3	3.8
20°-30°	615.6	6.1
30°-40°	1088.6	10.9
40°-50°	1907.3	19.0
50°-60°	2543.8	25.4
60°-70°	2368.1	23.6
70°-80°	908.9	9.1
80°-90°	56.5	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°	10021.0	100.0
0°-180°	10021.0	100.0

Coefficient of Utilization



REPORT NUMBER: P883126

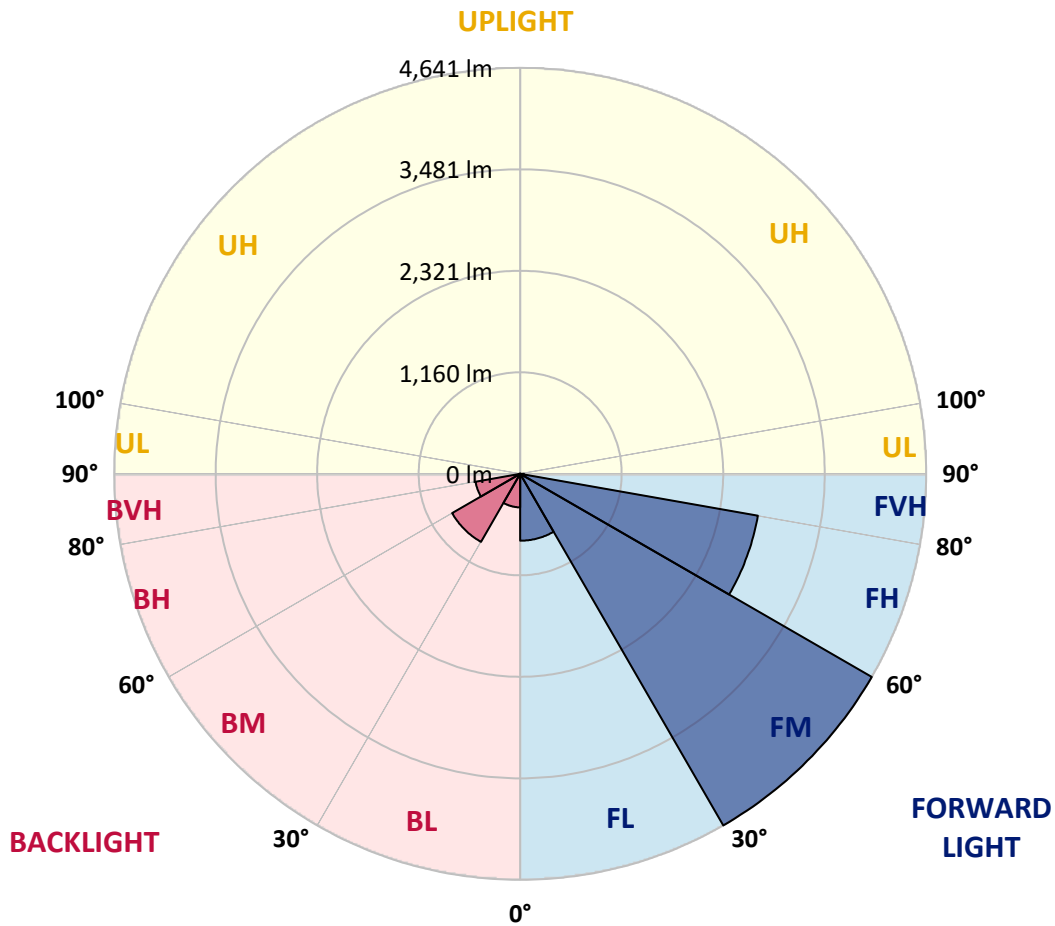
CATALOG NUMBER: NAV-SB3B-827-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	764.5	7.6			
FM (30°-60°)	4641.3	46.3			
FH (60°-80°)	2758.9	27.5			G2/5000
FVH (80°-90°)	41.0	0.4			G1/100
BL (0°-30°)	383.4	3.8	B1/500		
BM (30°-60°)	898.3	9.0	B1/1000		
BH (60°-80°)	518.1	5.2	B2/1000		G2/1000
BVH (80°-90°)	15.4	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



REPORT NUMBER: P883126

CATALOG NUMBER: NAV-SB3B-827-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1660.1	1660.1	1660.1	1660.1	1660.1	1660.1	1660.1	1660.1	1660.1	1660.1	1660.1
2.5°	1754.7	1764.8	1759.0	1756.1	1751.0	1743.8	1738.1	1720.0	1701.3	1689.0	1684.7
5°	1790.0	1800.1	1799.4	1802.3	1805.9	1808.0	1806.6	1786.4	1759.7	1738.8	1726.5
7.5°	1759.7	1771.2	1780.6	1795.1	1820.3	1847.0	1860.0	1855.7	1828.2	1799.4	1784.2
10°	1673.8	1686.1	1708.5	1742.4	1795.8	1853.5	1901.8	1924.2	1906.9	1875.1	1854.2
12.5°	1516.6	1528.8	1572.8	1646.4	1735.9	1836.2	1928.5	1988.4	1992.7	1961.0	1936.5
15°	1339.8	1352.1	1399.0	1491.3	1627.7	1788.6	1943.0	2056.2	2094.5	2067.1	2037.5
17.5°	1230.1	1241.0	1276.3	1350.6	1492.8	1693.3	1937.9	2128.4	2215.7	2194.0	2158.7
20°	1196.9	1206.3	1222.9	1274.9	1393.2	1594.5	1904.7	2196.2	2346.3	2334.0	2294.3
22.5°	1232.3	1241.0	1246.0	1269.1	1343.4	1529.6	1862.9	2265.5	2497.8	2499.2	2450.9
25°	1313.8	1322.5	1316.7	1331.1	1363.6	1509.3	1847.0	2347.0	2688.3	2704.1	2649.3
27.5°	1448.0	1448.7	1435.0	1434.3	1439.4	1539.7	1863.6	2434.3	2928.5	2958.1	2890.3
30°	1717.1	1706.3	1653.6	1596.6	1570.7	1630.6	1909.8	2537.5	3212.1	3264.7	3179.6
32.5°	2132.0	2116.1	2019.4	1883.1	1746.0	1777.0	1992.7	2655.1	3520.9	3616.1	3512.2
35°	2582.2	2577.9	2476.9	2274.1	2034.6	1985.5	2127.7	2809.5	3857.8	4009.3	3885.9
37.5°	3000.7	2998.5	2940.8	2702.0	2410.5	2276.3	2344.1	3011.5	4218.5	4437.9	4292.1
40°	3383.1	3389.5	3331.8	3118.3	2824.6	2649.3	2638.5	3261.1	4619.7	4904.7	4731.5
42.5°	3713.5	3720.7	3662.3	3504.3	3233.7	3062.0	2999.9	3567.0	5011.4	5406.1	5201.2
45°	3937.9	3982.6	3973.9	3847.7	3653.6	3475.4	3434.3	3950.9	5458.0	5937.8	5697.6
47.5°	4001.4	4042.5	4107.4	4124.7	4006.4	3831.1	3880.2	4413.3	5909.7	6470.3	6196.8
50°	3844.8	3883.0	4018.0	4197.6	4279.9	4225.7	4313.8	4909.0	6372.2	7001.3	6686.7
52.5°	3536.0	3575.0	3745.2	4029.5	4365.0	4535.3	4748.8	5397.4	6820.2	7504.2	7150.7
55°	3089.4	3130.5	3349.1	3670.9	4202.7	4663.0	5111.7	5885.2	7230.7	7956.6	7569.1
57.5°	2481.9	2512.2	2739.5	3189.7	3794.3	4536.0	5379.4	6417.6	7617.5	8401.0	7984.0
60°	1617.6	1644.3	1908.3	2410.5	3117.5	4111.8	5432.8	7011.4	8131.2	8978.9	8543.1
62.5°	1075.7	1093.8	1250.3	1619.0	2195.5	3297.2	5120.4	7485.4	8884.4	9984.7	9502.0
65°	738.1	756.1	912.7	1169.5	1418.4	2181.1	4222.1	7422.7	9566.9	10783.3	10212.6
67.5°	526.7	541.8	674.6	917.0	1026.7	1266.9	2862.1	6620.4	9468.8	10813.6	10250.9
70°	377.3	386.0	495.7	714.3	816.0	761.2	1591.6	5063.4	8290.6	9985.4	9470.2
72.5°	264.1	267.0	344.1	544.0	657.3	555.5	757.6	3375.8	6270.4	7837.5	7341.8
75°	178.9	182.5	231.6	399.0	527.4	424.2	401.1	1810.2	3681.0	4338.3	3888.8
77.5°	109.7	111.1	149.3	272.7	394.7	323.2	258.3	766.9	1424.2	1398.2	1191.9
80°	62.0	62.0	95.2	169.5	269.1	208.5	181.1	326.1	450.9	396.1	349.2
82.5°	34.6	35.4	69.3	105.3	178.2	123.4	99.6	150.8	194.8	172.4	150.1
85°	14.4	15.9	42.6	49.8	85.1	61.3	40.4	63.5	72.1	64.2	46.9
87.5°	1.4	2.2	13.0	9.4	10.1	12.3	5.8	12.3	10.1	10.1	7.2
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: P883126

CATALOG NUMBER: NAV-SB3B-827-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1660.1	1660.1	1660.1	1660.1	1660.1	1660.1	1660.1	1660.1	1660.1	1660.1	1660.1
2.5°	1671.0	1660.1	1632.7	1601.0	1559.1	1538.9	1511.5	1492.8	1476.9	1478.3	1463.9
5°	1703.4	1676.0	1614.7	1538.2	1443.0	1375.2	1303.0	1253.2	1212.8	1204.2	1184.7
7.5°	1748.2	1704.9	1597.4	1459.6	1298.7	1176.7	1067.8	997.8	948.0	932.2	916.3
10°	1805.9	1743.1	1575.0	1360.7	1129.1	974.0	857.1	802.3	768.4	756.8	748.2
12.5°	1873.0	1787.1	1545.4	1240.2	954.5	805.2	730.9	703.4	692.6	689.0	686.9
15°	1957.4	1842.0	1500.7	1097.4	806.6	702.0	670.3	666.7	668.1	666.7	665.9
17.5°	2057.7	1901.8	1427.8	950.2	707.1	649.3	637.8	640.7	644.3	643.6	642.1
20°	2167.3	1961.0	1334.8	819.6	639.2	611.8	605.3	608.2	611.1	609.7	608.9
22.5°	2292.2	2024.5	1231.6	717.9	593.8	577.2	570.0	570.7	570.7	567.8	566.4
25°	2441.5	2094.5	1123.4	645.7	559.2	546.2	537.5	534.6	530.3	521.6	520.2
27.5°	2619.7	2168.8	1019.5	595.2	531.7	519.5	509.4	502.2	491.3	476.9	475.5
30°	2820.3	2259.0	931.4	563.5	510.1	497.8	486.3	475.5	459.6	441.5	440.1
32.5°	3056.2	2355.7	867.2	542.6	490.6	477.6	463.9	450.9	433.6	415.6	416.3
35°	3337.6	2472.5	829.7	528.1	475.5	458.1	443.0	428.6	415.6	399.7	398.3
37.5°	3642.8	2596.6	818.2	520.9	465.4	438.7	421.3	411.2	409.8	400.4	399.7
40°	3976.8	2743.8	826.8	516.6	454.5	419.9	401.1	399.0	402.6	386.0	386.7
42.5°	4330.4	2918.4	841.3	511.5	439.4	401.1	383.1	383.1	380.2	357.1	357.1
45°	4712.8	3119.7	855.7	499.3	421.3	382.4	368.7	363.6	351.4	329.0	328.3
47.5°	5098.0	3324.6	866.5	476.9	399.7	366.5	354.2	342.7	324.7	304.5	303.7
50°	5463.8	3508.6	855.0	443.7	375.2	351.4	338.4	322.5	303.0	289.3	287.2
52.5°	5790.7	3668.0	805.9	404.8	349.2	335.5	323.9	307.4	291.5	277.1	275.6
55°	6074.9	3797.2	719.3	368.0	326.1	321.8	310.2	289.3	267.7	255.4	254.0
57.5°	6347.6	3895.3	611.1	337.7	305.2	306.6	289.3	270.6	250.4	237.4	235.9
60°	6710.5	4026.6	501.4	309.5	282.8	287.2	268.4	254.7	229.4	212.8	210.7
62.5°	7290.6	4230.8	398.3	274.9	256.8	258.3	250.4	233.8	203.5	184.0	182.5
65°	7750.9	4155.8	313.8	237.4	227.3	229.4	229.4	211.4	178.9	156.6	154.4
67.5°	7699.0	3558.4	250.4	200.6	199.1	200.6	205.6	190.5	158.7	140.7	137.8
70°	7092.2	2830.4	200.6	166.7	173.2	169.5	184.0	173.9	142.9	124.8	122.7
72.5°	5787.0	2038.9	153.0	137.8	132.8	138.5	165.9	156.6	119.0	98.8	96.7
75°	3381.6	1088.0	114.0	108.9	96.0	115.4	147.2	133.5	90.9	72.9	70.7
77.5°	1101.0	379.5	83.7	80.1	71.4	93.1	125.5	112.6	74.3	57.7	55.6
80°	295.1	114.7	57.0	52.7	46.2	69.3	99.6	89.5	53.4	37.5	36.8
82.5°	118.3	48.3	33.2	29.6	25.3	47.6	78.6	72.1	39.7	23.8	23.8
85°	38.2	15.9	12.3	9.4	11.5	29.6	46.9	49.1	28.1	12.3	9.4
87.5°	5.1	2.2	2.2	2.9	2.2	5.1	14.4	13.7	7.9	1.4	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)