

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: P883648

Luminaire Tested: **NAV-SB4A-830-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883648
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4A-830-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12475 lumens
Efficiency: N/A
Efficacy: 109.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

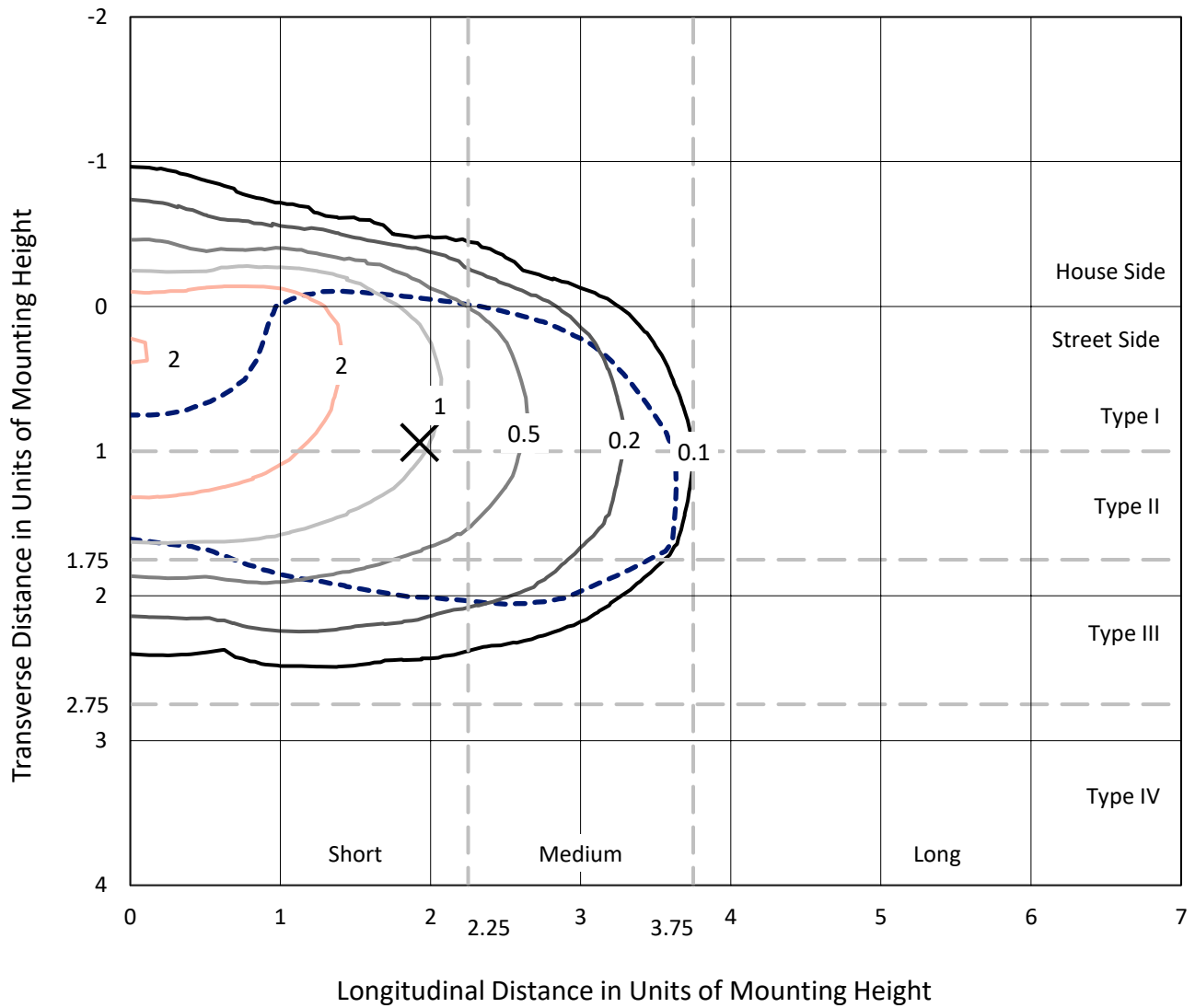
Input Watts (W): 114
Input Voltage (V): 120.0
Input Current (Ain): 0.952
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.206
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P883648
 CATALOG NUMBER: NAV-SB4A-830-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

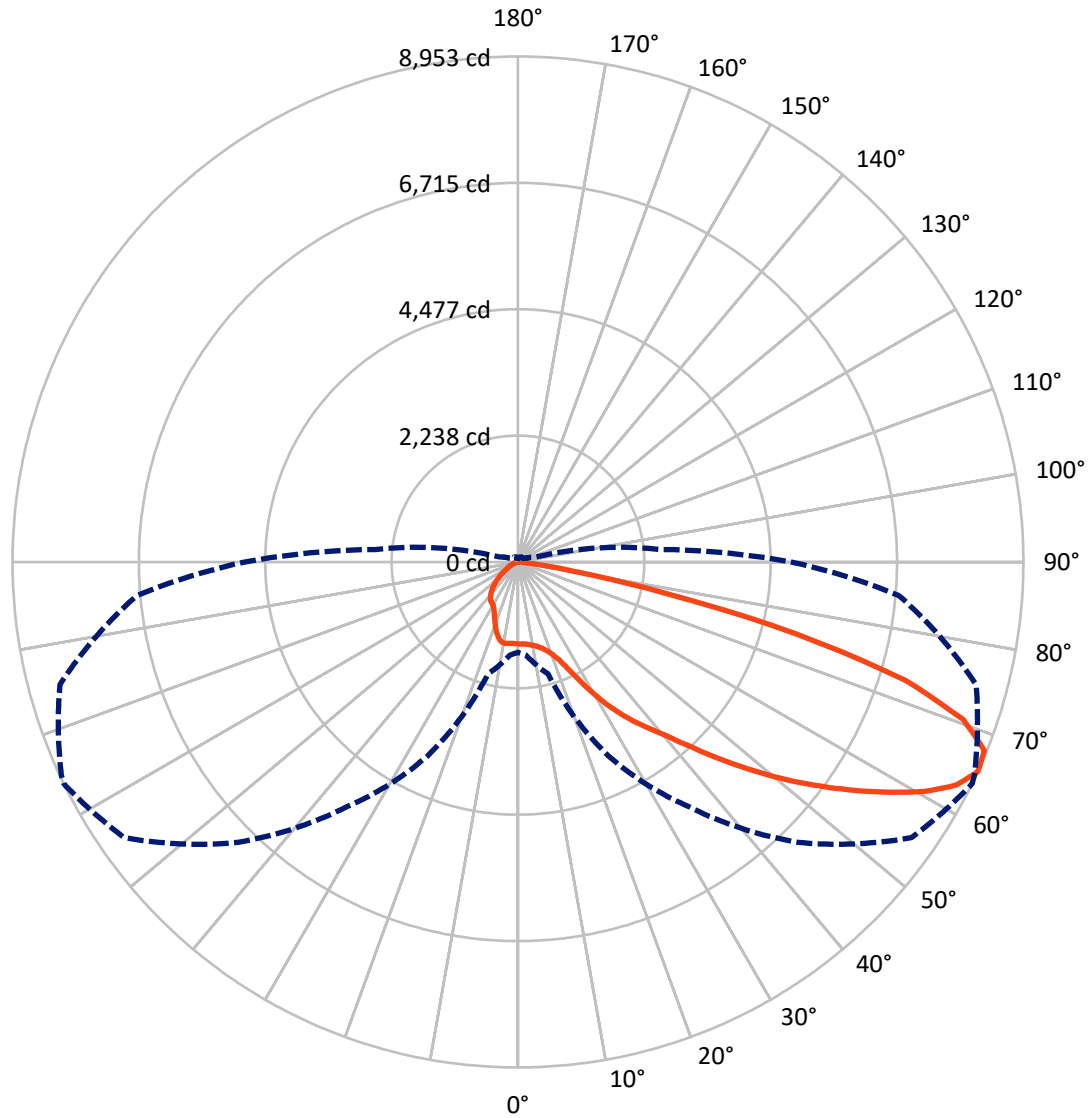
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type III - Short - N/A

REPORT NUMBER: P883648
CATALOG NUMBER: NAV-SB4A-830-U-T3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P883648

CATALOG NUMBER: NAV-SB4A-830-U-T3-HSS

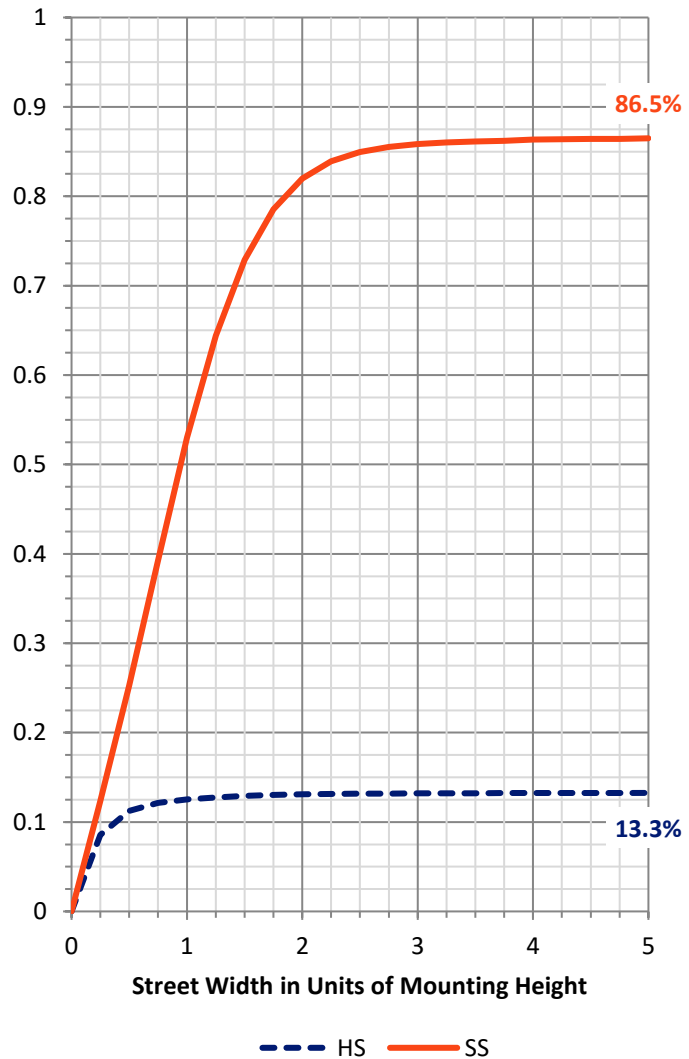
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1668.3	0.0	1668.3
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	10806.7	0.0	10806.7
	% Fixture	86.6	0.0	86.6
Total	Lumens	12475.0	0.0	12475.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.9	1.1
10°-20°	363.1	2.9
20°-30°	688.0	5.5
30°-40°	1392.2	11.2
40°-50°	2371.7	19.0
50°-60°	3225.3	25.9
60°-70°	3028.7	24.3
70°-80°	1213.4	9.7
80°-90°	58.8	0.5
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°	12475.0	100.0
0°-180°	12475.0	100.0

Coefficient of Utilization



REPORT NUMBER: P883648

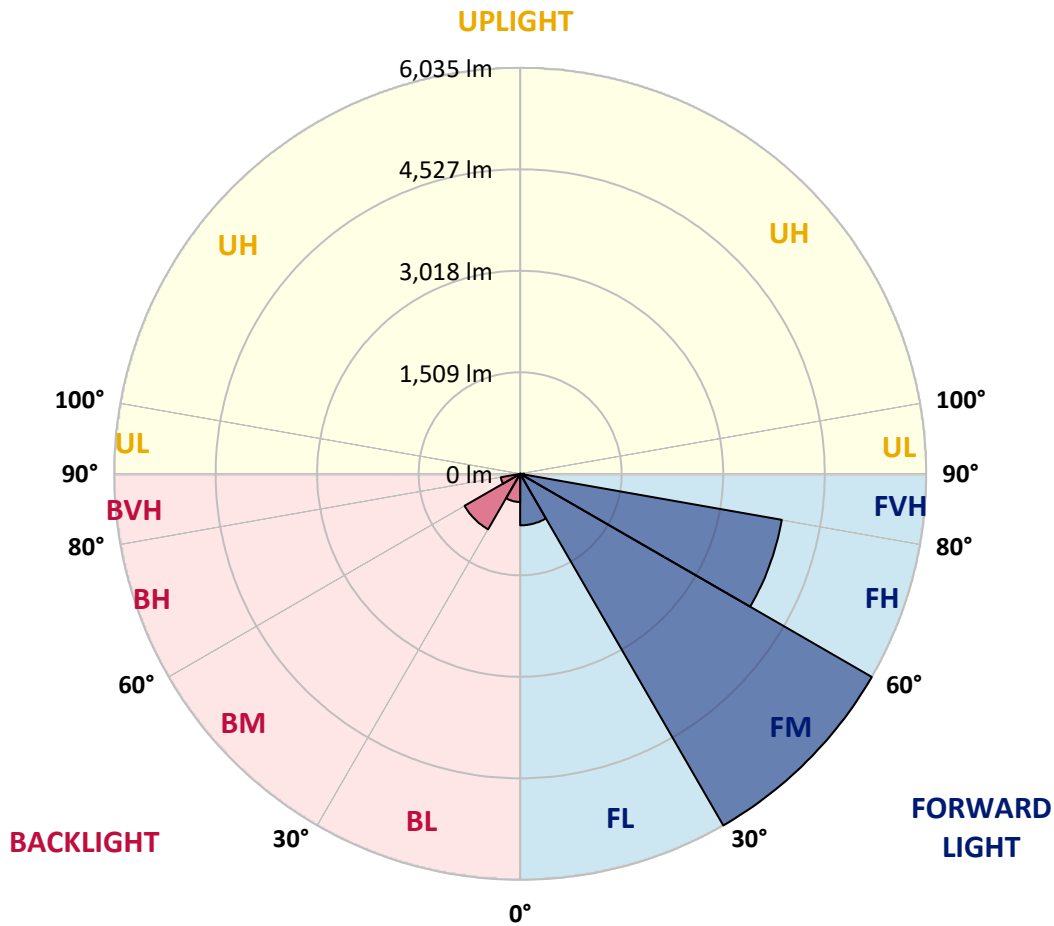
CATALOG NUMBER: NAV-SB4A-830-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	766.1	6.1			
FM (30°-60°)	6035.4	48.4			
FH (60°-80°)	3949.3	31.7			G2/5000
FVH (80°-90°)	55.9	0.4			G1/100
BL (0°-30°)	418.9	3.4	B1/500		
BM (30°-60°)	953.8	7.6	B1/1000		
BH (60°-80°)	292.8	2.3	B1/500		G1/500
BVH (80°-90°)	2.9	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-G2

Type III Short



REPORT NUMBER: P883648

CATALOG NUMBER: NAV-SB4A-830-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1451.0	1451.0	1451.0	1451.0	1451.0	1451.0	1451.0	1451.0	1451.0	1451.0	1451.0
2.5°	1446.0	1456.0	1453.5	1451.0	1450.1	1451.8	1452.6	1451.8	1451.8	1451.8	1452.6
5°	1418.4	1426.7	1426.7	1432.6	1440.9	1451.0	1458.5	1460.2	1461.8	1464.4	1463.5
7.5°	1365.7	1372.4	1377.4	1396.6	1417.5	1444.3	1466.9	1478.6	1480.2	1489.4	1492.8
10°	1329.7	1338.1	1346.4	1366.5	1396.6	1436.8	1475.2	1503.7	1507.8	1529.6	1539.6
12.5°	1328.0	1336.4	1347.3	1369.0	1404.1	1446.8	1493.6	1534.6	1542.1	1573.9	1594.8
15°	1345.6	1355.6	1365.7	1392.4	1430.1	1481.9	1532.1	1583.1	1590.6	1635.8	1658.4
17.5°	1381.6	1394.9	1402.5	1429.2	1469.4	1527.1	1593.1	1651.7	1658.4	1711.1	1739.5
20°	1452.6	1468.5	1471.0	1492.8	1532.1	1594.0	1672.6	1745.3	1753.7	1813.9	1845.7
22.5°	1599.8	1622.4	1602.3	1613.2	1648.3	1710.2	1795.5	1887.5	1899.2	1967.8	1996.2
25°	1859.1	1890.9	1839.0	1820.6	1835.7	1900.1	2007.1	2123.4	2136.7	2191.9	2206.1
27.5°	2368.4	2327.4	2248.8	2171.9	2126.7	2163.5	2283.9	2427.8	2444.5	2498.0	2481.3
30°	2927.9	2891.9	2785.7	2615.1	2508.0	2502.2	2613.4	2774.0	2793.2	2844.2	2793.2
32.5°	3488.2	3453.9	3338.5	3128.6	2942.9	2850.9	2927.9	3106.0	3116.0	3148.7	3073.4
35°	4039.3	4004.2	3888.8	3673.8	3445.5	3236.5	3221.4	3422.1	3425.5	3459.8	3347.7
37.5°	4593.8	4564.5	4441.6	4230.8	4005.9	3717.3	3577.7	3721.5	3725.7	3759.1	3642.9
40°	4989.3	5001.9	4917.4	4754.3	4561.2	4245.9	3977.4	4040.1	4015.1	4071.1	4001.7
42.5°	5328.9	5354.0	5280.4	5198.4	5086.3	4808.7	4472.5	4461.6	4421.5	4451.6	4379.7
45°	5622.4	5643.3	5577.3	5558.0	5555.5	5360.7	5013.6	4948.4	4892.3	4886.5	4800.3
47.5°	5730.3	5770.4	5798.9	5863.3	5988.7	5906.8	5573.1	5471.9	5409.2	5363.2	5226.8
50°	5771.3	5813.9	5910.9	6098.3	6395.1	6430.3	6130.0	6016.3	5939.4	5855.7	5655.0
52.5°	5716.1	5792.2	5922.6	6237.9	6668.6	6850.1	6664.4	6564.9	6477.1	6340.8	6043.1
55°	5390.8	5466.9	5733.6	6236.3	6804.9	7144.5	7169.6	7125.2	7026.6	6811.6	6356.7
57.5°	4705.0	4817.9	5240.2	6023.8	6802.4	7397.9	7664.6	7696.4	7586.0	7278.3	6603.4
60°	3755.0	3908.0	4423.2	5553.0	6592.5	7535.0	8098.7	8257.6	8140.5	7738.2	6803.3
62.5°	2620.1	2797.4	3285.0	4815.4	6112.5	7436.3	8415.6	8709.2	8620.5	8149.7	6880.2
65°	1598.2	1655.0	2048.1	3789.3	5296.3	7023.2	8513.5	8953.4	8924.1	8401.4	6766.5
67.5°	1064.6	1112.3	1225.2	2598.4	4111.2	6197.8	8279.3	8910.7	8919.1	8360.4	6350.0
70°	641.4	682.4	756.0	1511.2	2664.4	4905.7	7554.3	8367.1	8415.6	7812.7	5560.5
72.5°	264.3	291.9	358.8	684.9	1379.9	3113.5	6015.5	7183.8	7296.7	6569.1	4267.6
75°	149.7	163.9	210.7	343.7	598.8	1451.0	3643.7	5099.7	5266.2	4527.7	2567.4
77.5°	99.5	106.2	136.3	222.5	337.0	495.1	1557.2	2656.9	2974.7	2472.9	1111.4
80°	66.9	72.8	93.7	148.9	219.1	212.4	495.9	984.3	1211.0	849.7	271.0
82.5°	45.2	46.0	66.9	97.8	138.8	102.9	146.4	306.1	384.7	245.9	102.9
85°	25.9	25.1	49.3	56.9	61.9	42.7	44.3	92.0	120.4	103.7	58.5
87.5°	3.3	5.0	19.2	15.1	8.4	9.2	9.2	15.9	23.4	25.1	12.5
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: P883648

CATALOG NUMBER: NAV-SB4A-830-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1451.0	1451.0	1451.0	1451.0	1451.0	1451.0	1451.0	1451.0	1451.0	1451.0	1451.0
2.5°	1452.6	1451.8	1449.3	1446.8	1440.9	1437.6	1439.3	1437.6	1436.8	1437.6	1440.9
5°	1463.5	1461.0	1454.3	1446.0	1434.2	1420.0	1410.8	1397.4	1384.9	1377.4	1379.1
7.5°	1492.8	1490.3	1481.1	1457.7	1420.0	1360.7	1306.3	1258.6	1222.7	1201.8	1202.6
10°	1539.6	1535.4	1521.2	1469.4	1370.7	1241.1	1133.2	1043.7	985.2	957.6	955.0
12.5°	1594.8	1589.8	1564.7	1458.5	1277.0	1074.6	925.8	826.3	771.9	747.6	745.1
15°	1660.0	1653.4	1604.0	1406.6	1140.7	890.7	754.3	679.9	644.8	623.0	623.9
17.5°	1741.2	1729.5	1633.3	1328.9	992.7	750.2	649.0	592.9	562.0	541.1	539.4
20°	1846.5	1827.3	1656.7	1236.0	856.4	661.5	577.9	531.0	507.6	489.2	485.9
22.5°	1993.7	1966.1	1685.1	1135.7	760.2	600.5	525.2	490.9	471.7	450.8	447.4
25°	2176.0	2143.4	1720.3	1042.9	694.1	547.8	486.7	458.3	435.7	411.5	408.9
27.5°	2431.1	2372.6	1762.1	966.8	637.3	502.6	451.6	419.8	393.9	373.8	369.6
30°	2715.5	2619.3	1798.9	920.8	585.4	460.8	405.6	373.8	349.6	335.4	332.8
32.5°	2984.7	2854.3	1823.1	900.7	538.6	413.1	355.4	321.1	302.7	298.6	301.1
35°	3239.0	3066.7	1820.6	881.5	496.8	365.5	306.1	271.0	256.7	259.3	259.3
37.5°	3531.7	3293.3	1803.1	851.3	462.5	322.0	263.4	232.5	219.9	220.8	224.1
40°	3872.0	3555.1	1792.2	794.5	424.8	281.8	228.3	203.2	194.0	190.7	189.8
42.5°	4235.0	3808.5	1793.9	730.1	378.0	245.9	204.1	183.1	174.8	172.3	171.4
45°	4599.6	4050.2	1796.4	663.2	328.7	218.3	186.5	168.9	163.9	160.6	160.6
47.5°	4942.5	4255.9	1749.5	591.3	280.2	197.4	172.3	160.6	156.4	152.2	152.2
50°	5262.0	4393.1	1636.6	507.6	241.7	180.6	161.4	153.0	148.9	144.7	144.7
52.5°	5510.3	4414.8	1450.1	421.5	214.9	168.1	154.7	147.2	142.2	138.0	137.2
55°	5620.7	4278.5	1185.0	341.2	194.0	157.2	148.0	140.5	134.6	130.5	129.6
57.5°	5592.3	3991.6	924.1	274.3	173.9	146.4	139.7	134.6	128.0	121.3	120.4
60°	5452.6	3607.8	696.6	228.3	155.6	134.6	130.5	126.3	117.1	107.0	105.4
62.5°	5211.0	3125.2	496.8	189.0	135.5	121.3	119.6	116.2	102.9	84.5	82.8
65°	4841.3	2539.0	334.5	157.2	116.2	106.2	107.0	101.2	83.6	62.7	61.0
67.5°	4301.1	1856.6	214.1	128.8	97.0	88.6	89.5	86.1	71.1	53.5	51.0
70°	3612.8	1229.4	139.7	97.8	77.8	68.6	73.6	74.4	60.2	43.5	41.8
72.5°	2648.5	725.9	97.8	72.8	56.9	47.7	60.2	61.9	48.5	32.6	30.9
75°	1509.5	344.6	73.6	52.7	35.1	33.5	46.8	46.8	33.5	21.7	20.1
77.5°	633.9	143.8	51.9	34.3	20.1	19.2	31.8	29.3	16.7	10.0	10.0
80°	183.1	64.4	27.6	16.7	8.4	7.5	12.5	9.2	4.2	1.7	1.7
82.5°	71.9	28.4	10.9	6.7	3.3	3.3	1.7	0.0	0.0	0.0	0.0
85°	42.7	11.7	5.0	2.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.9	2.5	1.7	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)