

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: P881906

Luminaire Tested: **NAV-SB1C-740-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881906
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-SB1C-740-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH
HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5901 lumens
Efficiency: N/A
Efficacy: 108.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

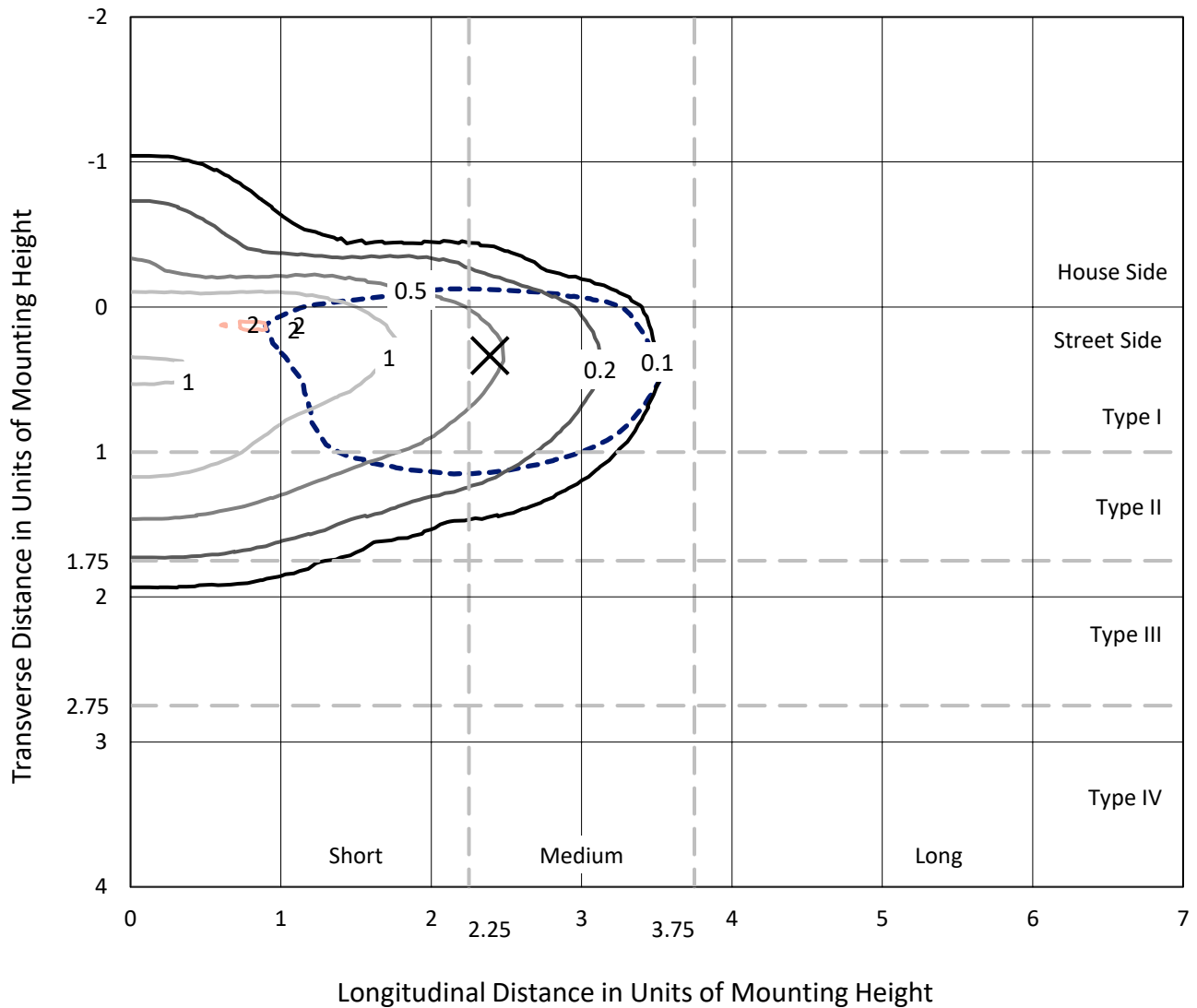
Input Watts (W): 54.4
Input Voltage (V): 120.0
Input Current (Ain): 0.437
Voltage Rise (V): NR
Power Factor: 0.993
Total Harmonic Distortion (THDi): 9.314
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881906
 CATALOG NUMBER: NAV-SB1C-740-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

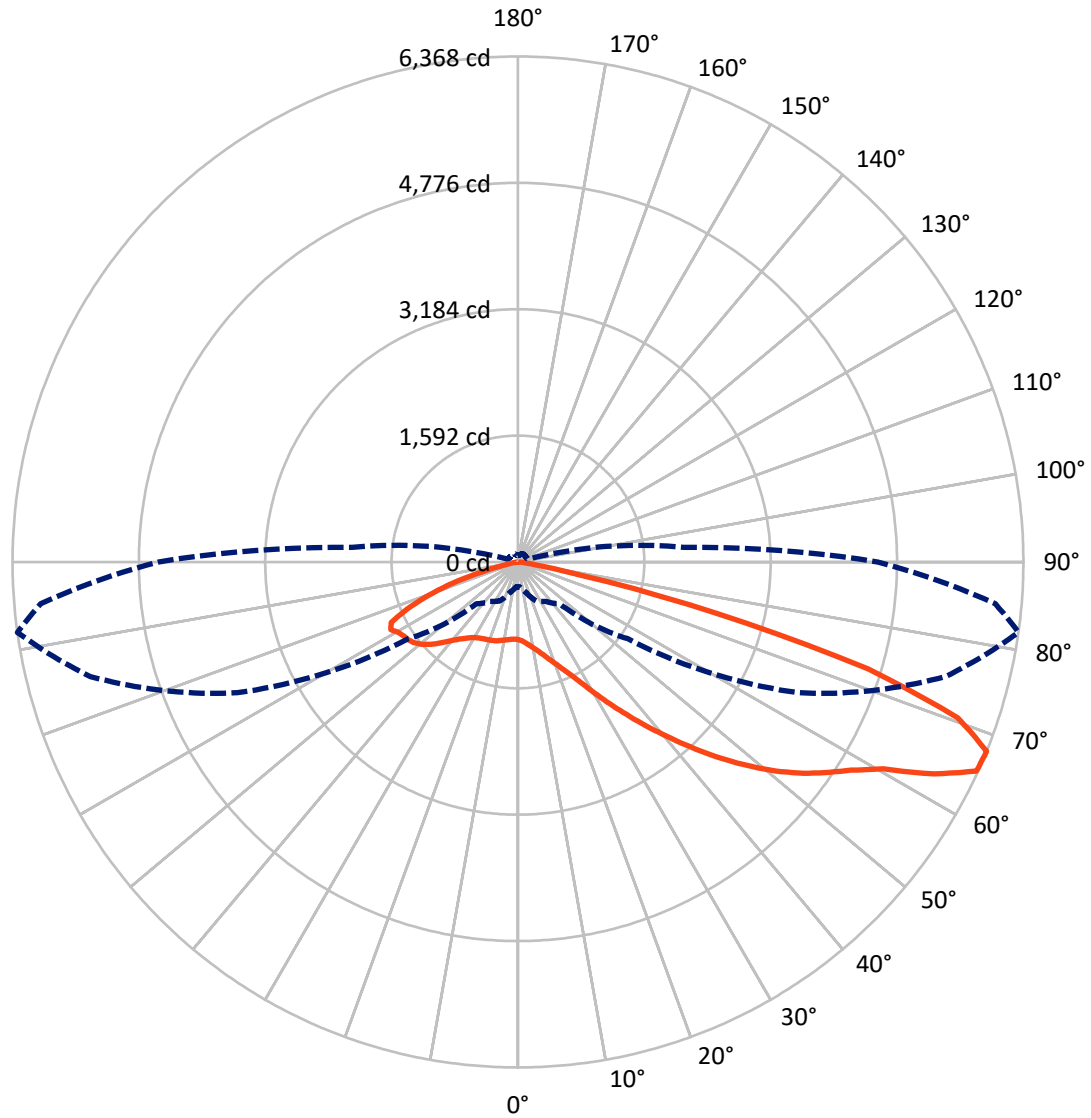
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc
 Type II - Medium - N/A

REPORT NUMBER: P881906
CATALOG NUMBER: NAV-SB1C-740-U-T2-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P881906
 CATALOG NUMBER: NAV-SB1C-740-U-T2-HSS

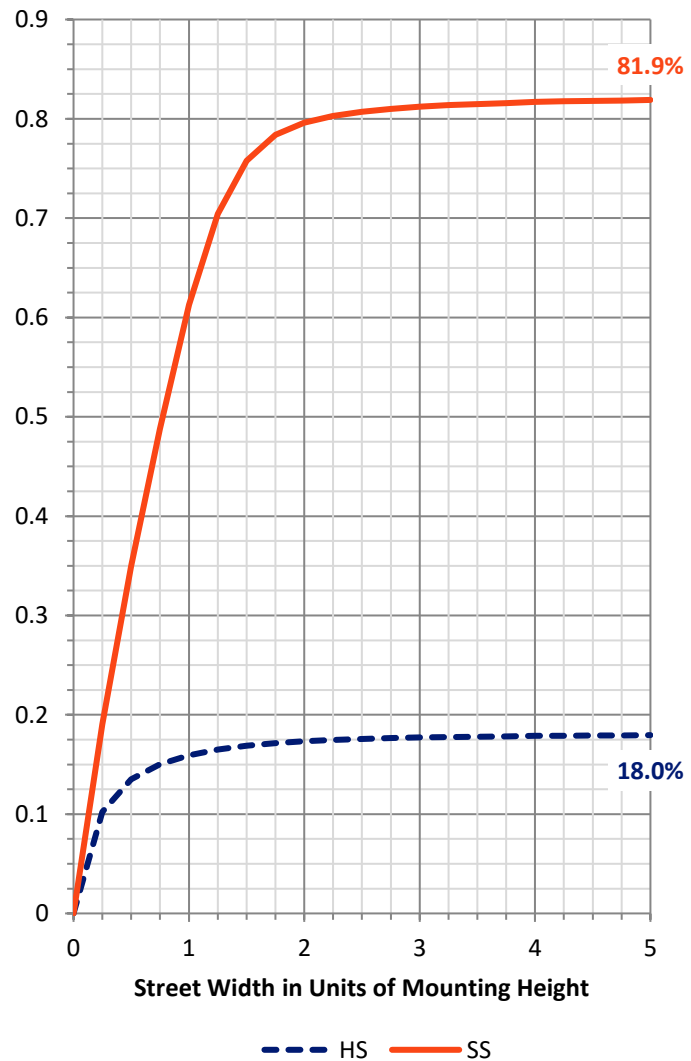
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1068.9	0.0	1068.9
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	4832.1	0.0	4832.1
	% Fixture	81.9	0.0	81.9
Total	Lumens	5901.0	0.0	5901.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.1	1.5
10°-20°	226.3	3.8
20°-30°	362.5	6.1
30°-40°	641.0	10.9
40°-50°	1123.1	19.0
50°-60°	1497.9	25.4
60°-70°	1394.5	23.6
70°-80°	535.2	9.1
80°-90°	33.2	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°	5901.0	100.0
0°-180°	5901.0	100.0

Coefficient of Utilization



REPORT NUMBER: P881906

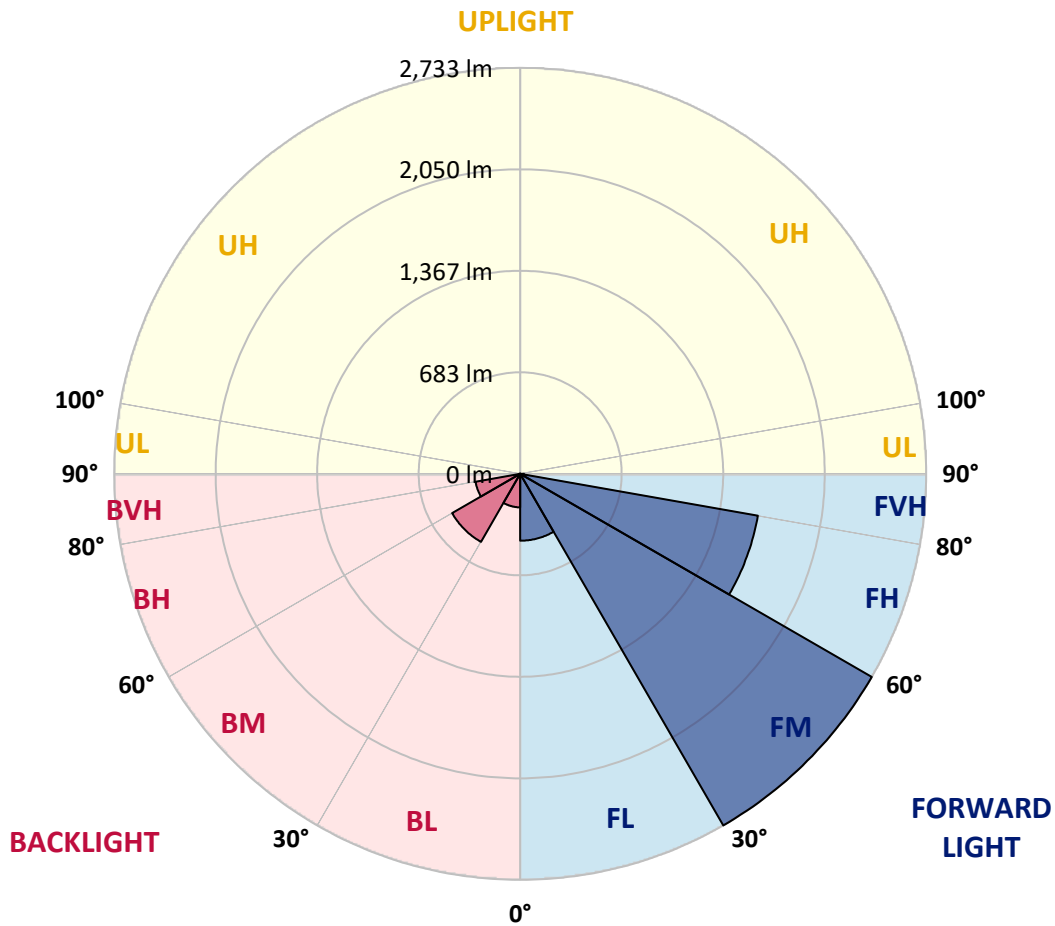
CATALOG NUMBER: NAV-SB1C-740-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	450.2	7.6			
FM (30°-60°)	2733.1	46.3			
FH (60°-80°)	1624.6	27.5			G1/1800
FVH (80°-90°)	24.2	0.4			G1/100
BL (0°-30°)	225.8	3.8	B1/500		
BM (30°-60°)	529.0	9.0	B1/1000		
BH (60°-80°)	305.1	5.2	B1/500		G1/500
BVH (80°-90°)	9.1	0.2			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Medium



REPORT NUMBER: P881906
 CATALOG NUMBER: NAV-SB1C-740-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	977.6	977.6	977.6	977.6	977.6	977.6	977.6	977.6	977.6	977.6	977.6
2.5°	1033.3	1039.2	1035.8	1034.1	1031.1	1026.9	1023.5	1012.9	1001.8	994.6	992.0
5°	1054.1	1060.0	1059.6	1061.3	1063.4	1064.7	1063.8	1051.9	1036.2	1023.9	1016.7
7.5°	1036.2	1043.0	1048.5	1057.0	1071.9	1087.6	1095.3	1092.7	1076.6	1059.6	1050.7
10°	985.7	992.9	1006.1	1026.0	1057.5	1091.5	1119.9	1133.1	1122.9	1104.2	1091.9
12.5°	893.0	900.3	926.2	969.5	1022.2	1081.3	1135.6	1170.9	1173.5	1154.8	1140.3
15°	789.0	796.2	823.8	878.2	958.5	1053.2	1144.1	1210.8	1233.4	1217.2	1199.8
17.5°	724.4	730.8	751.6	795.3	879.0	997.1	1141.2	1253.3	1304.7	1292.0	1271.2
20°	704.8	710.4	720.1	750.7	820.4	938.9	1121.6	1293.3	1381.6	1374.4	1351.0
22.5°	725.7	730.8	733.7	747.3	791.1	900.7	1097.0	1334.1	1470.9	1471.7	1443.2
25°	773.7	778.8	775.4	783.9	803.0	888.8	1087.6	1382.1	1583.0	1592.4	1560.1
27.5°	852.7	853.1	845.0	844.6	847.6	906.6	1097.4	1433.5	1724.5	1741.9	1702.0
30°	1011.2	1004.8	973.8	940.2	924.9	960.2	1124.6	1494.2	1891.5	1922.5	1872.3
32.5°	1255.5	1246.1	1189.2	1108.9	1028.2	1046.4	1173.5	1563.5	2073.3	2129.4	2068.2
35°	1520.6	1518.0	1458.5	1339.1	1198.1	1169.2	1252.9	1654.4	2271.7	2360.9	2288.3
37.5°	1767.0	1765.7	1731.7	1591.1	1419.4	1340.4	1380.4	1773.4	2484.1	2613.3	2527.5
40°	1992.2	1996.0	1962.0	1836.2	1663.3	1560.1	1553.7	1920.4	2720.4	2888.2	2786.2
42.5°	2186.7	2191.0	2156.6	2063.5	1904.2	1803.1	1766.6	2100.5	2951.1	3183.5	3062.8
45°	2318.9	2345.2	2340.1	2265.8	2151.5	2046.5	2022.3	2326.5	3214.0	3496.6	3355.1
47.5°	2356.3	2380.5	2418.7	2428.9	2359.2	2256.0	2284.9	2598.9	3480.0	3810.1	3649.1
50°	2264.1	2286.6	2366.0	2471.8	2520.3	2488.4	2540.2	2890.7	3752.3	4122.8	3937.6
52.5°	2082.2	2105.2	2205.4	2372.8	2570.4	2670.7	2796.4	3178.4	4016.2	4418.9	4210.8
55°	1819.2	1843.5	1972.2	2161.7	2474.8	2745.9	3010.1	3465.6	4257.9	4685.3	4457.2
57.5°	1461.5	1479.4	1613.2	1878.3	2234.3	2671.1	3167.7	3779.1	4485.6	4947.0	4701.5
60°	952.5	968.2	1123.7	1419.4	1835.8	2421.3	3199.2	4128.8	4788.1	5287.3	5030.7
62.5°	633.5	644.1	736.3	953.4	1292.8	1941.6	3015.2	4407.9	5231.7	5879.6	5595.4
65°	434.6	445.3	537.4	688.7	835.3	1284.3	2486.3	4370.9	5633.6	6349.9	6013.9
67.5°	310.1	319.1	397.2	540.0	604.6	746.0	1685.4	3898.5	5575.8	6367.8	6036.4
70°	222.2	227.3	291.9	420.6	480.5	448.2	937.2	2981.6	4882.0	5880.0	5576.7
72.5°	155.5	157.2	202.7	320.3	387.0	327.1	446.1	1987.9	3692.4	4615.2	4323.3
75°	105.4	107.5	136.4	234.9	310.6	249.8	236.2	1066.0	2167.6	2554.7	2290.0
77.5°	64.6	65.4	87.9	160.6	232.4	190.3	152.1	451.6	838.7	823.4	701.9
80°	36.5	36.5	56.1	99.8	158.5	122.8	106.6	192.0	265.5	233.2	205.6
82.5°	20.4	20.8	40.8	62.0	104.9	72.7	58.6	88.8	114.7	101.5	88.4
85°	8.5	9.3	25.1	29.3	50.1	36.1	23.8	37.4	42.5	37.8	27.6
87.5°	0.8	1.3	7.6	5.5	5.9	7.2	3.4	7.2	5.9	5.9	4.2
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: P881906
 CATALOG NUMBER: NAV-SB1C-740-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	977.6	977.6	977.6	977.6	977.6	977.6	977.6	977.6	977.6	977.6	977.6
2.5°	984.0	977.6	961.5	942.8	918.1	906.2	890.1	879.0	869.7	870.5	862.0
5°	1003.1	986.9	950.8	905.8	849.7	809.8	767.3	738.0	714.2	709.1	697.6
7.5°	1029.4	1003.9	940.6	859.5	764.7	692.9	628.8	587.6	558.3	548.9	539.6
10°	1063.4	1026.5	927.5	801.3	664.9	573.6	504.7	472.4	452.5	445.7	440.6
12.5°	1102.9	1052.4	910.0	730.3	562.1	474.1	430.4	414.2	407.9	405.7	404.5
15°	1152.6	1084.7	883.7	646.2	475.0	413.4	394.7	392.6	393.4	392.6	392.1
17.5°	1211.7	1119.9	840.8	559.5	416.4	382.4	375.6	377.3	379.4	379.0	378.1
20°	1276.3	1154.8	786.0	482.6	376.4	360.3	356.5	358.2	359.9	359.0	358.6
22.5°	1349.8	1192.1	725.2	422.7	349.7	339.9	335.6	336.1	336.1	334.4	333.5
25°	1437.7	1233.4	661.5	380.2	329.3	321.6	316.5	314.8	312.3	307.2	306.3
27.5°	1542.7	1277.1	600.3	350.5	313.1	305.9	299.9	295.7	289.3	280.8	280.0
30°	1660.8	1330.2	548.5	331.8	300.4	293.2	286.4	280.0	270.6	260.0	259.2
32.5°	1799.7	1387.2	510.7	319.5	288.9	281.3	273.2	265.5	255.3	244.7	245.1
35°	1965.4	1456.0	488.6	311.0	280.0	269.8	260.9	252.4	244.7	235.4	234.5
37.5°	2145.1	1529.1	481.8	306.7	274.0	258.3	248.1	242.2	241.3	235.8	235.4
40°	2341.8	1615.7	486.9	304.2	267.7	247.3	236.2	234.9	237.1	227.3	227.7
42.5°	2550.0	1718.5	495.4	301.2	258.7	236.2	225.6	225.6	223.9	210.3	210.3
45°	2775.2	1837.1	503.9	294.0	248.1	225.2	217.1	214.1	206.9	193.7	193.3
47.5°	3002.0	1957.7	510.3	280.8	235.4	215.8	208.6	201.8	191.2	179.3	178.9
50°	3217.4	2066.1	503.5	261.3	220.9	206.9	199.3	189.9	178.4	170.4	169.1
52.5°	3409.9	2160.0	474.6	238.3	205.6	197.6	190.8	181.0	171.6	163.1	162.3
55°	3577.3	2236.0	423.6	216.7	192.0	189.5	182.7	170.4	157.6	150.4	149.5
57.5°	3737.9	2293.8	359.9	198.8	179.7	180.6	170.4	159.3	147.4	139.8	138.9
60°	3951.6	2371.1	295.3	182.3	166.5	169.1	158.0	150.0	135.1	125.3	124.1
62.5°	4293.2	2491.4	234.5	161.9	151.2	152.1	147.4	137.7	119.8	108.3	107.5
65°	4564.2	2447.2	184.8	139.8	133.8	135.1	135.1	124.5	105.4	92.2	90.9
67.5°	4533.6	2095.4	147.4	118.1	117.3	118.1	121.1	112.2	93.5	82.8	81.1
70°	4176.3	1666.7	118.1	98.1	102.0	99.8	108.3	102.4	84.1	73.5	72.2
72.5°	3407.8	1200.6	90.1	81.1	78.2	81.6	97.7	92.2	70.1	58.2	56.9
75°	1991.3	640.7	67.1	64.2	56.5	68.0	86.7	78.6	53.5	42.9	41.6
77.5°	648.3	223.5	49.3	47.2	42.1	54.8	73.9	66.3	43.8	34.0	32.7
80°	173.8	67.6	33.6	31.0	27.2	40.8	58.6	52.7	31.4	22.1	21.7
82.5°	69.7	28.5	19.5	17.4	14.9	28.0	46.3	42.5	23.4	14.0	14.0
85°	22.5	9.3	7.2	5.5	6.8	17.4	27.6	28.9	16.6	7.2	5.5
87.5°	3.0	1.3	1.3	1.7	1.3	3.0	8.5	8.1	4.7	0.8	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)