

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: P882586

Luminaire Tested: **NAV-SB2C-740-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882586
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-SB2C-740-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 615mA 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: 12016 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

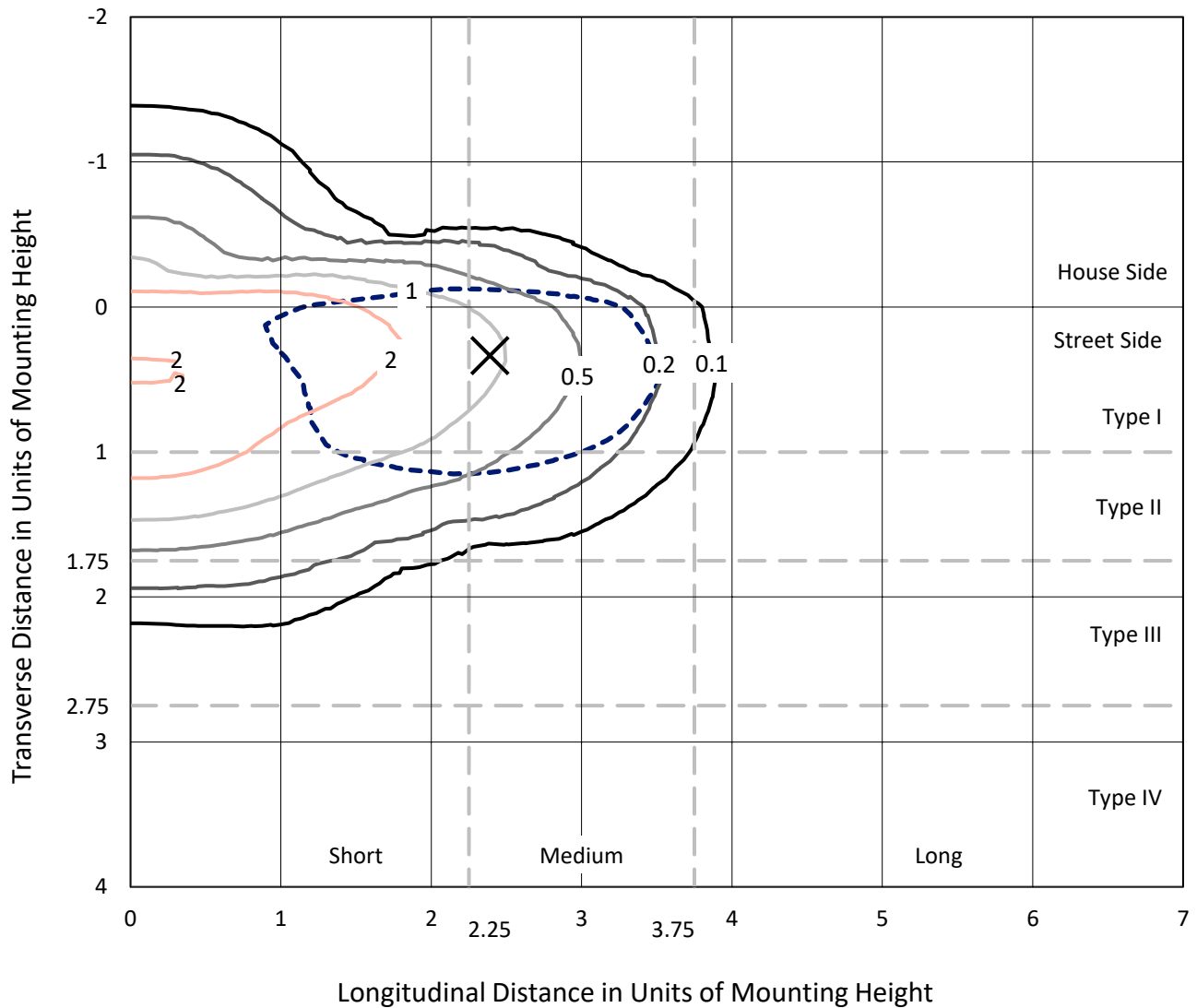
Input Watts (W): 100.9
Input Voltage (V): 120.0
Input Current (Ain): 0.857
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P882586
 CATALOG NUMBER: NAV-SB2C-740-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

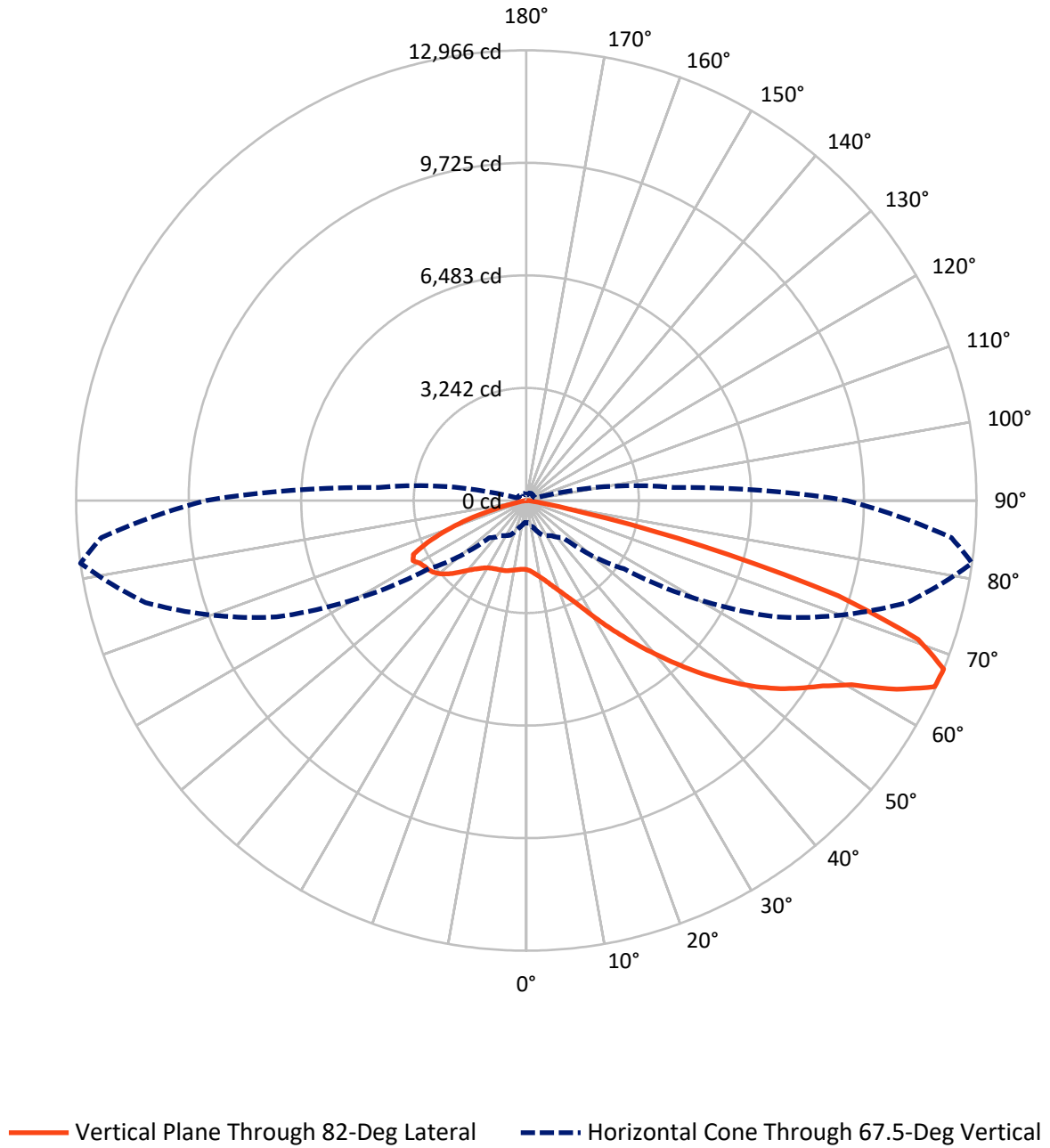
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc
 Type II - Medium - N/A

REPORT NUMBER: P882586
CATALOG NUMBER: NAV-SB2C-740-U-T2-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P882586

CATALOG NUMBER: NAV-SB2C-740-U-T2-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2176.6	0.0	2176.6
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	9839.4	0.0	9839.4
	% Fixture	81.9	0.0	81.9
Total	Lumens	12016.0	0.0	12016.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.4	1.5
10°-20°	460.9	3.8
20°-30°	738.2	6.1
30°-40°	1305.3	10.9
40°-50°	2287.0	19.0
50°-60°	3050.2	25.4
60°-70°	2839.6	23.6
70°-80°	1089.8	9.1
80°-90°	67.7	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°	12016.0	100.0
0°-180°	12016.0	100.0

Coefficient of Utilization



REPORT NUMBER: P882586

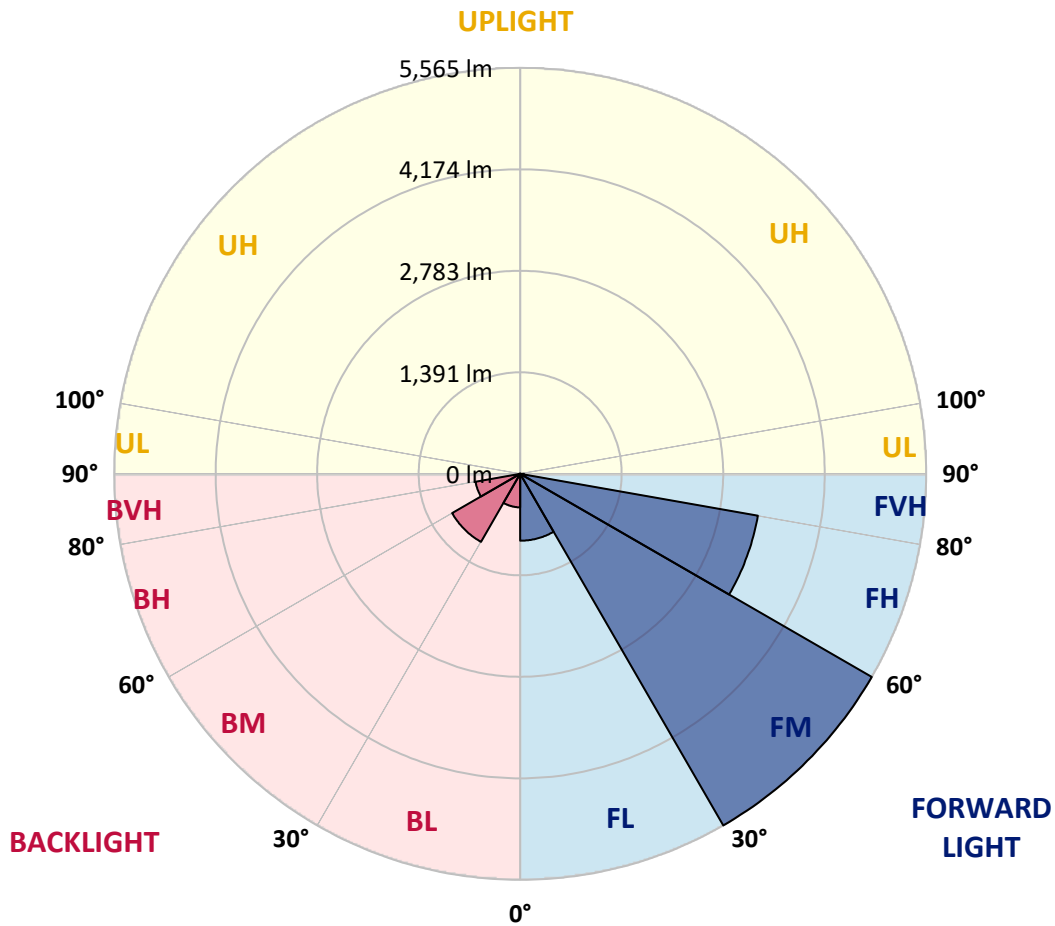
CATALOG NUMBER: NAV-SB2C-740-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	916.7	7.6			
FM (30°-60°)	5565.3	46.3			
FH (60°-80°)	3308.2	27.5			G2/5000
FVH (80°-90°)	49.2	0.4			G1/100
BL (0°-30°)	459.7	3.8	B1/500		
BM (30°-60°)	1077.2	9.0	B2/2500		
BH (60°-80°)	621.2	5.2	B2/1000		G2/1000
BVH (80°-90°)	18.5	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: P882586
 CATALOG NUMBER: NAV-SB2C-740-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1990.6	1990.6	1990.6	1990.6	1990.6	1990.6	1990.6	1990.6	1990.6	1990.6	1990.6
2.5°	2104.0	2116.1	2109.2	2105.7	2099.6	2091.0	2084.1	2062.4	2040.0	2025.2	2020.1
5°	2146.4	2158.5	2157.6	2161.1	2165.4	2168.0	2166.3	2142.0	2110.0	2084.9	2070.2
7.5°	2110.0	2123.9	2135.1	2152.4	2182.7	2214.7	2230.3	2225.1	2192.2	2157.6	2139.4
10°	2007.1	2021.8	2048.6	2089.3	2153.3	2222.5	2280.5	2307.3	2286.5	2248.5	2223.4
12.5°	1818.5	1833.2	1886.0	1974.2	2081.5	2201.7	2312.5	2384.3	2389.5	2351.4	2322.0
15°	1606.5	1621.2	1677.5	1788.2	1951.7	2144.6	2329.8	2465.6	2511.4	2478.6	2443.1
17.5°	1475.0	1488.0	1530.4	1619.5	1789.9	2030.4	2323.7	2552.1	2656.8	2630.8	2588.4
20°	1435.2	1446.5	1466.4	1528.7	1670.5	1911.9	2283.9	2633.4	2813.4	2798.7	2751.1
22.5°	1477.6	1488.0	1494.1	1521.7	1610.9	1834.1	2233.7	2716.5	2995.1	2996.8	2938.8
25°	1575.4	1585.8	1578.8	1596.1	1635.1	1809.8	2214.7	2814.2	3223.4	3242.5	3176.7
27.5°	1736.3	1737.2	1720.7	1719.9	1725.9	1846.2	2234.6	2918.9	3511.5	3547.0	3465.7
30°	2059.0	2046.0	1982.9	1914.5	1883.4	1955.2	2290.0	3042.6	3851.5	3914.7	3812.6
32.5°	2556.4	2537.4	2421.5	2258.0	2093.6	2130.8	2389.5	3183.6	4221.8	4336.0	4211.4
35°	3096.3	3091.1	2970.0	2726.9	2439.6	2380.8	2551.2	3368.8	4625.8	4807.5	4659.5
37.5°	3598.0	3595.4	3526.2	3239.9	2890.4	2729.5	2810.8	3611.0	5058.4	5321.4	5146.6
40°	4056.6	4064.3	3995.1	3739.1	3387.0	3176.7	3163.7	3910.3	5539.4	5881.1	5673.5
42.5°	4452.8	4461.4	4391.4	4201.9	3877.5	3671.6	3597.2	4277.2	6009.1	6482.4	6236.7
45°	4721.8	4775.5	4765.1	4613.7	4381.0	4167.3	4118.0	4737.4	6544.6	7119.9	6831.9
47.5°	4798.0	4847.3	4925.1	4945.9	4804.0	4593.8	4652.6	5291.9	7086.2	7758.4	7430.5
50°	4610.2	4656.1	4817.9	5033.3	5131.9	5067.0	5172.6	5886.3	7640.8	8395.1	8017.9
52.5°	4240.0	4286.7	4490.8	4831.7	5234.0	5438.2	5694.2	6472.0	8178.0	8998.1	8574.2
55°	3704.5	3753.8	4015.9	4401.7	5039.3	5591.3	6129.4	7056.8	8670.2	9540.6	9076.0
57.5°	2976.0	3012.4	3284.9	3824.7	4549.7	5439.0	6450.3	7695.3	9134.0	10073.5	9573.4
60°	1939.6	1971.6	2288.2	2890.4	3738.2	4930.3	6514.4	8407.3	9749.9	10766.4	10243.9
62.5°	1289.9	1311.5	1499.3	1941.3	2632.6	3953.6	6139.8	8975.6	10653.1	11972.4	11393.7
65°	885.0	906.6	1094.4	1402.4	1700.8	2615.3	5062.7	8900.4	11471.5	12930.1	12245.8
67.5°	631.5	649.7	808.9	1099.6	1231.1	1519.2	3431.9	7938.4	11353.9	12966.4	12291.6
70°	452.5	462.8	594.3	856.5	978.5	912.7	1908.5	6071.4	9941.1	11973.3	11355.6
72.5°	316.6	320.1	412.7	652.3	788.1	666.1	908.4	4047.9	7518.8	9397.8	8803.5
75°	214.6	218.9	277.7	478.4	632.4	508.7	481.0	2170.6	4413.8	5202.0	4663.0
77.5°	131.5	133.2	179.1	327.0	473.2	387.6	309.7	919.6	1707.7	1676.6	1429.2
80°	74.4	74.4	114.2	203.3	322.7	250.0	217.1	391.0	540.7	475.0	418.7
82.5°	41.5	42.4	83.1	126.3	213.7	147.9	119.4	180.8	233.6	206.8	179.9
85°	17.3	19.0	51.0	59.7	102.1	73.5	48.4	76.1	86.5	77.0	56.2
87.5°	1.7	2.6	15.6	11.2	12.1	14.7	6.9	14.7	12.1	12.1	8.7
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: P882586
 CATALOG NUMBER: NAV-SB2C-740-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1990.6	1990.6	1990.6	1990.6	1990.6	1990.6	1990.6	1990.6	1990.6	1990.6	1990.6
2.5°	2003.6	1990.6	1957.8	1919.7	1869.5	1845.3	1812.4	1789.9	1770.9	1772.6	1755.3
5°	2042.6	2009.7	1936.1	1844.4	1730.2	1648.9	1562.4	1502.7	1454.3	1443.9	1420.5
7.5°	2096.2	2044.3	1915.4	1750.1	1557.2	1411.0	1280.4	1196.5	1136.8	1117.7	1098.7
10°	2165.4	2090.1	1888.6	1631.6	1353.9	1167.9	1027.8	962.0	921.4	907.5	897.1
12.5°	2245.9	2142.9	1853.1	1487.1	1144.6	965.5	876.4	843.5	830.5	826.2	823.6
15°	2347.1	2208.7	1799.5	1315.8	967.2	841.8	803.7	799.4	801.1	799.4	798.5
17.5°	2467.3	2280.5	1712.1	1139.4	847.8	778.6	764.8	768.2	772.6	771.7	770.0
20°	2598.8	2351.4	1600.5	982.8	766.5	733.6	725.8	729.3	732.8	731.0	730.2
22.5°	2748.5	2427.5	1476.8	860.8	712.0	692.1	683.4	684.3	684.3	680.9	679.1
25°	2927.6	2511.4	1347.0	774.3	670.5	654.9	644.5	641.1	635.9	625.5	623.8
27.5°	3141.3	2600.6	1222.4	713.7	637.6	622.9	610.8	602.1	589.1	571.8	570.1
30°	3381.8	2708.7	1116.9	675.7	611.6	596.9	583.1	570.1	551.1	529.5	527.7
32.5°	3664.7	2824.6	1039.9	650.6	588.3	572.7	556.3	540.7	519.9	498.3	499.2
35°	4002.1	2964.8	994.9	633.3	570.1	549.4	531.2	513.9	498.3	479.3	477.5
37.5°	4368.0	3113.6	981.0	624.6	558.0	526.0	505.2	493.1	491.4	480.1	479.3
40°	4768.5	3290.1	991.4	619.4	545.0	503.5	481.0	478.4	482.7	462.8	463.7
42.5°	5192.5	3499.4	1008.7	613.4	526.9	481.0	459.4	459.4	455.9	428.2	428.2
45°	5651.0	3740.8	1026.0	598.7	505.2	458.5	442.1	436.0	421.3	394.5	393.6
47.5°	6112.9	3986.5	1039.0	571.8	479.3	439.5	424.8	410.9	389.3	365.1	364.2
50°	6551.6	4207.1	1025.2	532.0	449.9	421.3	405.7	386.7	363.4	346.9	344.3
52.5°	6943.5	4398.3	966.3	485.3	418.7	402.3	388.4	368.5	349.5	332.2	330.5
55°	7284.3	4553.1	862.5	441.2	391.0	385.8	372.0	346.9	321.0	306.3	304.5
57.5°	7611.3	4670.8	732.8	404.9	365.9	367.7	346.9	324.4	300.2	284.6	282.9
60°	8046.5	4828.2	601.3	371.1	339.1	344.3	321.8	305.4	275.1	255.2	252.6
62.5°	8742.1	5073.1	477.5	329.6	308.0	309.7	300.2	280.3	244.0	220.6	218.9
65°	9294.0	4983.1	376.3	284.6	272.5	275.1	275.1	253.5	214.6	187.7	185.1
67.5°	9231.7	4266.8	300.2	240.5	238.8	240.5	246.6	228.4	190.3	168.7	165.2
70°	8504.1	3393.9	240.5	199.8	207.6	203.3	220.6	208.5	171.3	149.7	147.1
72.5°	6939.1	2444.8	183.4	165.2	159.2	166.1	199.0	187.7	142.7	118.5	115.9
75°	4054.8	1304.6	136.7	130.6	115.1	138.4	176.5	160.0	109.0	87.4	84.8
77.5°	1320.2	455.1	100.4	96.0	85.6	111.6	150.5	135.0	89.1	69.2	66.6
80°	353.8	137.6	68.3	63.2	55.4	83.1	119.4	107.3	64.0	45.0	44.1
82.5°	141.9	58.0	39.8	35.5	30.3	57.1	94.3	86.5	47.6	28.5	28.5
85°	45.9	19.0	14.7	11.2	13.8	35.5	56.2	58.8	33.7	14.7	11.2
87.5°	6.1	2.6	2.6	3.5	2.6	6.1	17.3	16.4	9.5	1.7	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)