

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: P962397

Luminaire Tested: **NAV-SB2C-727-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962397
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2C-727-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10397.6 lumens
Efficiency: N/A
Efficacy: 103.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

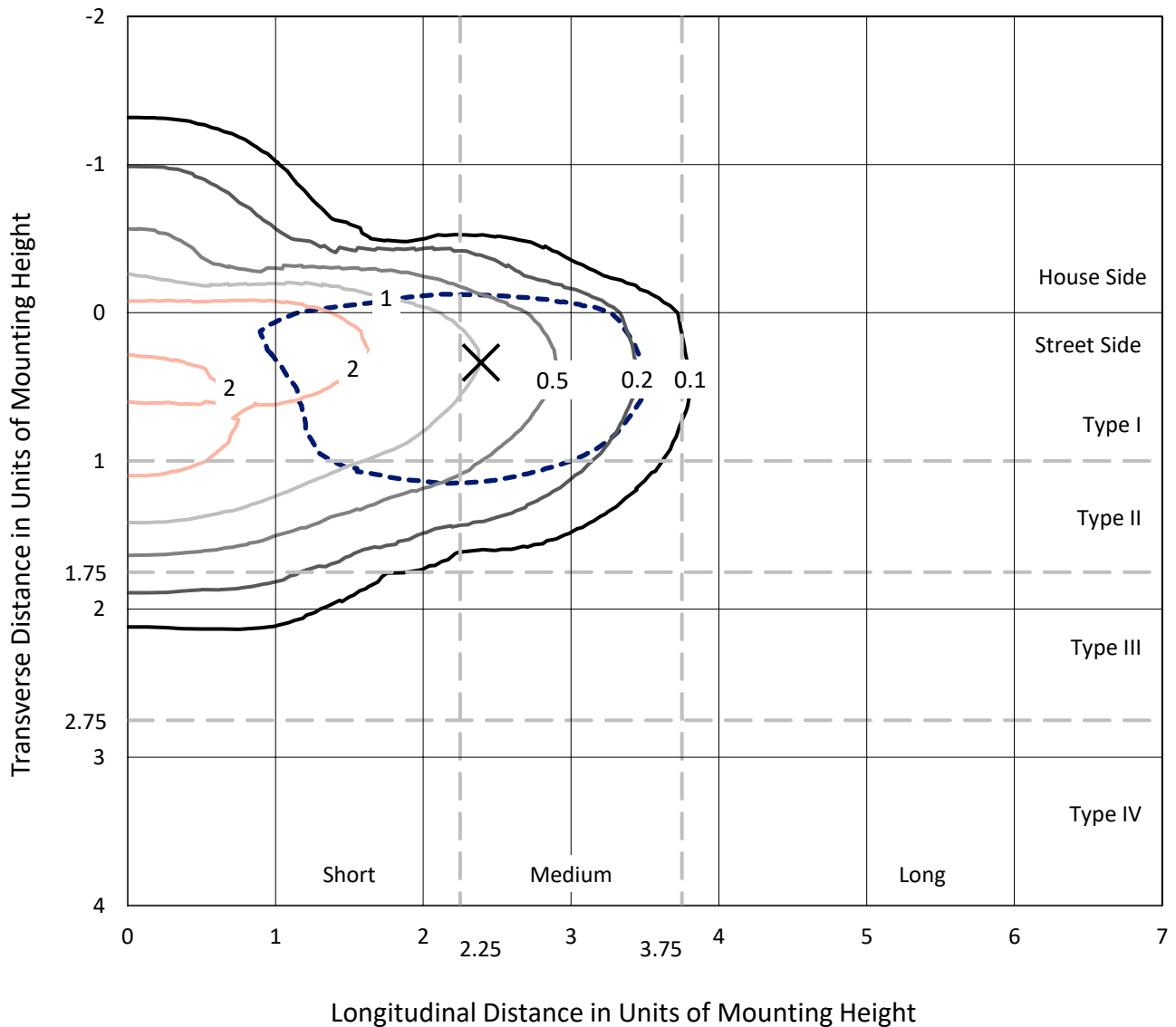
Input Watts (W): 100.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P962397
 CATALOG NUMBER: NAV-SB2C-727-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

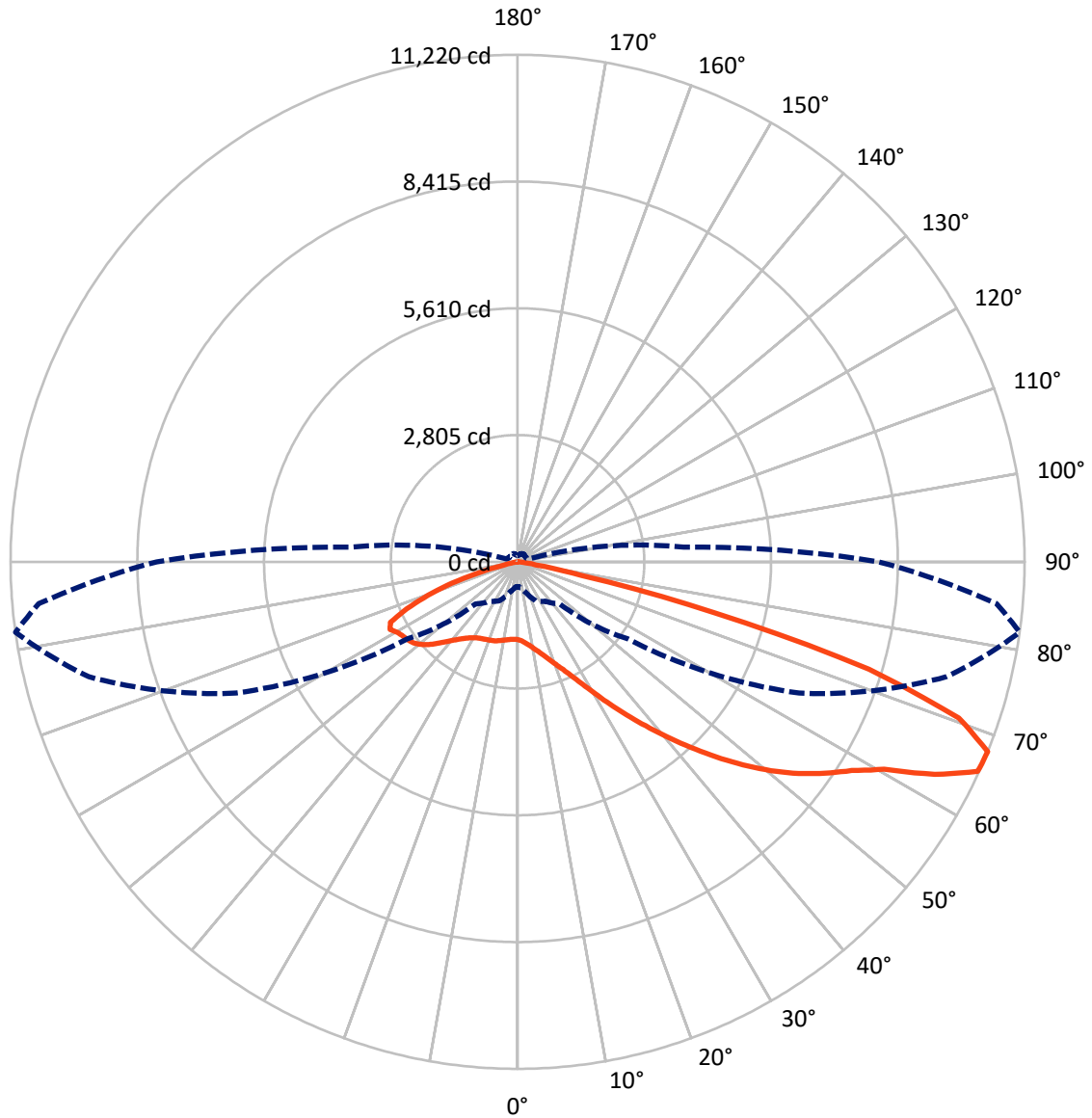
× Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P962397
CATALOG NUMBER: NAV-SB2C-727-U-T2-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P962397
 CATALOG NUMBER: NAV-SB2C-727-U-T2-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1883.4	0.0	1883.4
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	8514.2	0.0	8514.2
	% Fixture	81.9	0.0	81.9
Total	Lumens	10397.6	0.0	10397.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.5	1.5
10°-20°	398.8	3.8
20°-30°	638.7	6.1
30°-40°	1129.5	10.9
40°-50°	1979.0	19.0
50°-60°	2639.4	25.4
60°-70°	2457.1	23.6
70°-80°	943.1	9.1
80°-90°	58.6	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°	10397.6	100.0
0°-180°	10397.6	100.0

Coefficient of Utilization



REPORT NUMBER: P962397

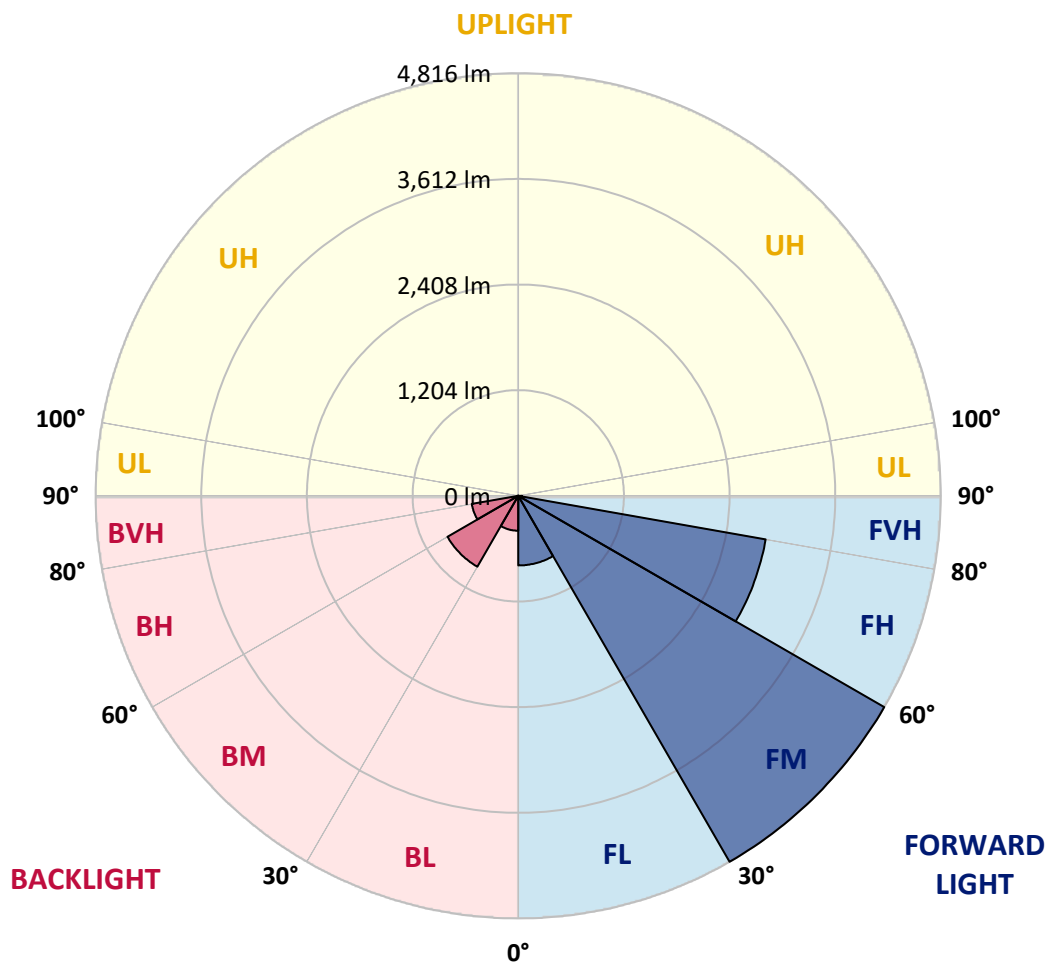
CATALOG NUMBER: NAV-SB2C-727-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	793.2	7.6			
FM (30°-60°)	4815.7	46.3			
FH (60°-80°)	2862.6	27.5			G2/5000
FVH (80°-90°)	42.6	0.4			G1/100
BL (0°-30°)	397.8	3.8	B1/500		
BM (30°-60°)	932.1	9.0	B1/1000		
BH (60°-80°)	537.6	5.2	B2/1000		G2/1000
BVH (80°-90°)	16.0	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: P962397
 CATALOG NUMBER: NAV-SB2C-727-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1722.5	1722.5	1722.5	1722.5	1722.5	1722.5	1722.5	1722.5	1722.5	1722.5	1722.5
2.5°	1820.6	1831.1	1825.1	1822.1	1816.8	1809.3	1803.4	1784.6	1765.2	1752.4	1747.9
5°	1857.3	1867.8	1867.0	1870.0	1873.7	1876.0	1874.5	1853.5	1825.8	1804.1	1791.4
7.5°	1825.8	1837.8	1847.6	1862.5	1888.8	1916.4	1929.9	1925.4	1897.0	1867.0	1851.3
10°	1736.8	1749.5	1772.7	1807.9	1863.2	1923.1	1973.3	1996.5	1978.6	1945.7	1923.9
12.5°	1573.6	1586.3	1631.9	1708.3	1801.1	1905.2	2001.0	2063.1	2067.6	2034.7	2009.2
15°	1390.1	1402.9	1451.5	1547.3	1688.9	1855.8	2016.0	2133.5	2173.2	2144.7	2114.1
17.5°	1276.3	1287.6	1324.3	1401.4	1548.9	1757.0	2010.7	2208.4	2299.0	2276.5	2239.8
20°	1241.9	1251.6	1268.8	1322.8	1445.6	1654.5	1976.3	2278.8	2434.5	2421.8	2380.6
22.5°	1278.6	1287.6	1292.8	1316.8	1393.9	1587.0	1932.8	2350.6	2591.6	2593.1	2543.0
25°	1363.2	1372.2	1366.2	1381.2	1414.8	1566.1	1916.4	2435.2	2789.3	2805.7	2748.8
27.5°	1502.4	1503.2	1489.0	1488.2	1493.4	1597.6	1933.7	2525.8	3038.6	3069.3	2998.9
30°	1781.7	1770.5	1715.7	1656.6	1629.7	1691.9	1981.5	2632.8	3332.8	3387.4	3299.1
32.5°	2212.2	2195.7	2095.3	1953.9	1811.6	1843.8	2067.6	2754.9	3653.2	3752.0	3644.2
35°	2679.2	2674.7	2570.0	2359.5	2111.1	2060.1	2207.6	2915.1	4002.7	4160.0	4031.9
37.5°	3113.4	3111.2	3051.3	2803.5	2501.1	2361.8	2432.2	3124.6	4377.1	4604.6	4453.4
40°	3510.2	3516.9	3457.0	3235.4	2930.8	2748.8	2737.7	3383.6	4793.3	5089.0	4909.3
42.5°	3853.1	3860.6	3799.9	3636.0	3355.2	3177.1	3112.7	3701.1	5199.8	5609.3	5396.6
45°	4085.9	4132.3	4123.3	3992.3	3791.0	3606.1	3563.3	4099.4	5663.1	6161.0	5911.7
47.5°	4151.8	4194.4	4261.7	4279.8	4157.0	3975.1	4026.0	4579.2	6131.8	6713.4	6429.7
50°	3989.3	4029.0	4169.0	4355.3	4440.7	4384.5	4475.9	5093.4	6611.7	7264.4	6938.0
52.5°	3668.9	3709.3	3886.0	4181.0	4529.1	4705.7	4927.3	5600.3	7076.5	7786.2	7419.4
55°	3205.5	3248.2	3475.0	3808.9	4360.6	4838.2	5303.9	6106.3	7502.5	8255.6	7853.6
57.5°	2575.2	2606.7	2842.4	3309.5	3936.9	4706.5	5581.5	6658.8	7903.8	8716.7	8284.0
60°	1678.3	1706.0	1980.1	2501.1	3234.7	4266.3	5637.0	7274.9	8436.8	9316.3	8864.2
62.5°	1116.1	1134.9	1297.3	1679.9	2278.0	3421.1	5312.8	7766.7	9218.2	10359.9	9859.1
65°	765.8	784.5	947.0	1213.5	1471.8	2263.0	4380.8	7701.6	9926.4	11188.6	10596.4
67.5°	546.4	562.2	700.0	951.5	1065.3	1314.6	2969.7	6869.1	9824.6	11220.1	10636.1
70°	391.5	400.5	514.2	741.1	846.6	789.8	1651.4	5253.6	8602.2	10360.6	9826.2
72.5°	274.0	277.0	357.1	564.5	681.9	576.5	786.1	3502.7	6506.1	8132.0	7617.8
75°	185.6	189.4	240.3	414.0	547.2	440.1	416.3	1878.2	3819.4	4501.3	4034.9
77.5°	113.8	115.3	155.0	283.0	409.5	335.4	268.0	795.8	1477.7	1450.8	1236.7
80°	64.4	64.4	98.8	175.9	279.2	216.4	187.9	338.4	467.9	411.0	362.3
82.5°	36.0	36.7	71.9	109.3	184.9	128.0	103.3	156.4	202.1	179.0	155.7
85°	15.0	16.5	44.2	51.7	88.4	63.7	41.9	65.9	74.8	66.6	48.7
87.5°	1.5	2.3	13.4	9.7	10.5	12.7	5.9	12.7	10.5	10.5	7.5
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: P962397
 CATALOG NUMBER: NAV-SB2C-727-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1722.5	1722.5	1722.5	1722.5	1722.5	1722.5	1722.5	1722.5	1722.5	1722.5	1722.5
2.5°	1733.8	1722.5	1694.1	1661.1	1617.8	1596.7	1568.4	1548.9	1532.4	1533.9	1518.9
5°	1767.4	1739.0	1675.4	1596.0	1497.2	1426.8	1352.0	1300.3	1258.4	1249.4	1229.2
7.5°	1813.8	1768.9	1657.4	1514.4	1347.5	1221.0	1107.9	1035.4	983.7	967.2	950.7
10°	1873.7	1808.6	1634.2	1411.8	1171.6	1010.6	889.3	832.4	797.2	785.3	776.3
12.5°	1943.4	1854.3	1603.5	1286.9	990.4	835.5	758.3	729.9	718.6	714.9	712.7
15°	2030.9	1911.2	1557.1	1138.7	836.9	728.4	695.5	691.7	693.2	691.7	691.0
17.5°	2135.0	1973.3	1481.4	985.9	733.6	673.7	661.7	664.7	668.5	667.8	666.2
20°	2248.7	2034.7	1384.9	850.4	663.3	634.8	628.1	631.1	634.1	632.5	631.8
22.5°	2378.3	2100.5	1277.9	744.9	616.1	598.9	591.4	592.1	592.1	589.2	587.6
25°	2533.3	2173.2	1165.5	670.0	580.2	566.7	557.7	554.7	550.2	541.2	539.8
27.5°	2718.2	2250.3	1057.8	617.6	551.8	538.9	528.5	521.0	509.8	494.9	493.3
30°	2926.3	2343.9	966.5	584.7	529.3	516.5	504.6	493.3	476.8	458.2	456.6
32.5°	3171.0	2444.2	899.8	562.9	509.0	495.6	481.3	467.9	449.9	431.2	431.9
35°	3463.1	2565.5	860.9	548.0	493.3	475.4	459.6	444.6	431.2	414.7	413.2
37.5°	3779.7	2694.2	848.9	540.5	482.9	455.1	437.2	426.7	425.2	415.4	414.7
40°	4126.2	2846.9	857.9	536.0	471.6	435.7	416.3	414.0	417.7	400.5	401.3
42.5°	4493.1	3028.1	872.9	530.7	455.9	416.3	397.5	397.5	394.5	370.5	370.5
45°	4889.9	3237.0	887.9	518.0	437.2	396.8	382.5	377.3	364.6	341.3	340.6
47.5°	5289.6	3449.5	899.0	494.9	414.7	380.3	367.6	355.6	336.9	315.9	315.2
50°	5669.2	3640.5	887.1	460.4	389.3	364.6	351.1	334.7	314.4	300.2	298.0
52.5°	6008.2	3805.9	836.2	419.9	362.3	348.1	336.1	318.9	302.5	287.5	286.0
55°	6303.2	3939.9	746.4	381.8	338.4	333.8	321.8	300.2	277.8	265.0	263.5
57.5°	6586.2	4041.7	634.1	350.3	316.6	318.2	300.2	280.7	259.7	246.3	244.8
60°	6962.7	4177.9	520.3	321.1	293.5	298.0	278.5	264.2	238.0	220.9	218.6
62.5°	7564.6	4389.8	413.2	285.3	266.5	268.0	259.7	242.5	211.2	190.9	189.4
65°	8042.3	4312.0	325.6	246.3	235.9	238.0	238.0	219.4	185.6	162.5	160.2
67.5°	7988.3	3692.0	259.7	208.1	206.6	208.1	213.3	197.6	164.7	146.0	143.0
70°	7358.8	2936.7	208.1	172.9	179.7	175.9	190.9	180.4	148.2	129.5	127.3
72.5°	6004.6	2115.5	158.7	143.0	137.8	143.7	172.2	162.5	123.5	102.6	100.3
75°	3508.7	1128.9	118.3	113.1	99.5	119.8	152.7	138.5	94.3	75.6	73.4
77.5°	1142.4	393.8	86.8	83.1	74.1	96.6	130.3	116.7	77.1	59.9	57.6
80°	306.2	119.0	59.1	54.6	47.9	71.9	103.3	92.9	55.4	38.9	38.1
82.5°	122.8	50.1	34.4	30.6	26.2	49.4	81.6	74.8	41.2	24.7	24.7
85°	39.7	16.5	12.7	9.7	12.0	30.6	48.7	50.9	29.2	12.7	9.7
87.5°	5.2	2.3	2.3	3.0	2.3	5.2	15.0	14.2	8.2	1.5	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)