

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: P961569

Luminaire Tested: **NAV-SB2A-830-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961569
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-830-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8267.6 lumens
Efficiency: N/A
Efficacy: 144.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

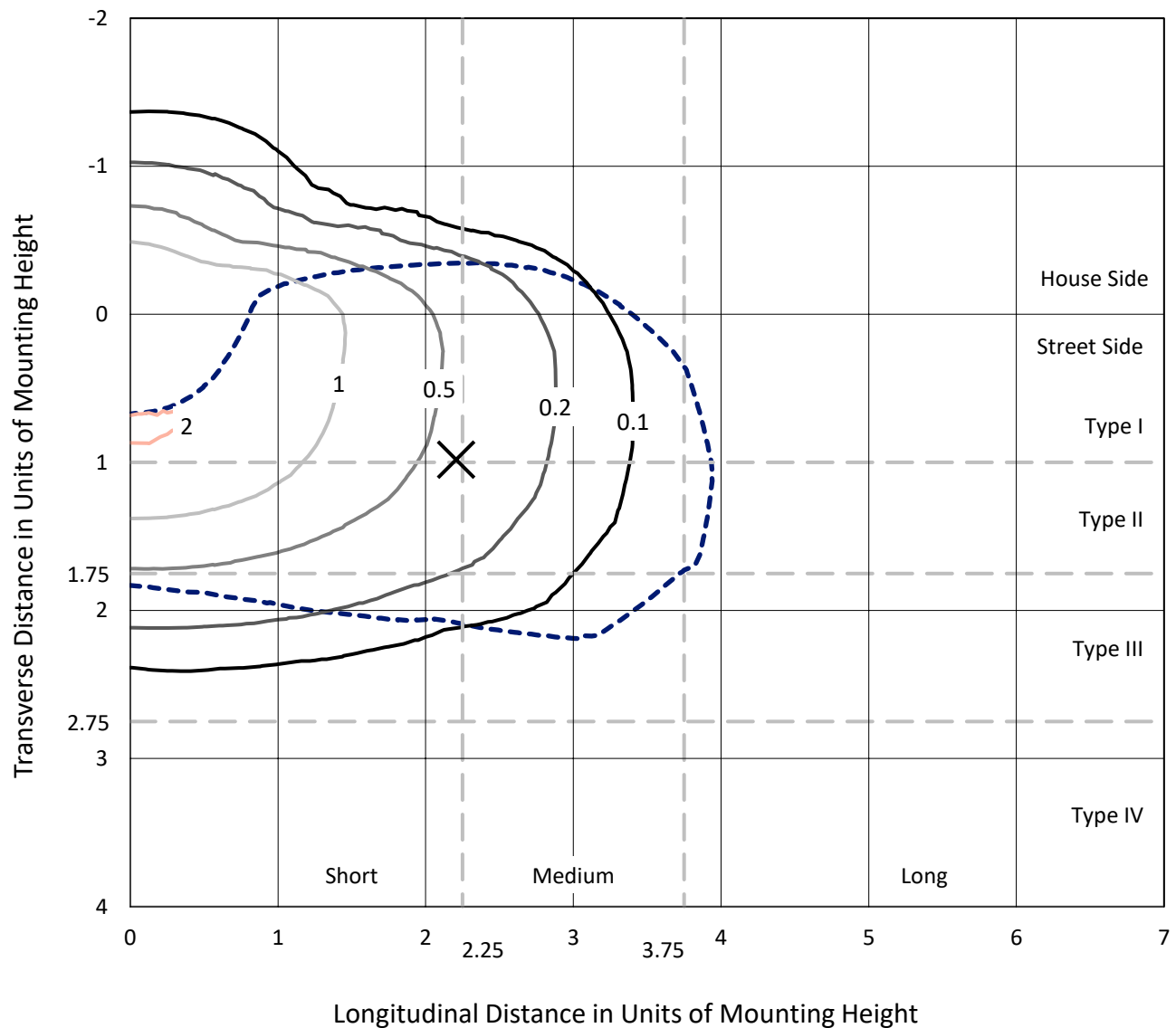
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

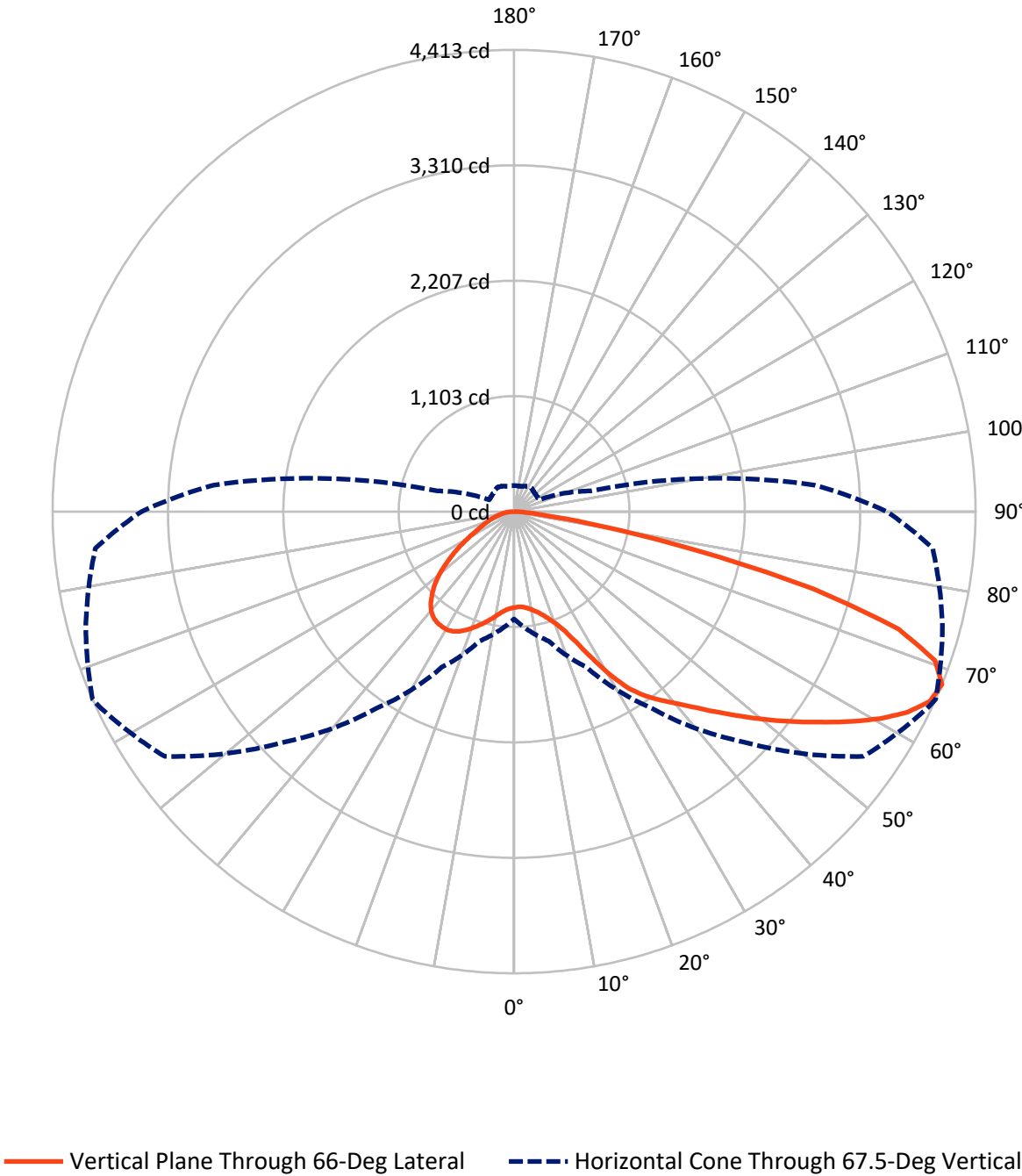
× Max cd
- - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2055.7	0.0	2055.7
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	6211.9	0.0	6211.9
	% Fixture	75.1	0.0	75.1
Total	Lumens	8267.6	0.0	8267.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.9	1.1
10°-20°	300.4	3.6
20°-30°	579.0	7.0
30°-40°	1015.1	12.3
40°-50°	1509.1	18.3
50°-60°	1913.0	23.1
60°-70°	1871.8	22.6
70°-80°	892.9	10.8
80°-90°	95.4	1.2
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°	8267.6	100.0
0°-180°	8267.6	100.0

Coefficient of Utilization



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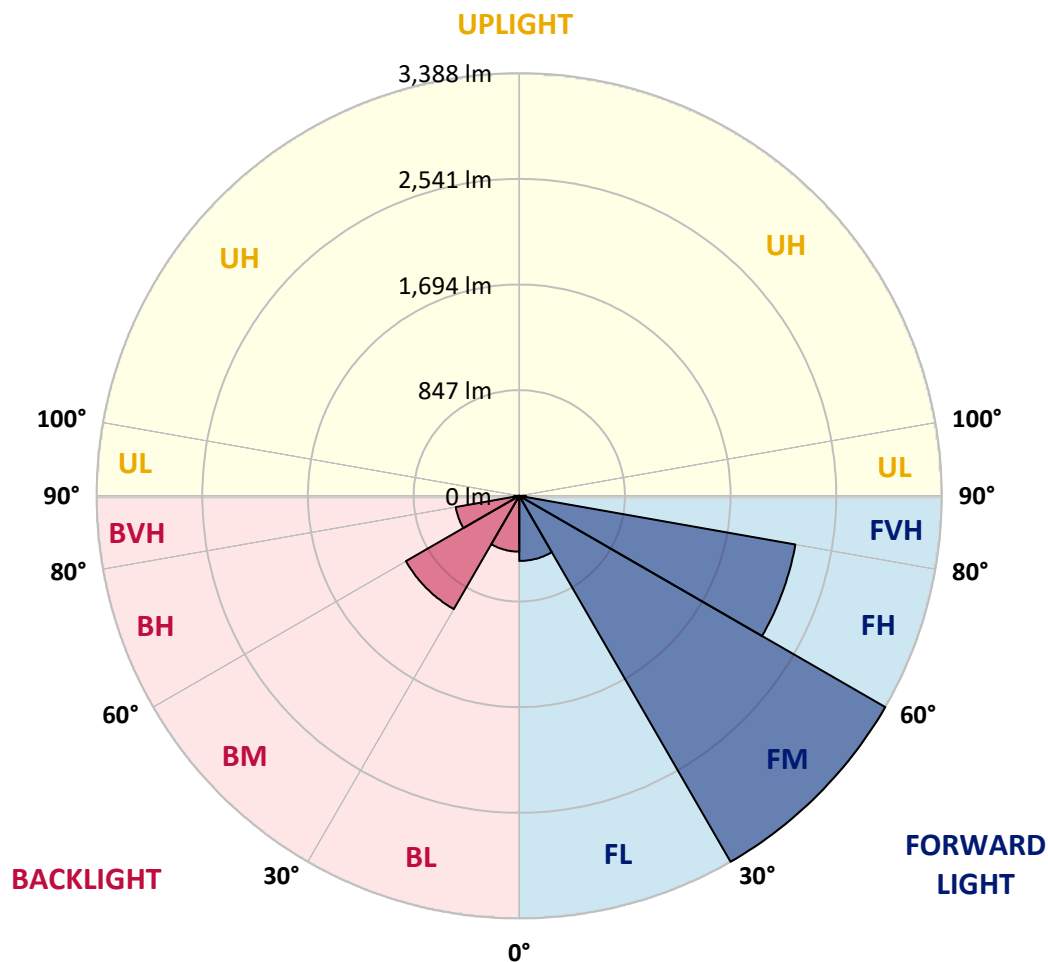
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	522.4	6.3			
FM	(30°-60°)	3388.0	41.0			
FH	(60°-80°)	2247.4	27.2			G2/5000
FVH	(80°-90°)	54.1	0.7			G1/100
BL	(0°-30°)	447.8	5.4	B1/500		
BM	(30°-60°)	1049.3	12.7	B2/2500		
BH	(60°-80°)	517.3	6.3	B2/1000		G2/1000
BVH	(80°-90°)	41.3	0.5			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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	917.0	917.0	917.0	917.0	917.0	917.0	917.0	917.0	917.0	917.0	917.0
2.5°	907.4	912.7	911.3	909.2	908.8	909.6	910.9	912.2	911.7	914.0	917.4
5°	904.9	910.0	909.6	909.6	911.3	914.8	917.0	919.1	917.0	919.6	924.3
7.5°	906.6	910.5	912.2	914.0	918.3	924.9	930.0	934.8	932.2	935.2	941.4
10°	928.8	931.7	933.5	933.5	936.5	943.9	949.1	957.9	955.6	960.4	968.2
12.5°	969.1	972.1	972.1	970.5	972.6	977.3	979.1	988.7	984.7	992.6	1000.4
15°	1018.6	1024.7	1020.0	1016.9	1017.7	1022.5	1022.1	1029.5	1025.6	1032.1	1039.0
17.5°	1073.4	1081.2	1073.4	1073.0	1071.2	1076.5	1076.9	1083.3	1076.5	1081.2	1086.0
20°	1138.1	1148.9	1142.5	1144.6	1140.7	1142.9	1145.0	1154.6	1143.7	1147.2	1145.9
22.5°	1229.3	1242.3	1235.4	1243.6	1241.1	1239.3	1238.9	1255.8	1238.9	1240.1	1227.5
25°	1362.2	1377.9	1365.7	1377.0	1377.0	1382.6	1389.2	1410.9	1382.6	1374.4	1341.8
27.5°	1558.6	1574.2	1550.3	1557.3	1555.1	1569.0	1562.1	1615.9	1585.5	1572.0	1506.4
30°	1794.9	1822.7	1777.6	1775.8	1773.6	1795.8	1805.7	1841.4	1810.6	1797.0	1718.0
32.5°	2050.3	2079.4	2025.5	2009.9	2001.6	2015.2	2006.8	2035.5	2014.2	1993.4	1895.6
35°	2320.5	2349.2	2297.9	2267.5	2234.5	2206.2	2176.7	2184.1	2164.1	2132.4	2031.2
37.5°	2575.9	2628.5	2574.2	2541.6	2480.8	2425.7	2343.0	2308.8	2290.1	2260.9	2158.9
40°	2836.1	2866.1	2824.8	2797.0	2731.0	2644.5	2512.5	2439.9	2414.8	2386.5	2300.1
42.5°	3027.6	3056.3	3034.2	3015.0	2963.4	2863.0	2692.4	2601.6	2565.1	2533.4	2459.9
45°	3179.8	3201.0	3187.1	3194.0	3171.9	3074.6	2878.7	2774.9	2737.1	2698.4	2640.6
47.5°	3240.9	3263.6	3285.7	3326.9	3364.8	3293.1	3078.9	2962.6	2922.6	2883.0	2826.1
50°	3234.0	3257.0	3321.3	3409.0	3526.3	3502.4	3290.0	3162.3	3125.4	3080.2	3027.6
52.5°	3178.4	3204.5	3287.0	3432.9	3619.8	3659.2	3505.1	3368.7	3333.9	3280.1	3227.5
55°	3032.5	3048.1	3171.9	3378.7	3641.9	3768.7	3715.7	3588.4	3553.7	3478.5	3421.2
57.5°	2761.9	2784.4	2964.7	3232.2	3586.3	3843.0	3900.8	3819.6	3786.1	3678.0	3618.0
60°	2408.6	2444.7	2651.1	2986.4	3444.7	3842.6	4068.9	4046.8	4018.9	3874.3	3811.8
62.5°	2009.0	2050.7	2249.3	2638.9	3197.1	3733.6	4174.0	4237.0	4222.7	4055.4	3975.5
65°	1542.9	1571.6	1769.3	2189.3	2811.8	3499.5	4186.2	4366.9	4369.5	4193.2	4061.0
67.5°	1027.4	1109.9	1281.5	1642.9	2295.7	3116.7	4079.3	4388.2	4413.3	4240.5	4018.1
70°	501.3	609.9	778.0	1067.7	1642.9	2529.9	3800.0	4213.6	4269.6	4102.4	3761.7
72.5°	208.1	243.2	334.9	527.0	943.1	1707.1	3238.8	3740.1	3843.9	3635.0	3162.7
75°	140.3	152.0	191.6	270.2	429.6	841.8	2335.7	2788.7	2956.0	2745.4	2244.0
77.5°	108.1	115.5	139.4	188.9	255.4	318.4	1250.2	1680.7	1767.1	1635.9	1167.7
80°	85.2	90.8	104.2	137.7	181.1	170.3	426.1	761.5	811.4	680.7	375.4
82.5°	73.8	76.1	74.7	93.4	120.3	99.4	139.9	281.1	310.2	225.0	122.5
85°	53.4	59.6	62.1	57.8	63.9	50.4	57.3	99.4	109.5	97.8	69.1
87.5°	21.7	32.2	39.6	37.3	23.5	14.3	17.8	29.1	33.4	36.5	22.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	917.0	917.0	917.0	917.0	917.0	917.0	917.0	917.0	917.0	917.0	917.0
2.5°	917.9	920.9	923.1	925.7	927.4	930.0	935.2	938.3	938.7	940.8	940.4
5°	926.1	930.5	935.2	942.2	950.0	956.5	966.5	973.4	976.1	978.3	977.8
7.5°	943.9	950.0	958.7	970.9	982.2	990.9	1003.0	1011.3	1019.5	1022.5	1023.0
10°	970.5	979.1	991.7	1008.2	1020.4	1031.7	1044.3	1051.2	1059.4	1062.9	1064.7
12.5°	1003.5	1012.6	1029.1	1052.1	1063.3	1071.2	1075.5	1073.8	1075.5	1078.6	1079.4
15°	1041.2	1051.2	1069.9	1094.7	1102.5	1095.5	1086.0	1077.3	1075.9	1076.9	1079.8
17.5°	1086.0	1093.4	1115.1	1135.9	1130.3	1101.6	1080.8	1066.8	1060.0	1057.7	1060.8
20°	1148.5	1148.5	1166.3	1179.4	1141.5	1093.0	1060.4	1037.7	1023.5	1017.3	1016.1
22.5°	1224.6	1217.6	1228.9	1219.8	1139.4	1068.6	1023.5	984.3	962.6	953.9	952.6
25°	1321.0	1312.7	1309.6	1253.2	1123.8	1029.9	956.5	909.2	890.1	885.3	886.1
27.5°	1466.5	1445.7	1406.1	1271.4	1095.1	969.1	878.3	834.5	823.6	824.0	825.3
30°	1660.2	1618.6	1521.6	1274.5	1048.2	883.1	798.4	767.1	761.9	764.1	771.5
32.5°	1839.7	1800.1	1639.8	1260.5	976.1	798.9	726.7	705.9	698.0	700.7	704.2
35°	1980.4	1969.5	1749.3	1241.1	887.4	719.8	662.5	644.6	629.5	626.0	628.5
37.5°	2113.3	2108.9	1831.4	1213.7	799.7	663.8	610.8	587.3	565.2	553.0	553.4
40°	2259.2	2254.9	1885.3	1171.6	721.9	615.1	564.3	533.4	506.0	483.9	486.1
42.5°	2423.4	2397.8	1910.9	1111.2	655.9	573.8	526.4	484.8	448.7	428.3	429.6
45°	2602.9	2545.1	1910.4	1034.2	600.3	536.1	486.1	427.0	393.6	374.4	373.6
47.5°	2793.1	2685.8	1887.0	949.1	546.4	494.4	423.5	378.3	356.2	344.5	341.8
50°	2989.4	2817.4	1847.0	851.4	491.3	447.0	384.5	353.6	336.6	325.7	321.8
52.5°	3174.1	2936.9	1798.8	740.7	435.2	401.0	367.1	343.2	325.3	313.2	308.0
55°	3345.6	3039.8	1730.6	627.3	389.6	370.1	358.9	338.9	318.4	304.1	298.4
57.5°	3498.1	3106.8	1612.8	520.8	357.1	348.8	350.1	331.5	308.0	295.8	288.0
60°	3624.9	3155.9	1438.7	422.2	330.6	328.0	336.6	317.5	290.2	276.2	270.2
62.5°	3701.0	3155.0	1225.0	345.7	308.0	308.8	318.9	300.1	272.3	259.3	255.4
65°	3694.5	3077.7	990.4	295.8	286.3	287.1	300.1	281.1	257.6	249.8	249.4
67.5°	3563.7	2889.1	759.7	263.2	262.4	266.3	281.5	268.0	248.5	247.6	248.9
70°	3209.7	2497.7	547.3	237.2	237.6	243.2	263.2	259.7	243.6	245.4	245.0
72.5°	2573.8	1904.3	367.5	209.8	210.2	219.4	245.9	253.3	238.9	261.9	265.4
75°	1714.1	1187.6	236.3	180.7	181.1	192.9	230.6	240.7	225.9	261.1	263.2
77.5°	823.6	533.8	171.2	152.0	152.0	162.9	199.4	215.5	192.4	202.8	185.9
80°	284.5	200.7	134.7	122.5	119.9	127.3	168.1	186.8	165.9	152.9	143.4
82.5°	112.0	104.2	108.1	95.1	86.4	91.2	130.8	154.2	122.1	110.3	109.9
85°	64.3	67.8	76.5	62.9	49.9	56.1	96.0	110.8	92.0	81.2	82.9
87.5°	17.4	23.9	35.2	32.6	22.5	23.9	45.6	61.3	53.0	40.8	42.1
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)