

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: P882123

Luminaire Tested: **NAV-SB1D-835-U-SL4-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882123
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-10)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-835-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5999 lumens
Efficiency: N/A
Efficacy: 75.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

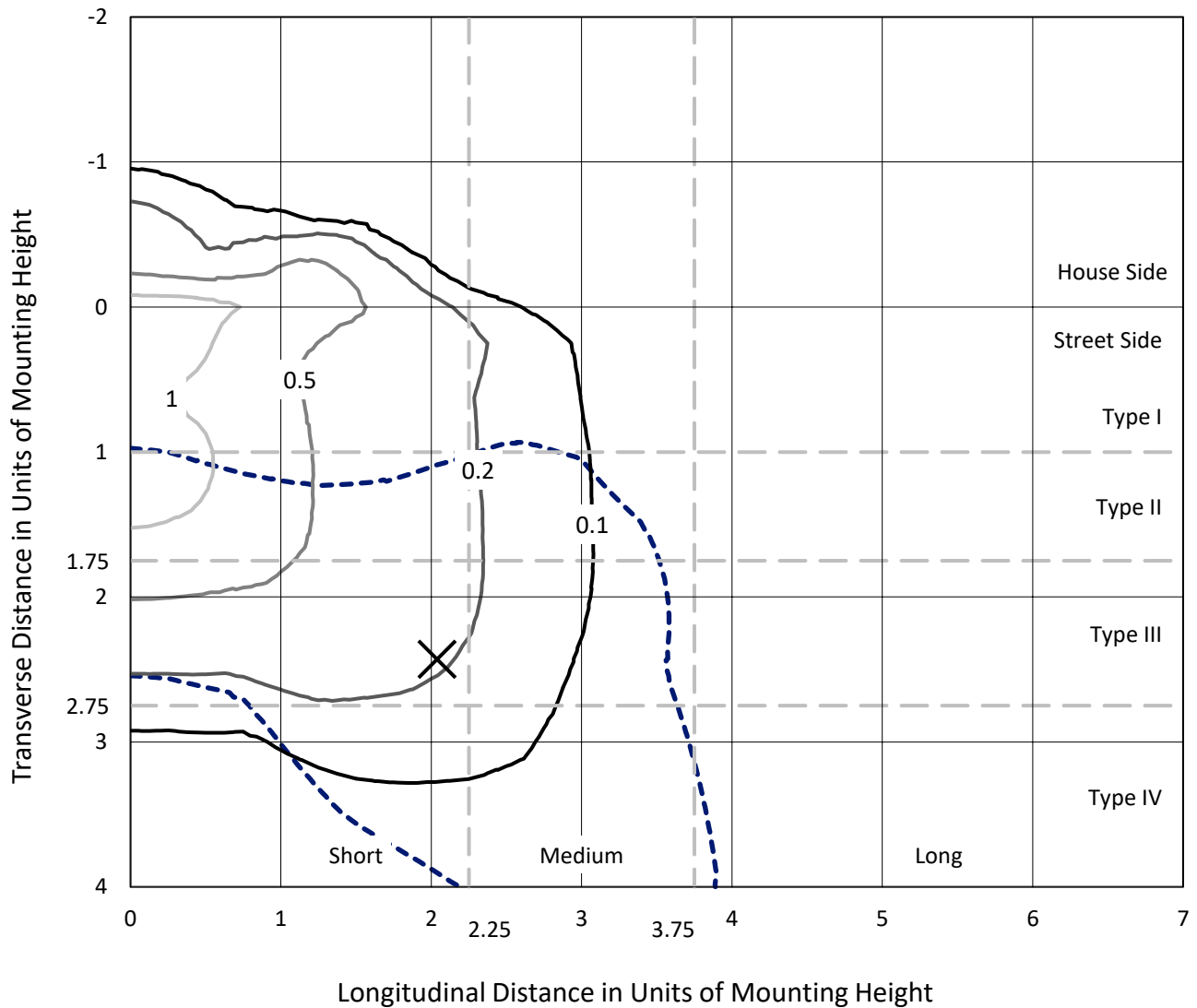
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P882123
 CATALOG NUMBER: NAV-SB1D-835-U-SL4-HSS

Iso-Footcandle Lines of Horizontal Illumination

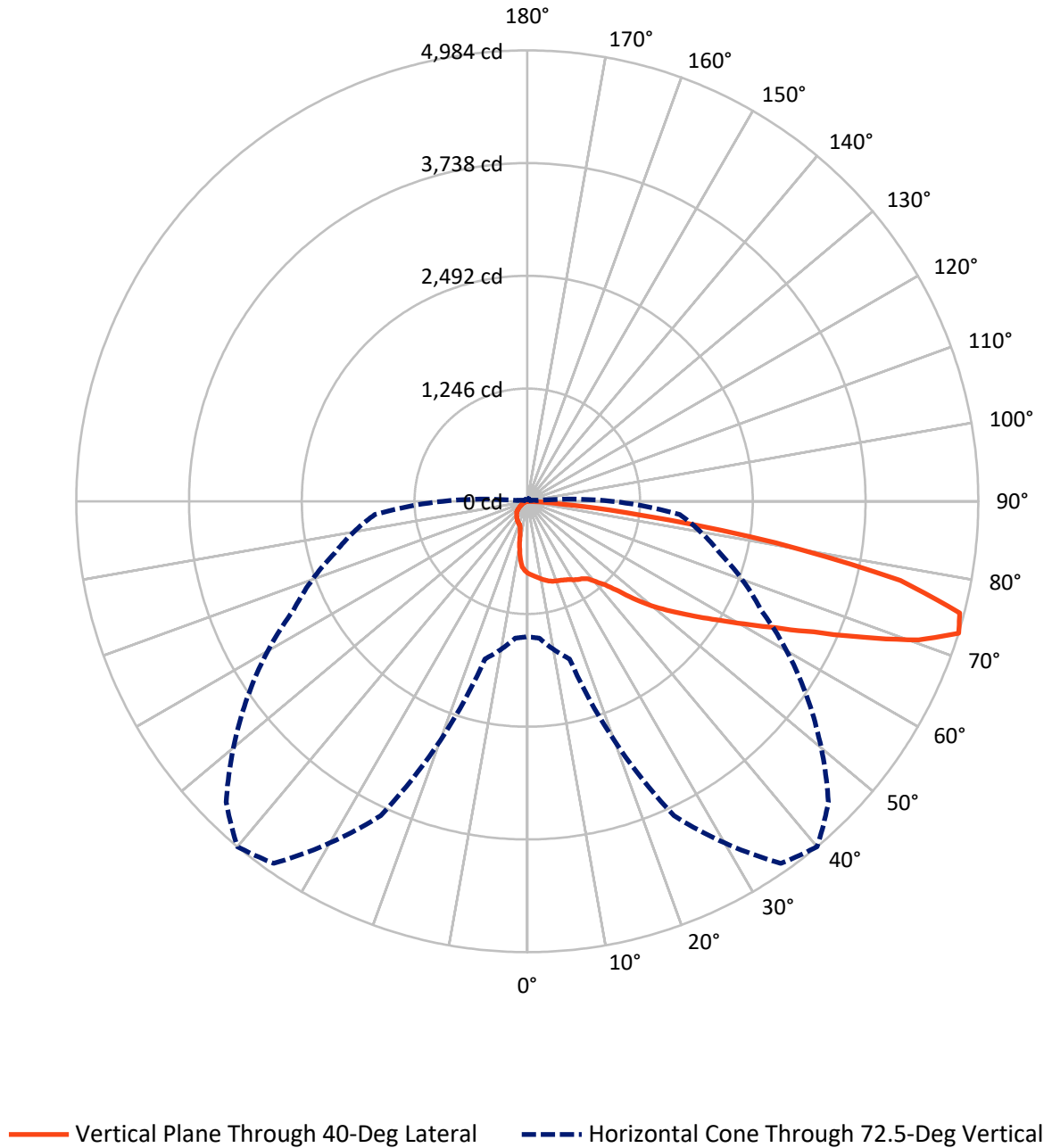
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 fc
 Type IV - Short - N/A

REPORT NUMBER: P882123
CATALOG NUMBER: NAV-SB1D-835-U-SL4-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P882123

CATALOG NUMBER: NAV-SB1D-835-U-SL4-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	774.7	0.0	774.7
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	5224.3	0.0	5224.3
	% Fixture	87.1	0.0	87.1
Total	Lumens	5999.0	0.0	5999.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.5	1.2
10°-20°	197.0	3.3
20°-30°	318.8	5.3
30°-40°	470.6	7.8
40°-50°	792.0	13.2
50°-60°	1229.8	20.5
60°-70°	1538.9	25.7
70°-80°	1259.9	21.0
80°-90°	119.5	2.0
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°	5999.0	100.0
0°-180°	5999.0	100.0

Coefficient of Utilization



REPORT NUMBER: P882123

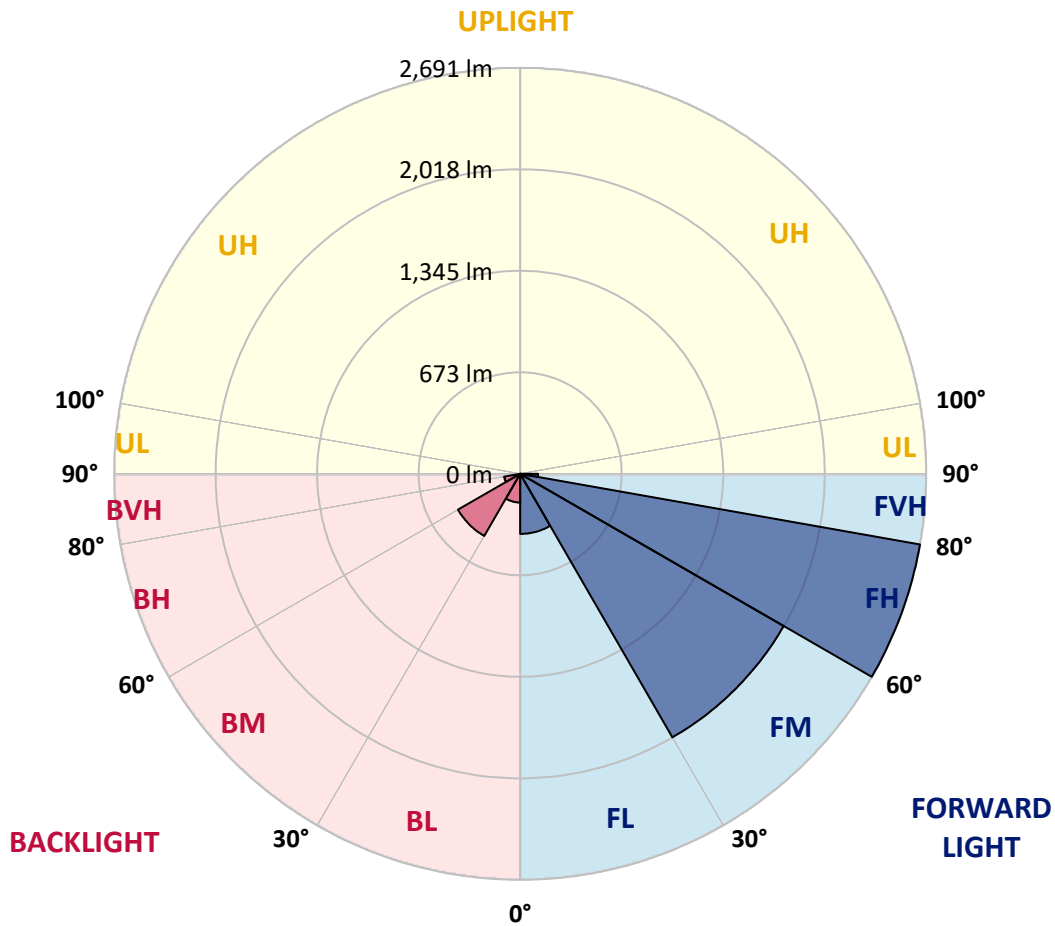
CATALOG NUMBER: NAV-SB1D-835-U-SL4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	398.2	6.6			
FM (30°-60°)	2016.8	33.6			
FH (60°-80°)	2690.8	44.9			G2/5000
FVH (80°-90°)	118.6	2.0			G2/225
BL (0°-30°)	190.1	3.2	B1/500		
BM (30°-60°)	475.7	7.9	B1/1000		
BH (60°-80°)	107.9	1.8	B0/110		G0/110
BVH (80°-90°)	0.9	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 IV Short



REPORT NUMBER: P882123

CATALOG NUMBER: NAV-SB1D-835-U-SL4-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	794.3	794.3	794.3	794.3	794.3	794.3	794.3	794.3	794.3	794.3	794.3
2.5°	818.3	821.4	819.6	816.0	815.1	813.3	811.0	810.1	807.0	804.3	801.1
5°	841.3	844.5	842.2	837.2	835.0	832.7	829.6	826.8	820.5	814.6	807.4
7.5°	866.6	869.3	866.6	859.4	855.8	853.1	848.5	844.5	837.2	828.7	819.6
10°	894.6	896.9	892.8	883.3	877.5	873.4	869.3	864.8	858.0	848.5	837.7
12.5°	920.8	923.5	917.2	905.9	899.1	895.1	890.6	886.9	880.2	871.1	859.8
15°	944.8	948.8	938.0	925.8	918.1	915.0	910.4	908.2	903.7	897.3	886.9
17.5°	962.8	965.6	954.3	939.8	931.2	929.0	925.8	927.2	926.3	923.1	916.3
20°	978.2	980.0	965.1	947.5	938.0	938.4	937.5	942.1	943.9	943.9	943.4
22.5°	997.2	997.6	978.7	956.5	945.2	948.4	949.7	954.7	958.3	961.9	970.1
25°	1022.0	1021.1	998.5	968.3	958.3	962.8	966.0	967.8	971.9	977.8	996.3
27.5°	1059.1	1056.4	1027.5	987.2	975.5	979.6	985.4	984.5	982.7	987.2	1018.4
30°	1106.1	1102.5	1064.1	1013.9	1003.1	1006.7	1008.5	1000.4	987.2	991.3	1037.9
32.5°	1180.6	1174.3	1121.0	1043.7	1027.0	1031.1	1028.8	1012.1	992.7	996.7	1057.3
35°	1310.3	1294.9	1219.5	1106.1	1054.1	1049.6	1044.2	1027.9	1004.0	999.9	1073.5
37.5°	1585.9	1558.8	1430.0	1227.6	1115.6	1086.2	1069.5	1053.2	1016.2	999.9	1092.1
40°	1896.8	1869.2	1720.6	1430.9	1217.7	1168.0	1128.2	1083.0	1028.8	1005.8	1121.0
42.5°	2221.2	2190.9	2038.2	1683.1	1363.6	1261.5	1187.4	1107.0	1049.6	1023.8	1159.4
45°	2583.6	2545.6	2345.9	1946.0	1575.5	1416.9	1282.7	1156.2	1085.7	1055.9	1211.8
47.5°	2965.8	2916.6	2652.7	2201.3	1803.7	1632.0	1457.2	1244.3	1139.1	1103.8	1282.7
50°	3304.7	3255.9	2969.4	2468.3	2017.0	1836.7	1656.0	1366.3	1219.0	1171.6	1378.1
52.5°	3548.2	3511.2	3257.7	2744.0	2238.8	2028.7	1836.2	1508.2	1320.2	1258.3	1490.6
55°	3711.3	3677.4	3461.9	3005.1	2496.8	2240.2	2013.8	1662.3	1442.2	1362.3	1614.8
57.5°	3810.3	3790.8	3609.7	3238.3	2752.5	2471.5	2217.1	1831.7	1585.9	1484.7	1753.6
60°	3845.5	3829.7	3701.4	3460.6	3061.6	2749.4	2456.1	2022.8	1760.3	1623.9	1895.9
62.5°	3751.5	3754.7	3767.4	3724.0	3387.4	3074.7	2742.6	2252.4	1953.7	1781.6	2029.6
65°	3309.2	3335.4	3575.8	4015.9	3818.9	3482.2	3107.2	2532.5	2175.1	1960.9	2135.8
67.5°	2739.9	2777.8	3077.0	4186.7	4278.8	4011.3	3615.1	2889.4	2439.0	2143.5	2176.0
70°	2097.4	2138.1	2500.4	4151.0	4709.4	4589.7	4243.1	3343.5	2712.3	2270.0	2073.4
72.5°	1496.9	1517.7	1803.3	3833.3	4886.1	4983.7	4705.8	3773.7	2851.9	2200.0	1691.2
75°	1051.9	1048.2	1237.6	3086.9	4610.9	4935.8	4543.6	3541.0	2580.9	1747.7	1042.8
77.5°	458.2	459.1	618.1	1874.6	3680.2	4215.6	3776.8	2218.0	1799.2	926.3	440.1
80°	118.8	122.4	226.8	746.4	2215.8	2782.4	2303.4	975.0	831.4	225.9	84.0
82.5°	42.0	44.7	104.4	234.5	817.4	1276.0	1025.7	311.8	216.9	64.6	22.6
85°	12.2	14.5	56.0	71.8	169.0	360.6	249.0	60.5	53.3	33.4	5.9
87.5°	0.0	1.8	11.3	9.9	9.9	6.8	12.7	6.8	8.6	4.1	1.8
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: P882123

CATALOG NUMBER: NAV-SB1D-835-U-SL4-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	794.3	794.3	794.3	794.3	794.3	794.3	794.3	794.3	794.3	794.3	794.3
2.5°	798.4	795.2	788.4	781.2	774.4	768.1	766.3	759.5	756.4	756.8	756.4
5°	802.4	796.6	783.5	767.7	751.4	732.9	717.5	695.8	677.3	675.0	673.7
7.5°	813.3	803.8	782.6	751.8	711.2	660.1	612.7	565.7	539.0	524.6	523.7
10°	830.0	817.4	784.8	726.1	639.8	548.5	476.7	417.5	387.2	373.2	370.5
12.5°	849.9	835.9	788.4	682.3	547.6	427.9	350.2	314.0	307.7	306.8	306.3
15°	877.9	862.5	792.5	623.1	447.8	325.8	290.1	290.5	295.5	298.2	297.8
17.5°	909.1	893.7	786.6	550.8	349.3	278.3	277.4	281.5	288.7	291.4	291.0
20°	940.7	926.3	765.9	465.8	282.4	265.2	268.8	273.4	280.6	284.2	284.2
22.5°	973.2	960.6	732.9	375.5	254.8	255.7	260.3	264.8	272.9	277.0	277.0
25°	1008.0	997.2	689.0	300.9	243.1	245.8	251.7	257.1	265.7	270.6	270.6
27.5°	1043.3	1035.1	639.3	251.2	232.2	235.4	242.2	249.4	258.0	263.9	264.3
30°	1081.7	1077.2	599.6	232.7	221.8	224.6	232.2	240.4	249.9	257.1	258.0
32.5°	1121.0	1120.1	580.1	246.2	212.4	214.2	220.9	229.1	240.8	249.9	250.8
35°	1159.8	1161.7	568.9	284.7	209.2	204.2	208.7	216.0	230.0	241.3	243.1
37.5°	1209.5	1214.1	568.4	326.2	216.9	194.3	197.4	202.4	214.6	227.7	230.0
40°	1283.6	1307.6	597.3	361.9	230.4	185.3	186.2	187.1	193.4	204.2	207.8
42.5°	1382.1	1452.2	701.7	386.3	235.9	177.1	174.0	169.0	168.1	174.0	177.1
45°	1504.6	1627.0	885.1	399.9	230.4	168.1	159.5	146.4	141.4	145.5	145.5
47.5°	1648.7	1818.6	1102.5	403.0	221.4	156.8	141.4	124.3	120.2	121.5	121.1
50°	1789.2	1962.3	1293.6	376.8	206.5	142.3	121.5	107.1	104.4	104.8	104.8
52.5°	1913.5	2011.5	1347.8	314.9	186.6	124.7	104.4	94.4	92.6	92.6	92.2
55°	1995.7	1958.2	1201.9	240.8	161.8	106.6	89.5	84.5	83.6	83.1	82.2
57.5°	2012.9	1784.7	907.7	174.0	126.5	89.9	79.5	76.8	75.0	73.2	72.3
60°	1951.5	1495.6	577.9	121.5	94.9	76.8	70.5	68.7	65.1	61.4	60.1
62.5°	1818.6	1129.6	319.9	84.5	76.4	65.5	62.4	60.1	53.3	47.4	45.6
65°	1640.1	750.9	141.4	66.0	62.4	55.1	53.3	50.2	42.0	35.2	33.9
67.5°	1460.8	432.4	63.7	52.9	50.2	45.2	43.8	41.6	35.7	29.4	28.5
70°	1256.1	219.1	43.8	42.0	38.9	34.3	35.7	35.2	29.4	23.9	23.0
72.5°	935.3	108.9	33.0	31.6	28.0	24.4	29.4	28.9	23.0	18.1	17.2
75°	529.5	53.8	23.9	22.1	16.7	18.1	23.5	22.1	15.8	11.7	10.8
77.5°	210.1	27.6	15.8	13.6	9.9	12.2	17.2	14.9	8.1	5.0	4.5
80°	48.3	13.6	8.1	5.9	4.5	7.2	9.0	5.4	2.3	0.5	0.0
82.5°	13.6	5.9	2.7	2.3	2.3	2.7	2.3	0.9	0.0	0.0	0.0
85°	4.5	2.7	0.9	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
87.5°	1.8	0.9	0.0	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)