

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: P961446

Luminaire Tested: **NAV-SB2A-740-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961446
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-740-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7365.7 lumens
Efficiency: N/A
Efficacy: 128.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

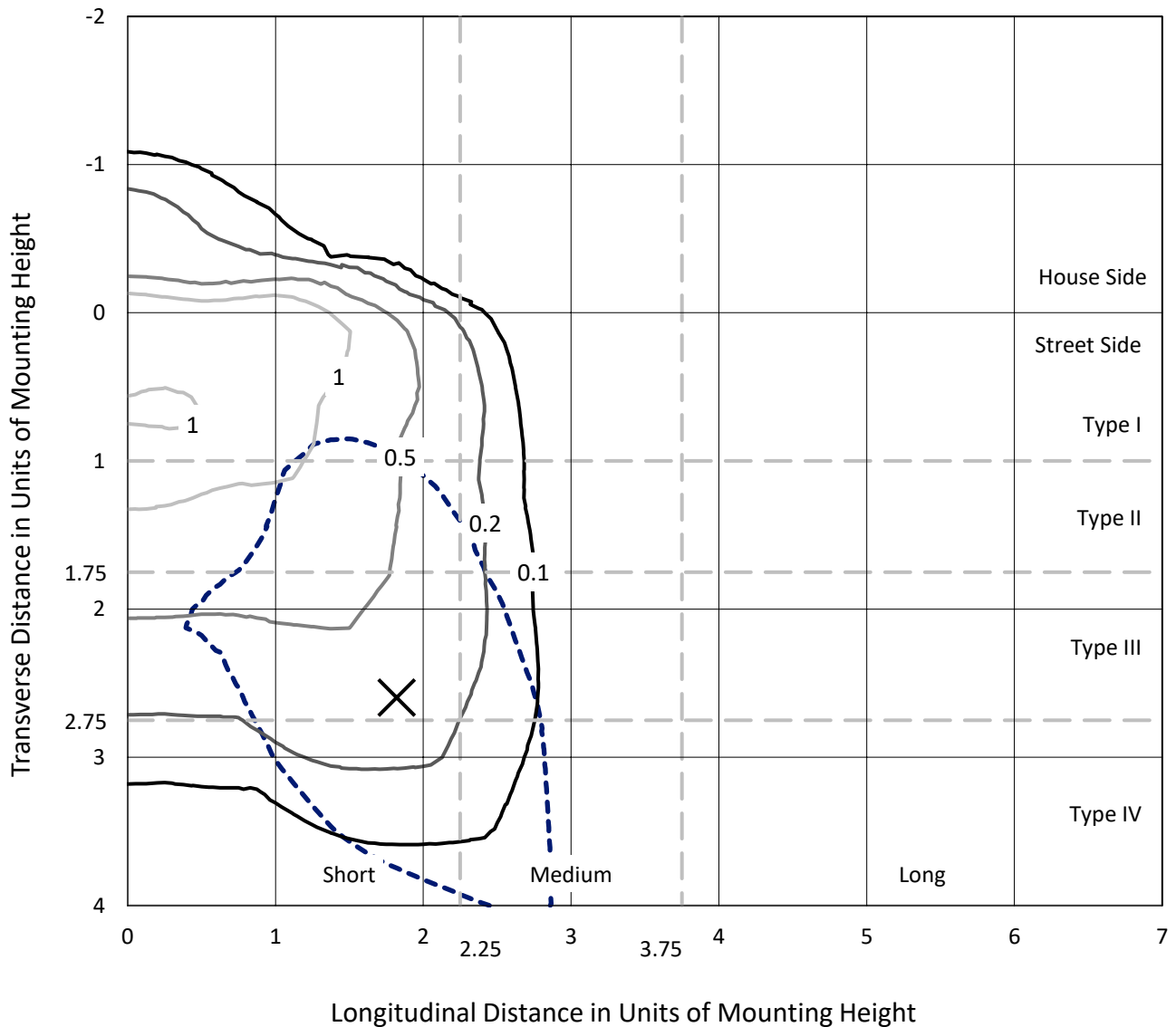
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

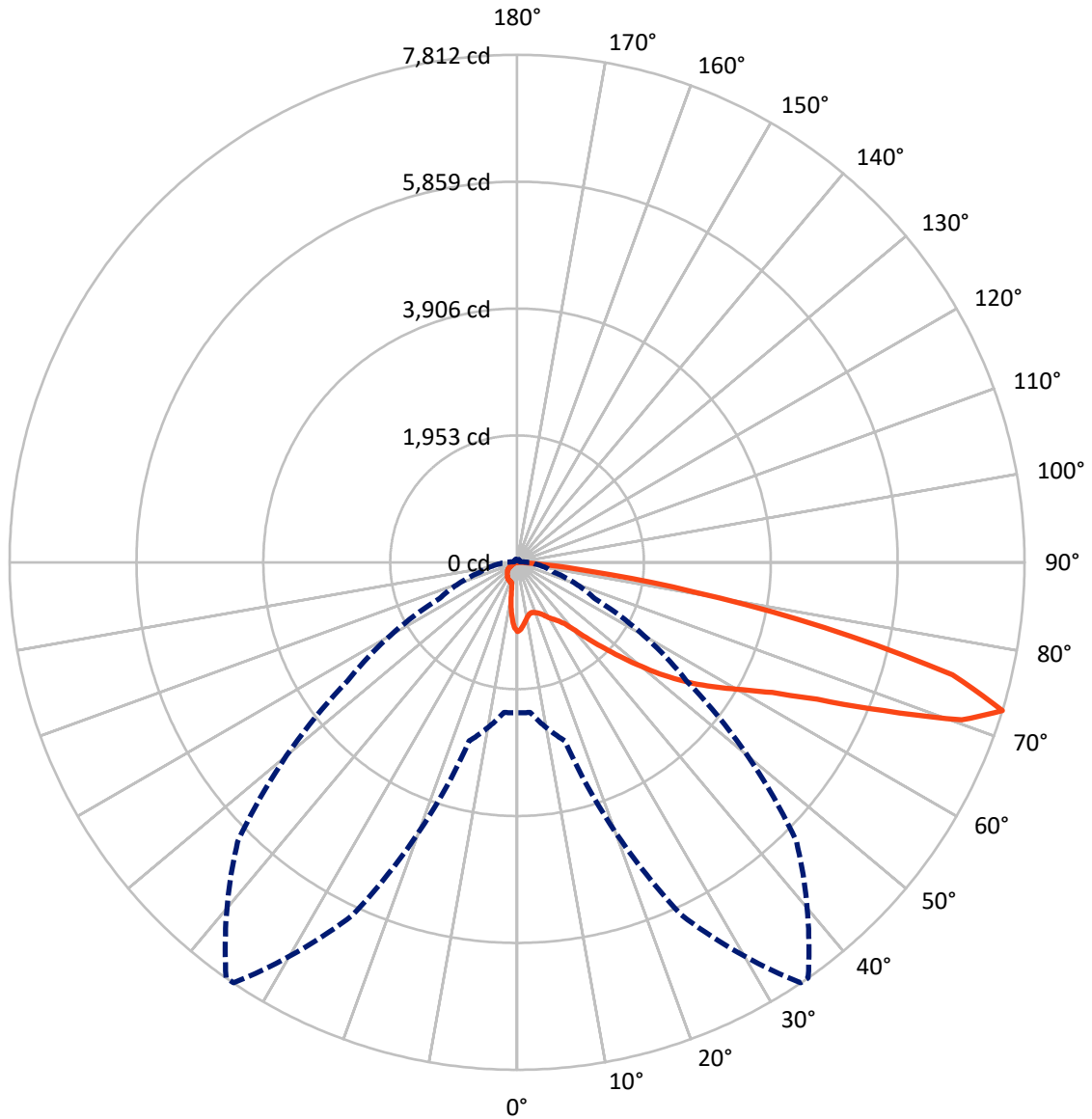
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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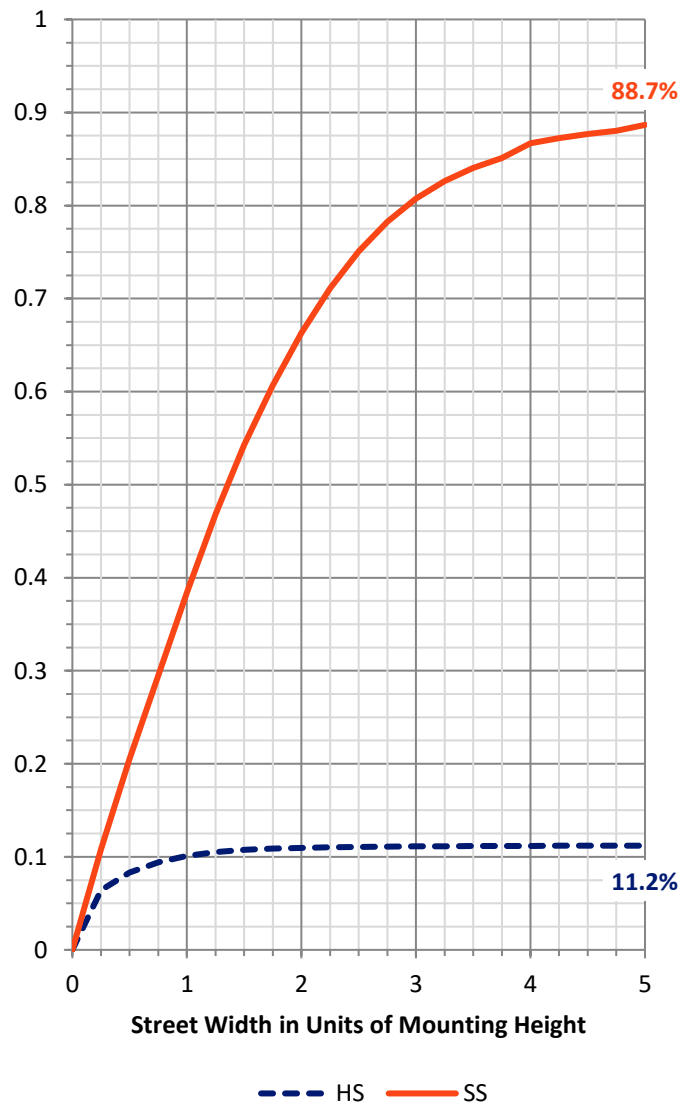
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	829.0	0.0	829.0
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	6536.7	0.0	6536.7
	% Fixture	88.7	0.0	88.7
Total	Lumens	7365.7	0.0	7365.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.7	1.2
10°-20°	205.2	2.8
20°-30°	333.4	4.5
30°-40°	556.2	7.6
40°-50°	1052.4	14.3
50°-60°	1672.2	22.7
60°-70°	2068.7	28.1
70°-80°	1285.9	17.5
80°-90°	103.9	1.4
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°	7365.7	100.0
0°-180°	7365.7	100.0

Coefficient of Utilization

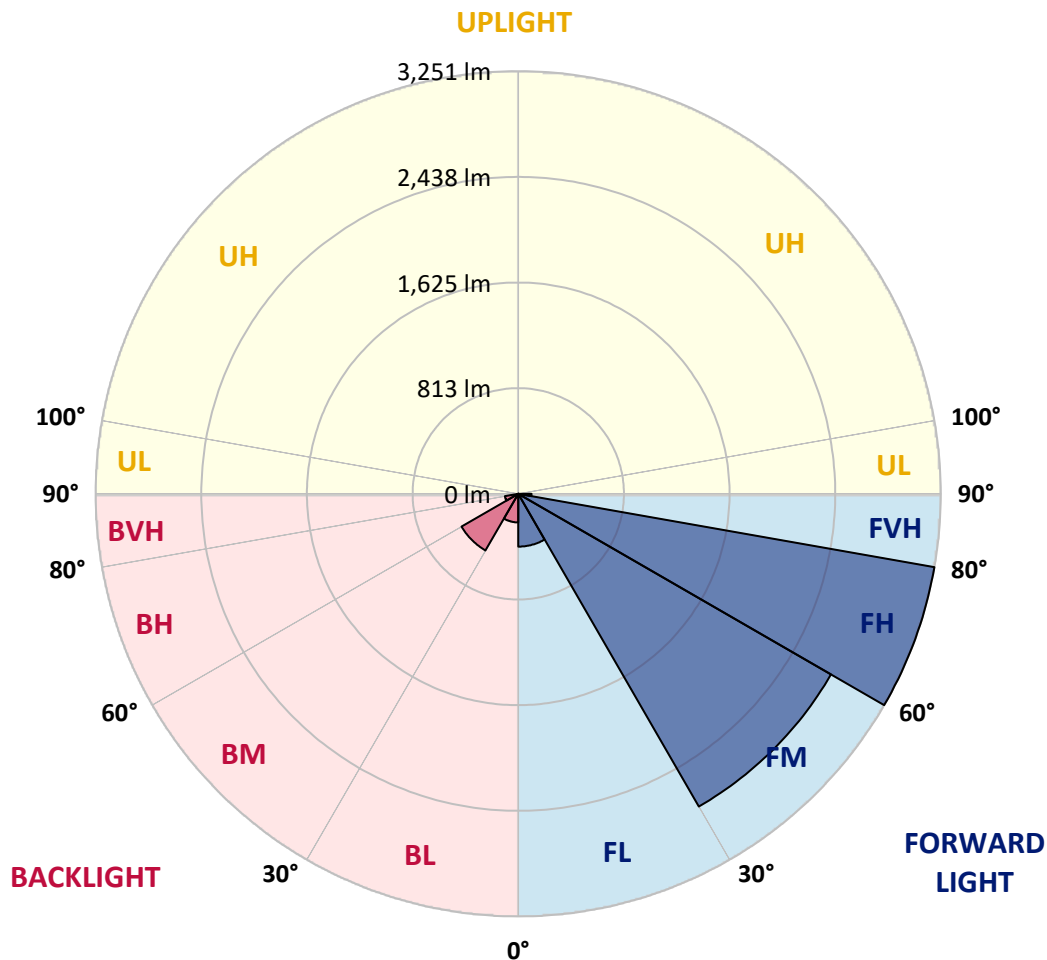


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	406.0	5.5			
FM (30°-60°)	2777.6	37.7			
FH (60°-80°)	3250.6	44.1			G2/5000
FVH (80°-90°)	102.5	1.4			G2/225
BL (0°-30°)	220.3	3.0	B1/500		
BM (30°-60°)	503.3	6.8	B1/1000		
BH (60°-80°)	104.0	1.4	B0/110		G0/110
BVH (80°-90°)	1.4	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5
2.5°	1020.1	1028.7	1030.3	1033.0	1033.0	1036.3	1041.6	1049.2	1061.6	1068.0	1072.4
5°	940.1	946.6	954.7	961.2	973.6	975.3	996.3	1016.8	1045.4	1067.0	1082.1
7.5°	859.8	867.3	878.1	893.7	909.9	914.8	946.6	981.1	1026.5	1067.0	1092.3
10°	803.1	803.6	813.3	829.0	854.8	860.8	899.6	948.8	1005.4	1060.5	1102.1
12.5°	771.2	775.0	779.3	791.2	816.0	819.8	861.4	919.1	984.4	1056.8	1113.4
15°	771.2	774.0	776.6	782.6	802.6	805.8	842.4	900.3	973.6	1058.3	1131.8
17.5°	779.3	783.6	781.5	788.5	809.5	811.7	844.1	894.8	973.0	1068.6	1159.8
20°	798.8	802.0	797.7	802.0	823.1	827.4	860.8	905.1	982.3	1086.4	1194.9
22.5°	829.5	831.2	820.9	824.1	845.7	851.2	890.0	934.2	1004.4	1115.0	1241.9
25°	868.4	871.7	856.0	859.8	880.3	886.7	931.5	978.0	1039.5	1154.5	1301.8
27.5°	913.2	914.8	901.3	900.8	927.2	936.3	981.7	1031.9	1086.4	1204.1	1377.3
30°	964.4	969.3	956.3	954.2	987.7	995.2	1040.0	1098.3	1155.5	1278.6	1484.7
32.5°	1004.9	1008.7	1001.1	1006.6	1040.6	1046.5	1110.7	1192.2	1264.0	1384.4	1631.0
35°	1063.2	1065.4	1048.1	1057.8	1096.6	1111.8	1207.3	1323.9	1400.6	1517.1	1822.0
37.5°	1274.3	1274.3	1200.8	1152.8	1190.0	1203.6	1339.6	1489.5	1568.9	1695.2	2062.7
40°	1566.2	1561.4	1454.0	1355.8	1350.8	1377.3	1527.9	1698.4	1786.4	1909.0	2333.7
42.5°	1877.6	1870.1	1723.8	1626.7	1610.5	1619.6	1745.4	1955.9	2045.5	2169.6	2625.1
45°	2153.9	2151.8	2017.9	1887.3	1858.2	1887.3	2016.9	2257.0	2321.2	2451.9	2916.0
47.5°	2385.5	2385.5	2287.8	2202.5	2187.5	2204.7	2384.4	2591.1	2585.2	2752.4	3199.3
50°	2652.1	2649.9	2557.1	2520.4	2536.1	2560.3	2807.6	2943.0	2858.2	3047.7	3452.5
52.5°	2838.8	2851.8	2820.0	2814.0	2893.9	2936.0	3237.2	3287.3	3102.8	3327.8	3641.9
55°	2986.7	3001.8	3038.5	3080.1	3233.9	3288.9	3653.2	3613.8	3307.3	3570.7	3750.9
57.5°	3196.2	3174.5	3231.2	3313.2	3562.1	3628.4	4056.4	3922.1	3471.9	3767.7	3762.8
60°	3450.4	3453.5	3463.3	3566.9	3889.7	3975.0	4453.6	4213.5	3577.7	3888.5	3631.1
62.5°	3755.8	3760.6	3780.6	3939.8	4329.5	4409.9	4876.7	4452.0	3626.2	3854.5	3291.1
65°	3734.7	3755.3	3978.1	4522.7	4998.2	5077.5	5370.6	4619.3	3552.9	3543.6	2679.7
67.5°	3402.3	3435.7	3808.7	5218.9	6006.3	6094.9	5967.4	4652.3	3236.0	2755.7	1748.1
70°	2966.2	2978.0	3426.6	5845.0	7173.7	7263.3	6501.8	4290.1	2455.6	1537.1	783.1
72.5°	2316.4	2319.1	2845.3	5990.1	7807.3	7812.1	6082.5	3184.8	1320.6	590.4	272.0
75°	1654.8	1638.6	1905.7	4857.9	6868.8	6923.9	4559.9	1493.9	504.6	279.0	135.5
77.5°	887.2	905.1	1078.3	2881.0	4745.0	4838.9	2488.0	430.7	256.9	189.9	89.6
80°	274.2	289.3	442.0	1319.1	2687.8	2744.3	922.4	191.6	179.2	135.5	58.8
82.5°	86.3	89.6	206.1	554.3	1115.6	1141.4	267.1	108.4	122.5	89.6	34.5
85°	24.8	25.3	91.7	206.7	275.8	281.2	75.0	42.1	70.1	55.6	17.8
87.5°	2.7	8.6	34.5	34.5	24.3	23.8	8.1	9.2	20.0	7.0	3.3
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°	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5	1067.5
2.5°	1069.7	1070.2	1063.2	1051.3	1038.4	1027.6	1014.1	1003.3	995.8	993.6	997.3
5°	1077.3	1073.5	1053.5	1017.3	974.2	937.0	895.3	862.4	840.8	831.7	835.0
7.5°	1088.6	1077.8	1034.0	962.8	880.3	806.9	732.4	674.7	638.0	619.6	622.3
10°	1098.3	1076.7	1001.7	884.1	757.8	646.6	546.2	476.5	437.7	419.3	419.8
12.5°	1107.5	1076.1	959.6	790.7	619.6	483.6	390.2	355.7	344.9	341.1	340.0
15°	1124.7	1077.8	906.7	683.8	482.0	365.4	331.4	330.9	333.0	331.9	331.4
17.5°	1148.5	1079.4	846.8	570.5	371.9	322.2	320.6	325.4	328.7	327.1	326.6
20°	1179.3	1085.9	783.1	458.2	319.5	311.4	315.2	319.5	322.2	319.5	319.0
22.5°	1222.4	1097.3	713.5	368.1	302.8	304.9	308.2	313.0	315.7	311.9	311.4
25°	1275.3	1115.0	644.9	320.0	294.7	297.4	302.3	307.6	310.9	307.1	306.6
27.5°	1343.9	1143.6	581.8	309.2	286.6	288.2	295.2	303.3	307.6	302.8	302.8
30°	1443.2	1190.5	527.3	314.1	281.8	278.0	287.6	299.0	303.8	299.5	299.0
32.5°	1574.8	1257.0	493.8	321.6	279.5	266.1	275.2	289.9	297.9	295.2	295.2
35°	1747.5	1357.9	480.8	330.3	278.0	253.7	260.1	275.8	289.9	292.5	292.5
37.5°	1956.9	1498.2	484.6	334.0	273.1	243.4	246.6	260.1	278.5	287.1	289.3
40°	2194.9	1661.7	506.2	330.3	267.7	234.7	235.3	245.6	261.8	274.7	279.0
42.5°	2440.5	1852.8	546.2	316.3	262.8	227.2	225.6	232.6	243.4	252.6	256.4
45°	2674.2	2049.3	585.6	296.8	256.9	219.7	215.9	218.5	220.8	224.5	226.6
47.5°	2878.2	2187.5	574.2	279.0	248.8	211.0	204.6	203.5	197.0	196.5	195.9
50°	3019.1	2217.6	510.0	261.2	237.0	201.3	191.1	184.6	173.2	167.9	168.4
52.5°	3063.9	2098.4	416.7	243.4	217.5	188.4	173.7	163.5	149.5	144.6	144.1
55°	3004.5	1864.7	333.0	221.8	190.5	171.1	154.9	141.4	130.1	124.1	124.1
57.5°	2859.3	1567.3	263.4	196.5	162.0	151.7	135.5	122.0	112.2	106.3	105.3
60°	2618.7	1244.6	208.3	166.3	138.2	130.6	113.9	105.3	96.7	89.6	87.9
62.5°	2253.3	888.4	163.5	131.7	115.5	106.9	97.2	90.7	80.5	70.7	69.1
65°	1758.4	543.5	126.3	96.7	92.9	88.6	82.6	76.7	64.3	54.5	52.9
67.5°	1109.0	257.5	90.1	72.9	73.4	71.2	68.6	63.7	54.5	45.9	44.8
70°	488.4	124.6	59.3	55.6	54.5	54.5	56.7	55.0	46.4	38.3	36.7
72.5°	166.3	66.9	44.3	42.1	39.4	38.8	47.5	45.9	37.2	29.7	28.1
75°	86.9	44.8	32.4	30.2	23.8	28.6	37.8	35.7	26.4	19.5	17.8
77.5°	56.7	31.9	22.1	19.5	13.5	18.9	28.1	24.8	15.7	9.7	8.6
80°	35.7	21.0	12.9	9.2	6.5	10.2	15.1	10.8	5.9	2.2	1.6
82.5°	18.9	10.8	4.8	3.3	2.7	3.3	3.8	2.7	1.1	0.0	0.0
85°	7.6	3.8	1.6	1.1	0.5	0.0	1.1	0.5	0.0	0.0	0.0
87.5°	2.7	0.5	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)