

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: P882239

Luminaire Tested: **NAV-SB2A-735-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882239
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-735-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9149 lumens
Efficiency: N/A
Efficacy: 159.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

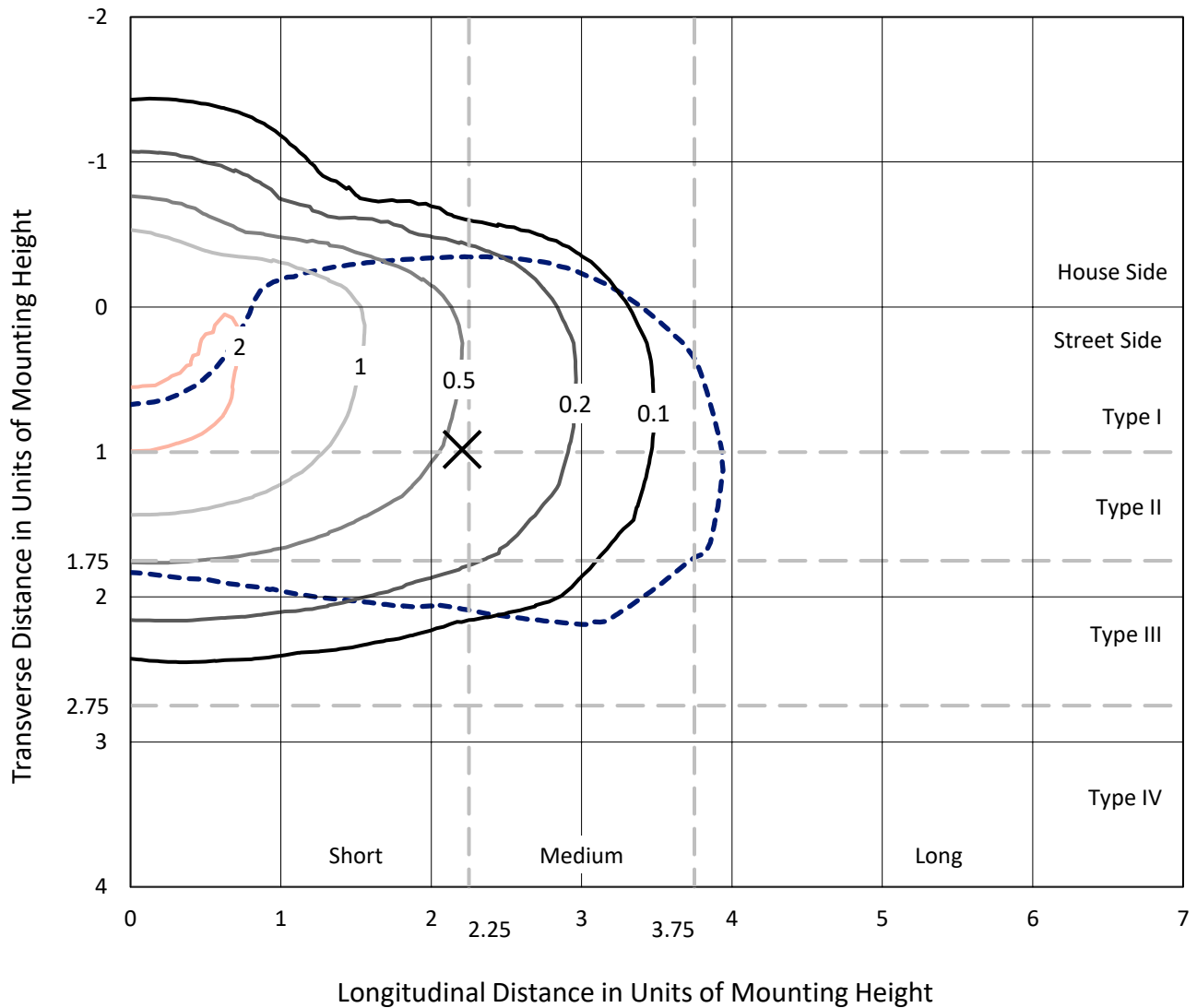
Input Watts (W): 57.3
Input Voltage (V): 120.0
Input Current (Ain): 0.484
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.038
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

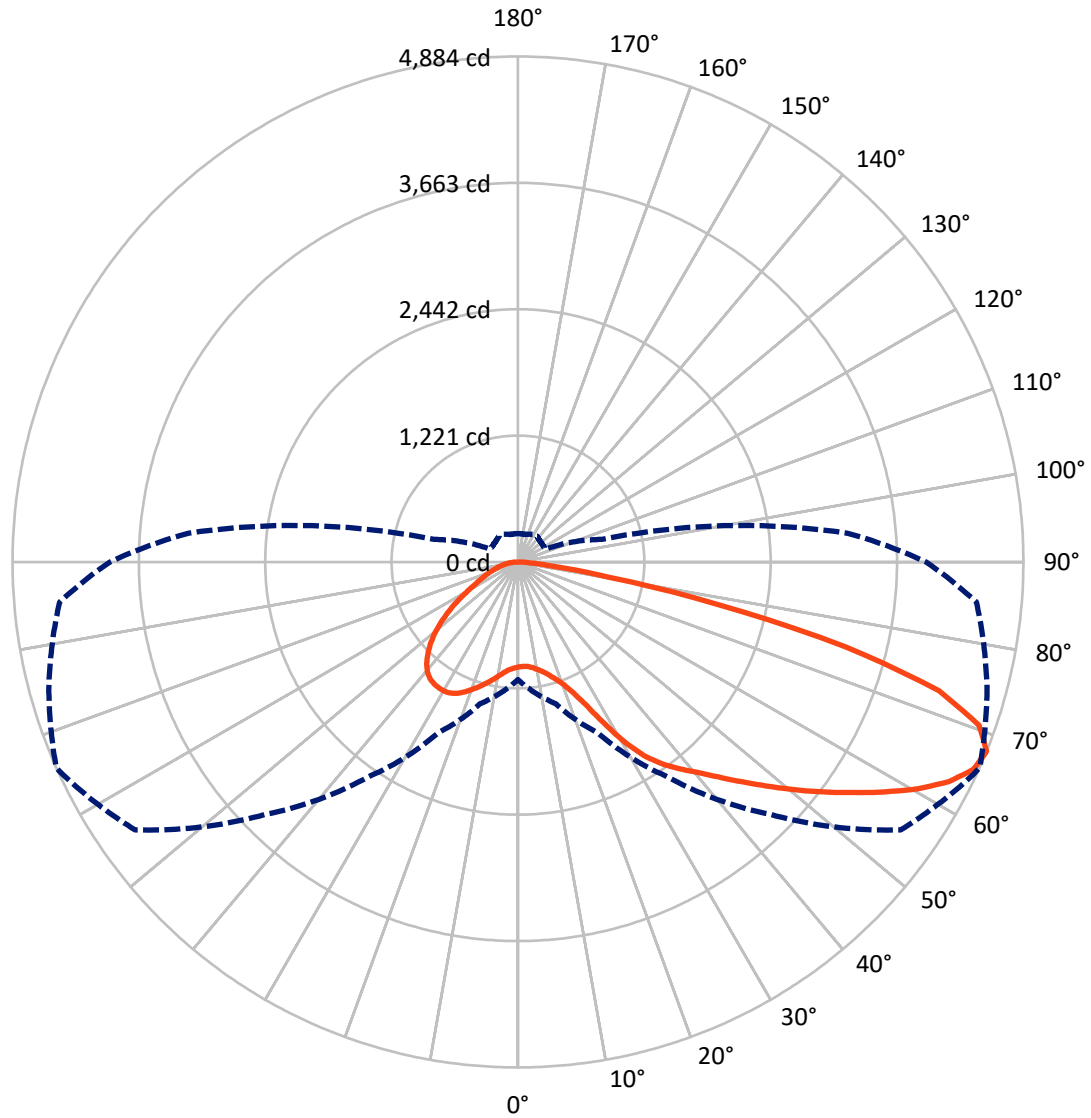
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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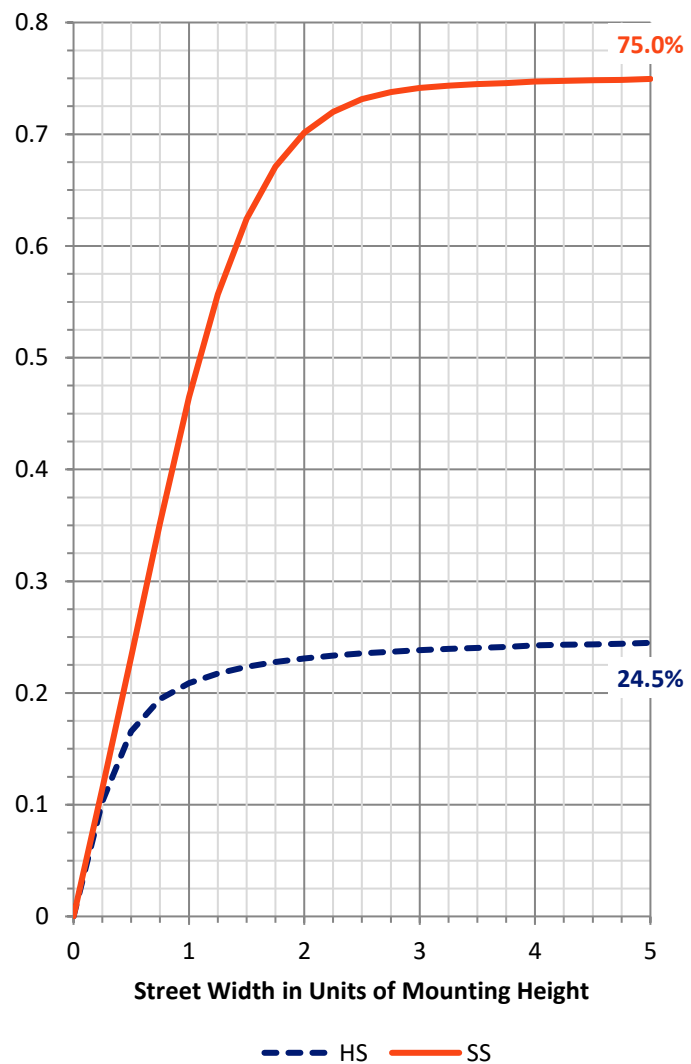
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2274.9	0.0	2274.9
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	6874.1	0.0	6874.1
	% Fixture	75.1	0.0	75.1
Total	Lumens	9149.0	0.0	9149.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.6	1.1
10°-20°	332.4	3.6
20°-30°	640.7	7.0
30°-40°	1123.3	12.3
40°-50°	1670.0	18.3
50°-60°	2116.9	23.1
60°-70°	2071.4	22.6
70°-80°	988.1	10.8
80°-90°	105.6	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°	9149.0	100.0
0°-180°	9149.0	100.0

Coefficient of Utilization



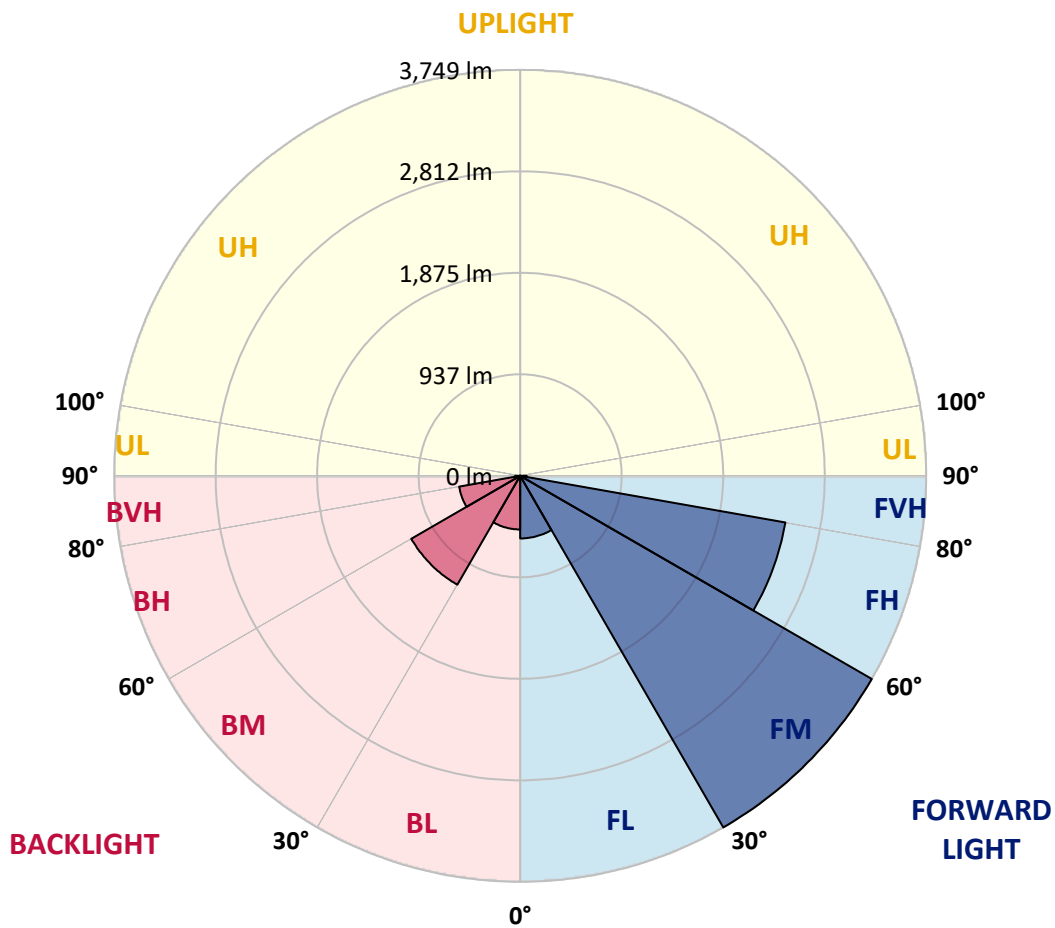
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	578.1	6.3			
FM (30°-60°)	3749.2	41.0			
FH (60°-80°)	2486.9	27.2			G2/5000
FVH (80°-90°)	59.9	0.7			G1/100
BL (0°-30°)	495.6	5.4	B1/500		
BM (30°-60°)	1161.1	12.7	B2/2500		
BH (60°-80°)	572.5	6.3	B2/1000		G2/1000
BVH (80°-90°)	45.7	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°	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7
2.5°	1004.2	1009.9	1008.5	1006.1	1005.6	1006.6	1008.0	1009.5	1009.0	1011.4	1015.2
5°	1001.3	1007.1	1006.6	1006.6	1008.5	1012.3	1014.7	1017.1	1014.7	1017.6	1022.9
7.5°	1003.2	1007.5	1009.5	1011.4	1016.2	1023.4	1029.2	1034.5	1031.6	1034.9	1041.7
10°	1027.7	1031.1	1033.0	1033.0	1036.4	1044.5	1050.3	1059.9	1057.5	1062.8	1071.5
12.5°	1072.4	1075.8	1075.8	1073.9	1076.3	1081.6	1083.5	1094.1	1089.7	1098.4	1107.0
15°	1127.2	1134.0	1128.7	1125.3	1126.3	1131.6	1131.1	1139.2	1134.9	1142.1	1149.8
17.5°	1187.8	1196.4	1187.8	1187.3	1185.4	1191.2	1191.6	1198.9	1191.2	1196.4	1201.7
20°	1259.4	1271.4	1264.2	1266.6	1262.3	1264.7	1267.1	1277.7	1265.7	1269.5	1268.1
22.5°	1360.4	1374.8	1367.1	1376.2	1373.3	1371.4	1370.9	1389.7	1370.9	1372.4	1358.4
25°	1507.5	1524.8	1511.3	1523.8	1523.8	1530.0	1537.3	1561.3	1530.0	1520.9	1484.9
27.5°	1724.7	1742.0	1715.6	1723.3	1720.9	1736.3	1728.6	1788.2	1754.5	1739.6	1667.0
30°	1986.2	2017.0	1967.0	1965.1	1962.7	1987.2	1998.2	2037.7	2003.5	1988.6	1901.1
32.5°	2268.9	2301.1	2241.5	2224.2	2215.0	2229.9	2220.8	2252.5	2229.0	2205.9	2097.7
35°	2567.9	2599.6	2542.9	2509.2	2472.7	2441.4	2408.8	2416.9	2394.8	2359.7	2247.7
37.5°	2850.5	2908.7	2848.6	2812.5	2745.2	2684.2	2592.9	2554.9	2534.2	2502.0	2389.0
40°	3138.5	3171.6	3126.0	3095.2	3022.1	2926.5	2780.3	2700.1	2672.2	2640.9	2545.3
42.5°	3350.4	3382.2	3357.6	3336.5	3279.3	3168.3	2979.3	2878.9	2838.5	2803.4	2722.2
45°	3518.7	3542.2	3526.9	3534.5	3510.0	3402.4	3185.6	3070.7	3028.9	2986.1	2922.1
47.5°	3586.5	3611.5	3636.0	3681.6	3723.5	3644.1	3407.2	3278.3	3234.1	3190.4	3127.4
50°	3578.8	3604.2	3675.4	3772.5	3902.3	3875.8	3640.8	3499.5	3458.6	3408.6	3350.4
52.5°	3517.2	3546.1	3637.4	3798.9	4005.6	4049.4	3878.7	3727.8	3689.3	3629.7	3571.6
55°	3355.7	3373.0	3510.0	3738.8	4030.1	4170.5	4111.9	3971.0	3932.6	3849.4	3785.9
57.5°	3056.3	3081.2	3280.7	3576.8	3968.6	4252.7	4316.6	4226.7	4189.7	4070.0	4003.7
60°	2665.4	2705.3	2933.7	3304.8	3811.9	4252.2	4502.7	4478.1	4447.4	4287.3	4218.1
62.5°	2223.2	2269.4	2489.0	2920.2	3537.9	4131.6	4619.0	4688.7	4672.8	4487.8	4399.3
65°	1707.4	1739.2	1957.9	2422.7	3111.5	3872.5	4632.4	4832.4	4835.3	4640.1	4494.0
67.5°	1136.8	1228.2	1418.0	1818.0	2540.5	3449.0	4514.2	4856.0	4883.9	4692.5	4446.4
70°	554.7	674.9	860.9	1181.5	1818.0	2799.6	4205.1	4662.7	4724.7	4539.7	4162.8
72.5°	230.3	269.2	370.6	583.1	1043.6	1889.1	3584.1	4138.8	4253.7	4022.4	3499.9
75°	155.3	168.2	212.0	299.0	475.4	931.6	2584.7	3086.1	3271.1	3038.0	2483.3
77.5°	119.7	127.9	154.3	209.1	282.6	352.3	1383.4	1859.8	1955.5	1810.3	1292.1
80°	94.2	100.5	115.4	152.4	200.4	188.4	471.6	842.7	897.9	753.2	415.3
82.5°	81.7	84.1	82.7	103.3	133.2	110.1	154.8	311.0	343.2	249.0	135.6
85°	59.1	65.9	68.7	63.9	70.7	55.8	63.5	110.1	121.1	108.2	76.4
87.5°	24.0	35.6	43.7	41.3	26.0	15.9	19.7	32.2	37.0	40.4	25.0
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°	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7
2.5°	1015.7	1019.1	1021.5	1024.4	1026.3	1029.2	1034.9	1038.3	1038.8	1041.2	1040.7
5°	1024.8	1029.6	1034.9	1042.6	1051.3	1058.5	1069.5	1077.2	1080.1	1082.5	1082.0
7.5°	1044.5	1051.3	1060.9	1074.4	1086.8	1096.5	1109.9	1119.1	1128.2	1131.6	1132.0
10°	1073.9	1083.5	1097.4	1115.7	1129.2	1141.6	1155.6	1163.3	1172.4	1176.3	1178.2
12.5°	1110.4	1120.5	1138.8	1164.2	1176.7	1185.4	1190.2	1188.3	1190.2	1193.6	1194.5
15°	1152.2	1163.3	1183.9	1211.3	1220.0	1212.3	1201.7	1192.1	1190.7	1191.6	1195.0
17.5°	1201.7	1209.9	1233.9	1257.0	1250.8	1219.0	1196.0	1180.6	1172.9	1170.5	1173.9
20°	1271.0	1271.0	1290.7	1305.1	1263.3	1209.4	1173.4	1148.4	1132.5	1125.8	1124.3
22.5°	1355.1	1347.4	1359.9	1349.8	1260.9	1182.5	1132.5	1089.3	1065.2	1055.6	1054.2
25°	1461.8	1452.7	1449.3	1386.8	1243.6	1139.7	1058.5	1006.1	984.9	979.7	980.6
27.5°	1622.8	1599.7	1556.0	1407.0	1211.8	1072.4	972.0	923.4	911.4	911.9	913.3
30°	1837.2	1791.1	1683.9	1410.4	1159.9	977.3	883.5	848.9	843.1	845.5	853.7
32.5°	2035.7	1992.0	1814.6	1395.0	1080.1	884.0	804.2	781.1	772.5	775.4	779.2
35°	2191.5	2179.5	1935.8	1373.3	982.1	796.5	733.1	713.3	696.5	692.7	695.6
37.5°	2338.6	2333.8	2026.6	1343.1	885.0	734.5	675.9	649.9	625.4	611.9	612.4
40°	2500.1	2495.3	2086.2	1296.4	798.9	680.7	624.4	590.3	560.0	535.5	537.9
42.5°	2681.8	2653.4	2114.6	1229.6	725.8	635.0	582.6	536.5	496.6	474.0	475.4
45°	2880.3	2816.4	2114.1	1144.5	664.3	593.2	537.9	472.5	435.5	414.4	413.4
47.5°	3090.9	2972.1	2088.1	1050.3	604.7	547.0	468.7	418.7	394.2	381.2	378.3
50°	3308.1	3117.8	2043.9	942.2	543.7	494.6	425.4	391.3	372.5	360.5	356.2
52.5°	3512.4	3250.0	1990.6	819.6	481.7	443.7	406.2	379.7	360.0	346.6	340.8
55°	3702.3	3363.9	1915.1	694.1	431.2	409.6	397.1	374.9	352.3	336.5	330.2
57.5°	3871.0	3437.9	1784.8	576.4	395.1	386.0	387.4	366.8	340.8	327.4	318.7
60°	4011.4	3492.2	1592.1	467.2	365.8	362.9	372.5	351.4	321.1	305.7	299.0
62.5°	4095.5	3491.3	1355.6	382.6	340.8	341.8	352.8	332.2	301.4	287.0	282.6
65°	4088.3	3405.7	1096.0	327.4	316.8	317.7	332.2	311.0	285.1	276.4	275.9
67.5°	3943.6	3197.1	840.7	291.3	290.3	294.7	311.5	296.6	275.0	274.0	275.4
70°	3551.8	2764.0	605.7	262.5	262.9	269.2	291.3	287.5	269.7	271.6	271.1
72.5°	2848.1	2107.4	406.7	232.2	232.7	242.8	272.1	280.2	264.4	289.9	293.7
75°	1896.8	1314.2	261.5	200.0	200.4	213.4	255.2	266.3	250.0	288.9	291.3
77.5°	911.4	590.8	189.4	168.2	168.2	180.3	220.6	238.4	212.9	224.5	205.7
80°	314.9	222.1	149.0	135.6	132.7	140.8	186.0	206.7	183.6	169.2	158.6
82.5°	124.0	115.4	119.7	105.3	95.7	100.9	144.7	170.6	135.1	122.1	121.6
85°	71.1	75.0	84.6	69.7	55.3	62.0	106.2	122.6	101.9	89.9	91.8
87.5°	19.2	26.4	38.9	36.1	25.0	26.4	50.5	67.8	58.6	45.2	46.6
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)