

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: P882204

Luminaire Tested: **NAV-SB2A-722-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882204
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-722-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2200K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7222 lumens
Efficiency: N/A
Efficacy: 126.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G2

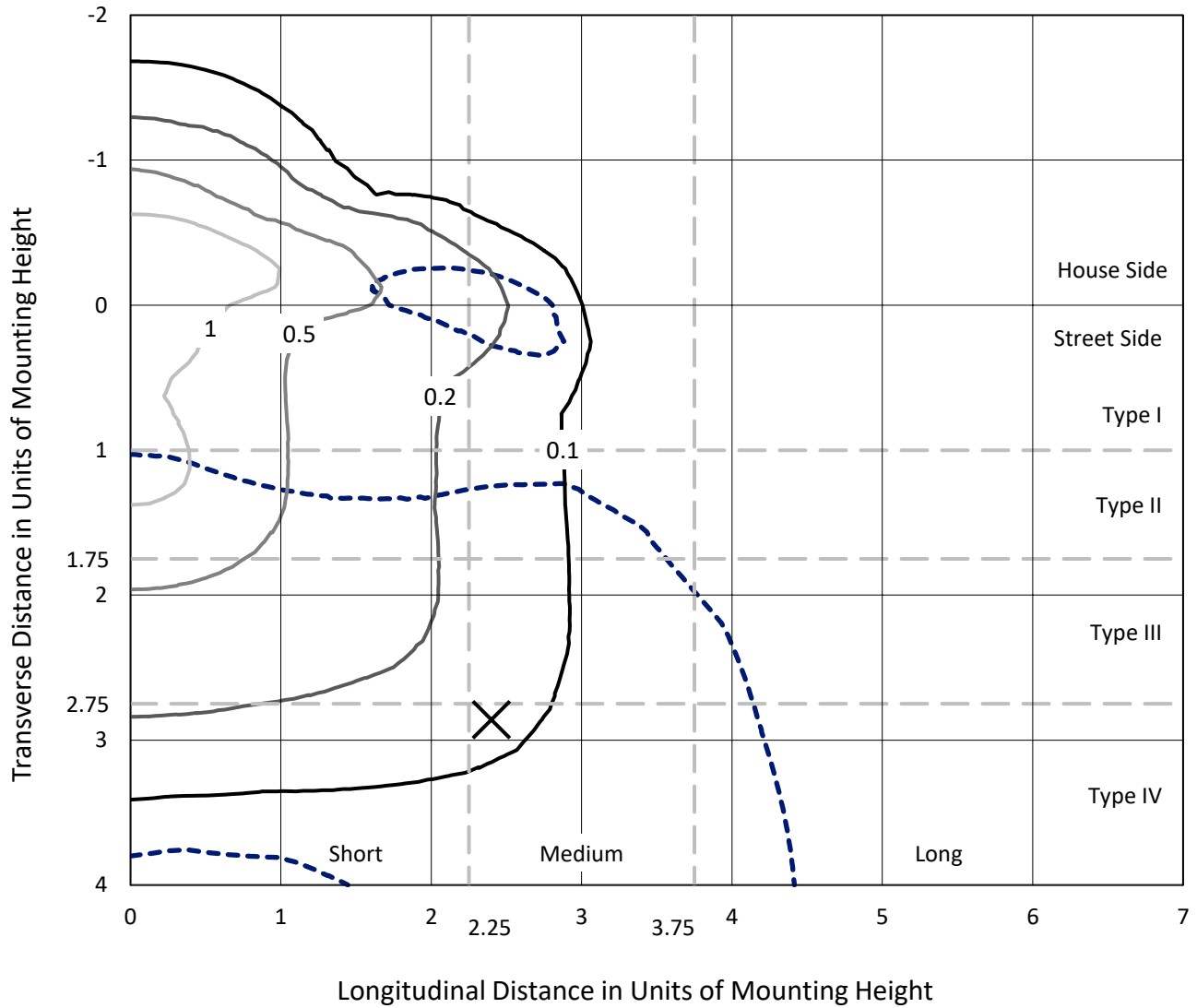
Input Watts (W): 57.3
Input Voltage (V): 120.0
Input Current (Ain): 0.484
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.038
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P882204
 CATALOG NUMBER: NAV-SB2A-722-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

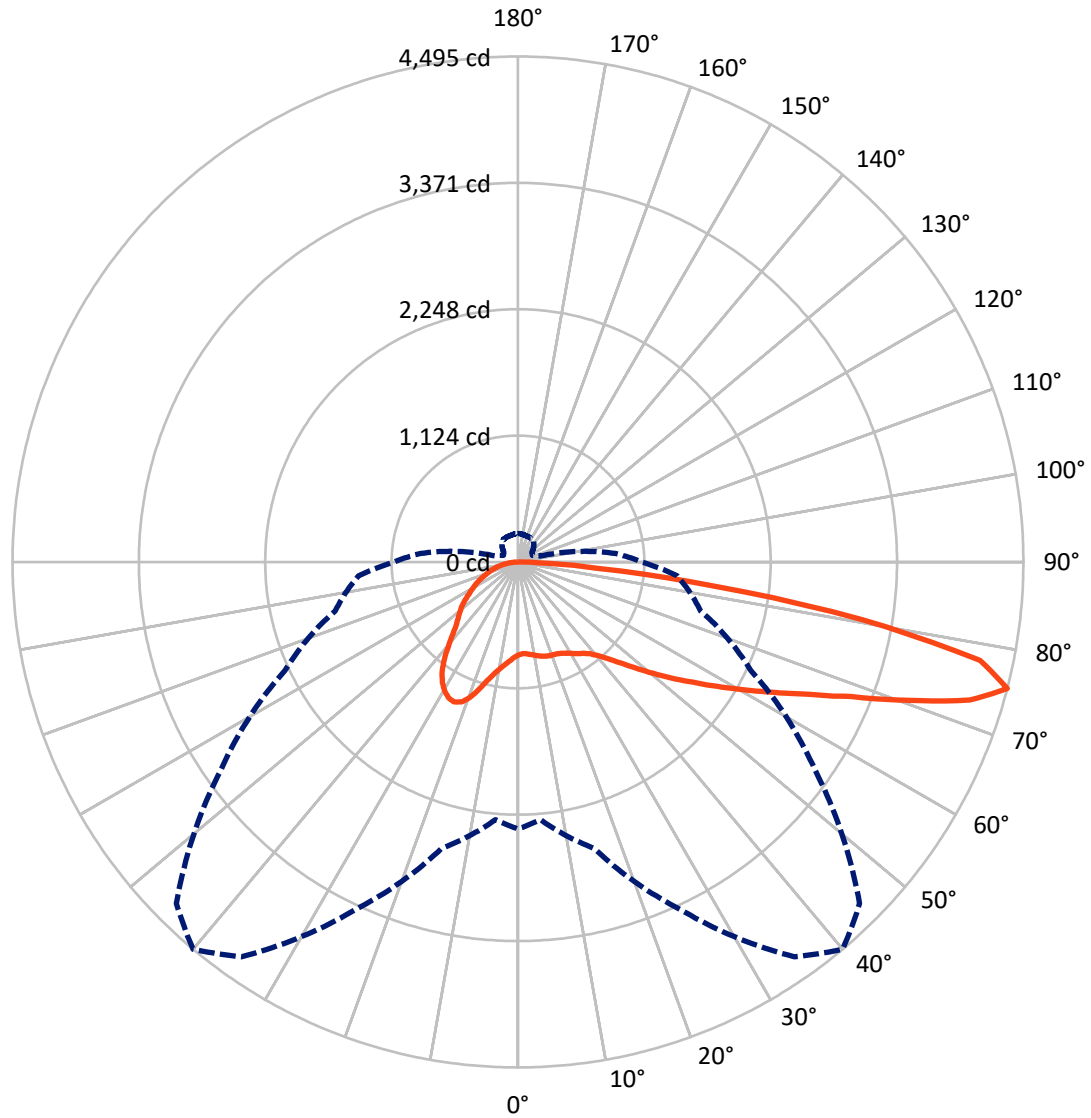
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P882204
CATALOG NUMBER: NAV-SB2A-722-U-SL4

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P882204
 CATALOG NUMBER: NAV-SB2A-722-U-SL4

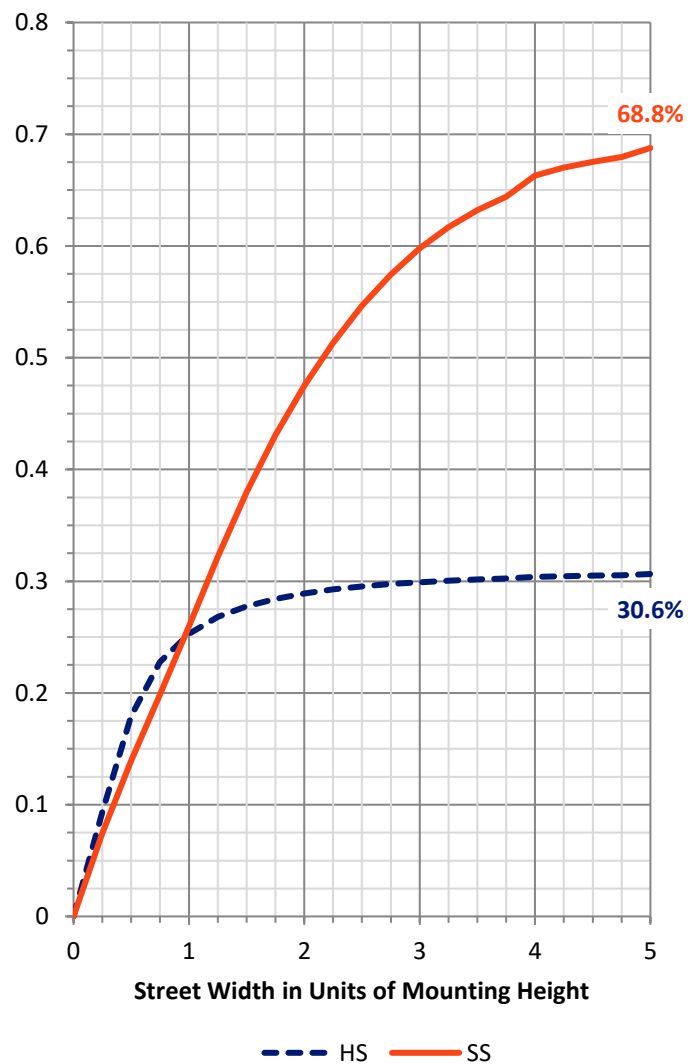
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2237.6	0.0	2237.6
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	4984.4	0.0	4984.4
	% Fixture	69.0	0.0	69.0
Total	Lumens	7222.0	0.0	7222.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.4	1.1
10°-20°	276.8	3.8
20°-30°	505.4	7.0
30°-40°	716.7	9.9
40°-50°	967.8	13.4
50°-60°	1302.0	18.0
60°-70°	1652.5	22.9
70°-80°	1499.7	20.8
80°-90°	218.6	3.0
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°	7222.0	100.0
0°-180°	7222.0	100.0

Coefficient of Utilization



REPORT NUMBER: P882204

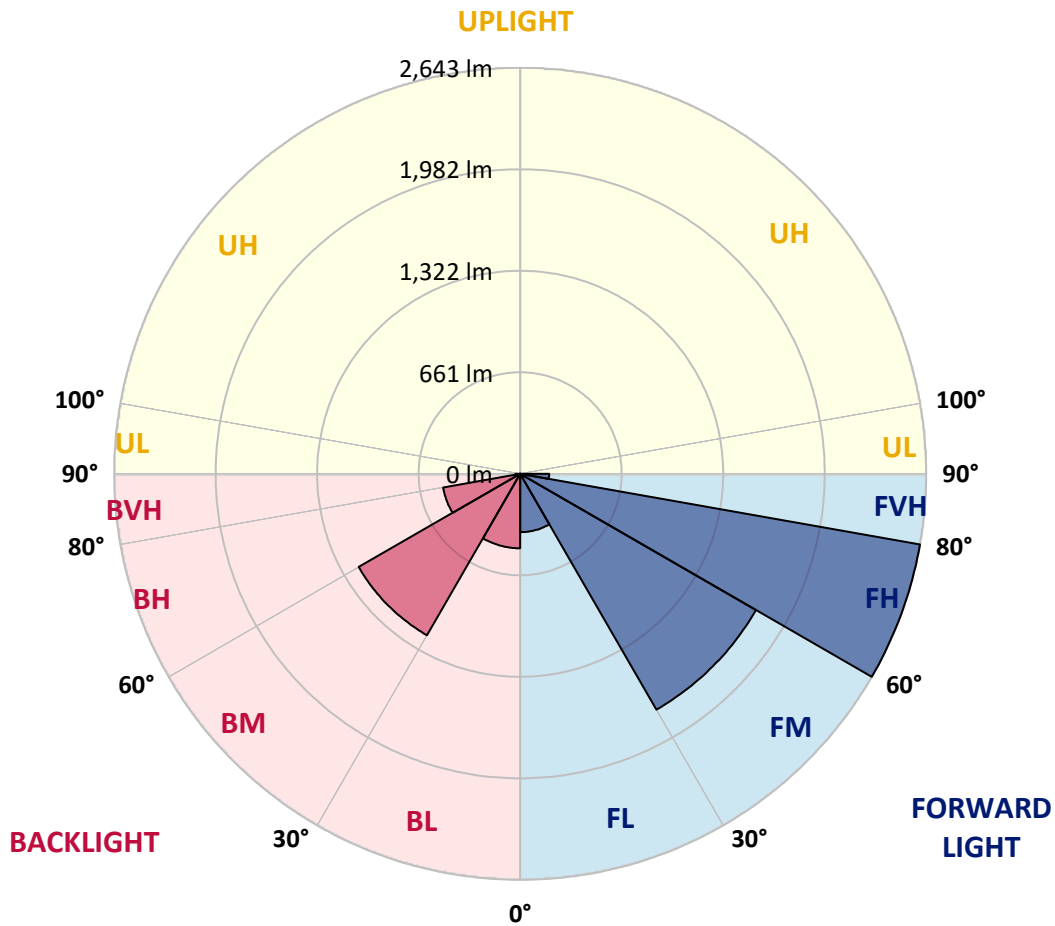
CATALOG NUMBER: NAV-SB2A-722-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	379.9	5.3			
FM (30°-60°)	1772.8	24.5			
FH (60°-80°)	2643.1	36.6			G2/5000
FVH (80°-90°)	188.5	2.6			G2/225
BL (0°-30°)	484.7	6.7	B1/500		
BM (30°-60°)	1213.7	16.8	B2/2500		
BH (60°-80°)	509.1	7.0	B2/1000		G2/1000
BVH (80°-90°)	30.1	0.4			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 IV Medium



REPORT NUMBER: P882204

CATALOG NUMBER: NAV-SB2A-722-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	825.8	825.8	825.8	825.8	825.8	825.8	825.8	825.8	825.8	825.8	825.8
2.5°	813.2	817.8	816.7	815.1	815.1	815.5	815.1	817.8	820.5	823.2	827.4
5°	821.6	826.2	823.9	822.0	820.5	820.1	819.0	818.6	820.1	823.5	829.3
7.5°	838.1	842.7	839.3	835.8	832.7	831.2	829.7	827.4	826.2	828.1	836.2
10°	856.5	861.1	856.9	850.7	845.8	843.8	842.3	840.0	838.5	839.6	848.4
12.5°	874.9	879.5	873.7	865.3	858.8	857.6	855.7	855.0	854.6	854.2	863.0
15°	892.1	895.9	888.7	878.7	871.8	869.9	868.0	869.1	871.0	873.3	883.3
17.5°	905.5	909.3	898.6	885.6	879.1	878.3	877.2	881.0	886.4	892.1	904.4
20°	917.8	921.6	907.8	890.2	882.5	882.5	882.9	891.0	898.6	907.1	923.9
22.5°	935.0	938.1	921.2	897.1	886.0	886.7	889.8	897.9	907.4	918.9	942.3
25°	960.7	963.0	942.3	910.1	897.5	899.8	902.5	906.3	915.5	928.9	960.3
27.5°	1002.0	1004.0	976.8	933.1	913.9	917.8	921.6	918.9	923.1	934.6	974.8
30°	1060.3	1061.4	1026.9	969.1	941.9	943.8	944.6	933.5	925.4	934.6	985.2
32.5°	1129.2	1128.8	1087.8	1012.8	973.7	971.8	965.3	943.4	924.7	932.7	994.4
35°	1236.1	1231.9	1179.0	1074.1	1009.7	997.8	982.5	954.5	928.5	930.8	1002.4
37.5°	1413.1	1400.0	1326.9	1174.4	1063.3	1033.1	1010.5	972.6	936.9	930.0	1012.0
40°	1612.6	1596.1	1515.7	1311.9	1143.8	1095.1	1058.7	998.2	950.7	933.5	1026.2
42.5°	1849.3	1826.0	1739.4	1474.0	1245.7	1175.2	1120.4	1030.8	971.0	944.6	1045.3
45°	2140.1	2109.0	1986.5	1656.7	1374.0	1280.1	1207.0	1080.2	1002.0	966.0	1074.1
47.5°	2433.9	2441.5	2267.2	1865.8	1528.0	1409.6	1315.4	1154.5	1047.2	1000.5	1120.4
50°	2746.1	2751.4	2546.5	2097.6	1702.6	1555.9	1437.2	1237.6	1110.1	1049.5	1189.7
52.5°	2989.7	2990.4	2800.1	2340.0	1884.6	1716.8	1568.6	1332.6	1182.8	1114.7	1282.1
55°	3142.1	3140.2	2977.8	2569.5	2093.7	1885.7	1714.1	1440.6	1271.7	1191.3	1398.1
57.5°	3252.8	3247.1	3100.4	2766.7	2316.7	2085.3	1878.8	1563.2	1376.7	1282.4	1550.9
60°	3295.0	3291.5	3183.5	2937.2	2551.1	2305.9	2068.8	1700.3	1495.8	1390.1	1747.5
62.5°	3311.0	3317.6	3265.1	3102.3	2802.0	2550.3	2277.6	1864.3	1629.9	1511.9	1954.7
65°	3367.7	3379.6	3368.9	3318.3	3085.4	2836.4	2554.5	2059.3	1776.2	1642.5	2171.1
67.5°	3480.0	3491.8	3496.4	3576.9	3431.7	3193.1	2900.0	2302.1	1947.4	1778.1	2333.9
70°	3477.3	3473.8	3555.0	3782.6	3865.3	3686.8	3365.8	2600.9	2151.6	1890.7	2354.6
72.5°	3165.1	3137.5	3329.4	3780.3	4226.1	4202.4	3934.6	2986.2	2327.8	1904.5	2043.2
75°	2374.5	2301.0	2639.9	3406.8	4286.3	4495.0	4296.2	3225.2	2286.0	1682.7	1421.9
77.5°	1015.5	941.5	1341.0	2522.0	3836.2	4202.0	3964.5	2813.8	1824.8	1112.7	698.3
80°	265.8	265.5	405.3	1143.4	2608.9	3103.0	2722.3	1817.2	1042.6	397.6	192.7
82.5°	109.9	107.3	149.0	444.7	1274.8	1741.3	1421.1	810.5	376.5	107.6	64.0
85°	41.0	40.6	72.4	153.6	449.7	718.2	519.8	207.2	93.8	52.5	28.7
87.5°	11.5	11.1	15.7	53.2	109.6	166.2	88.9	34.1	26.4	20.7	8.4
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: P882204

CATALOG NUMBER: NAV-SB2A-722-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	825.8	825.8	825.8	825.8	825.8	825.8	825.8	825.8	825.8	825.8	825.8
2.5°	828.5	830.4	833.9	836.6	840.0	843.8	849.2	852.7	856.1	858.4	856.9
5°	832.0	836.2	845.0	853.8	864.1	873.7	884.8	892.9	899.4	901.3	902.1
7.5°	839.6	846.5	861.5	876.4	892.9	908.6	924.7	938.5	949.6	953.8	954.2
10°	853.0	862.2	883.3	904.4	926.2	950.3	971.0	990.9	1006.6	1013.2	1013.5
12.5°	869.9	881.4	909.0	938.1	968.3	1001.7	1028.5	1053.0	1072.5	1081.3	1081.3
15°	891.7	906.7	941.9	981.0	1025.4	1071.8	1105.9	1133.0	1154.9	1165.6	1164.8
17.5°	915.5	935.4	979.8	1038.8	1102.4	1163.3	1203.1	1223.1	1245.7	1256.0	1255.6
20°	938.5	963.0	1026.6	1112.4	1197.0	1261.8	1293.9	1299.3	1300.8	1302.0	1305.0
22.5°	962.2	995.2	1085.2	1205.1	1295.8	1340.7	1345.3	1322.3	1290.1	1275.2	1279.4
25°	988.3	1031.9	1161.8	1307.3	1380.9	1386.2	1351.0	1295.1	1234.2	1206.2	1210.4
27.5°	1013.5	1074.4	1253.7	1405.0	1442.2	1395.1	1319.2	1239.9	1166.4	1136.9	1140.3
30°	1038.8	1123.1	1355.2	1490.4	1470.1	1373.2	1269.0	1180.5	1106.6	1075.6	1079.0
32.5°	1064.5	1179.8	1472.0	1552.1	1465.1	1326.9	1206.6	1113.9	1048.8	1016.2	1020.4
35°	1093.6	1249.5	1582.7	1585.8	1431.8	1258.7	1124.2	1034.2	977.5	951.5	957.2
37.5°	1131.5	1338.0	1680.4	1594.2	1373.6	1158.7	1022.0	940.0	893.3	881.4	889.8
40°	1178.6	1444.5	1755.1	1580.8	1287.4	1037.3	910.1	844.6	818.2	820.9	830.1
42.5°	1239.9	1563.6	1807.6	1546.4	1167.5	912.0	812.1	782.9	795.6	806.3	816.3
45°	1319.6	1687.3	1840.1	1487.7	1031.9	805.9	754.2	761.1	770.7	771.8	779.5
47.5°	1421.5	1812.6	1861.6	1399.3	893.6	731.2	717.4	719.0	717.1	709.0	715.1
50°	1548.7	1934.4	1880.8	1282.1	776.0	684.5	666.1	660.8	634.3	608.3	611.7
52.5°	1693.4	2046.2	1888.8	1136.5	684.5	645.4	615.6	581.8	532.4	524.4	527.1
55°	1854.3	2149.6	1868.1	957.6	607.5	595.3	550.1	509.5	504.1	497.2	498.3
57.5°	2046.6	2261.1	1826.0	758.0	528.6	536.6	492.6	497.2	487.6	476.9	475.0
60°	2256.9	2376.4	1752.0	576.1	447.0	463.5	477.7	477.3	474.6	465.8	462.7
62.5°	2446.1	2452.3	1606.5	441.3	375.4	406.8	445.5	445.1	442.8	437.8	435.9
65°	2558.7	2440.8	1363.6	347.4	316.4	360.1	401.8	404.9	405.3	404.9	404.9
67.5°	2538.8	2306.3	1030.4	276.6	267.7	312.6	358.5	362.7	365.8	366.6	367.3
70°	2313.6	2011.0	671.9	220.6	224.5	270.8	317.5	321.8	324.4	327.5	329.0
72.5°	1803.4	1478.6	384.6	178.5	186.5	234.8	276.9	281.9	283.5	289.2	291.5
75°	1099.0	869.5	207.6	140.6	153.2	200.7	236.7	242.5	245.1	252.0	252.8
77.5°	522.5	376.5	118.4	109.6	123.3	163.9	199.9	206.5	199.2	203.0	199.9
80°	176.6	139.8	74.7	83.5	94.2	127.9	160.1	166.6	151.3	150.5	149.0
82.5°	61.7	56.7	47.5	55.5	60.9	91.5	121.0	129.5	112.6	112.2	106.9
85°	24.1	23.0	26.4	30.3	36.4	56.3	79.7	83.9	69.3	55.9	55.2
87.5°	5.0	5.4	6.5	6.9	11.1	19.5	28.7	35.2	28.0	23.7	21.8
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)