

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: P961851

Luminaire Tested: **NAV-SB2B-722-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961851
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-722-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7345.2 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

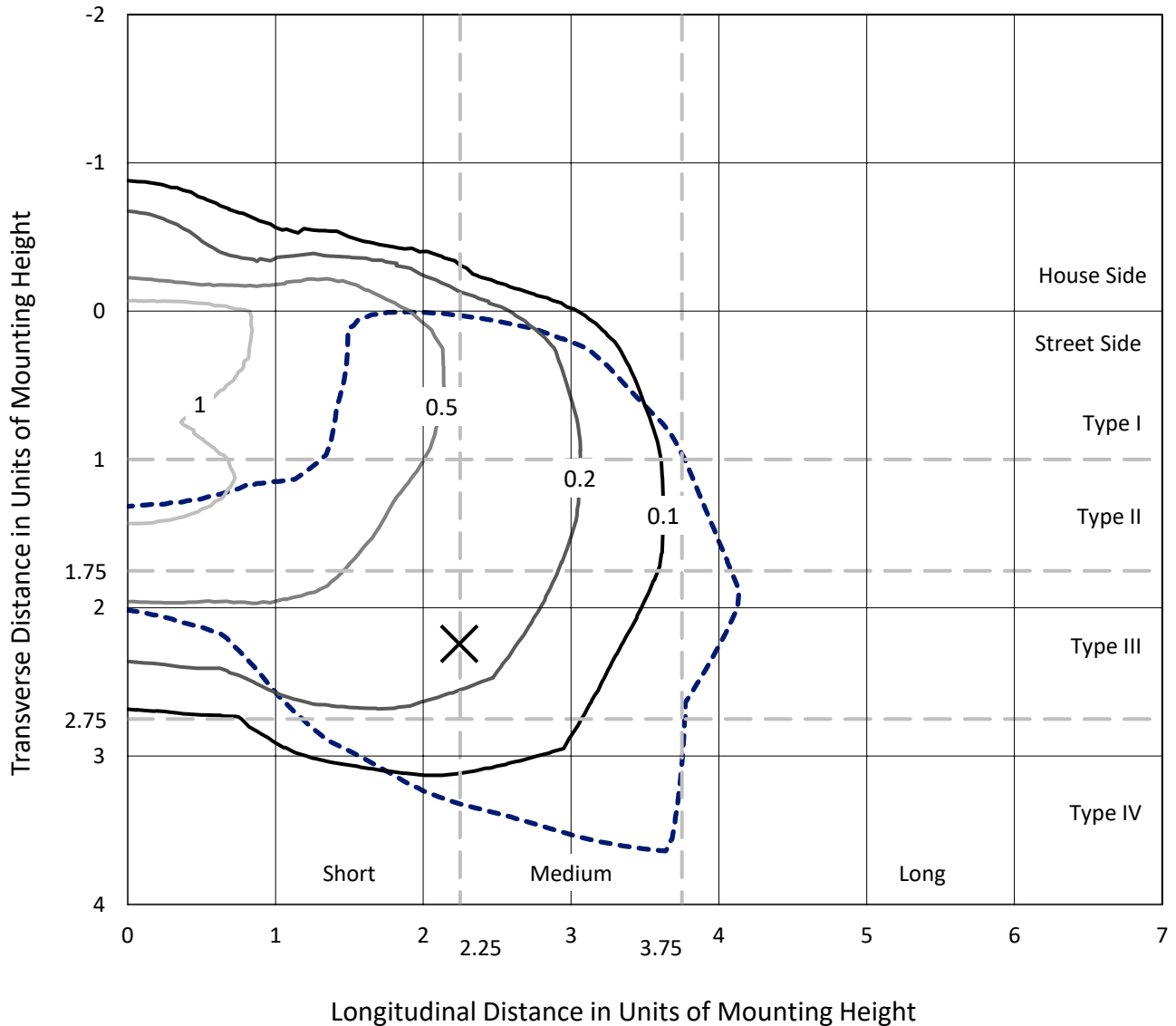
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

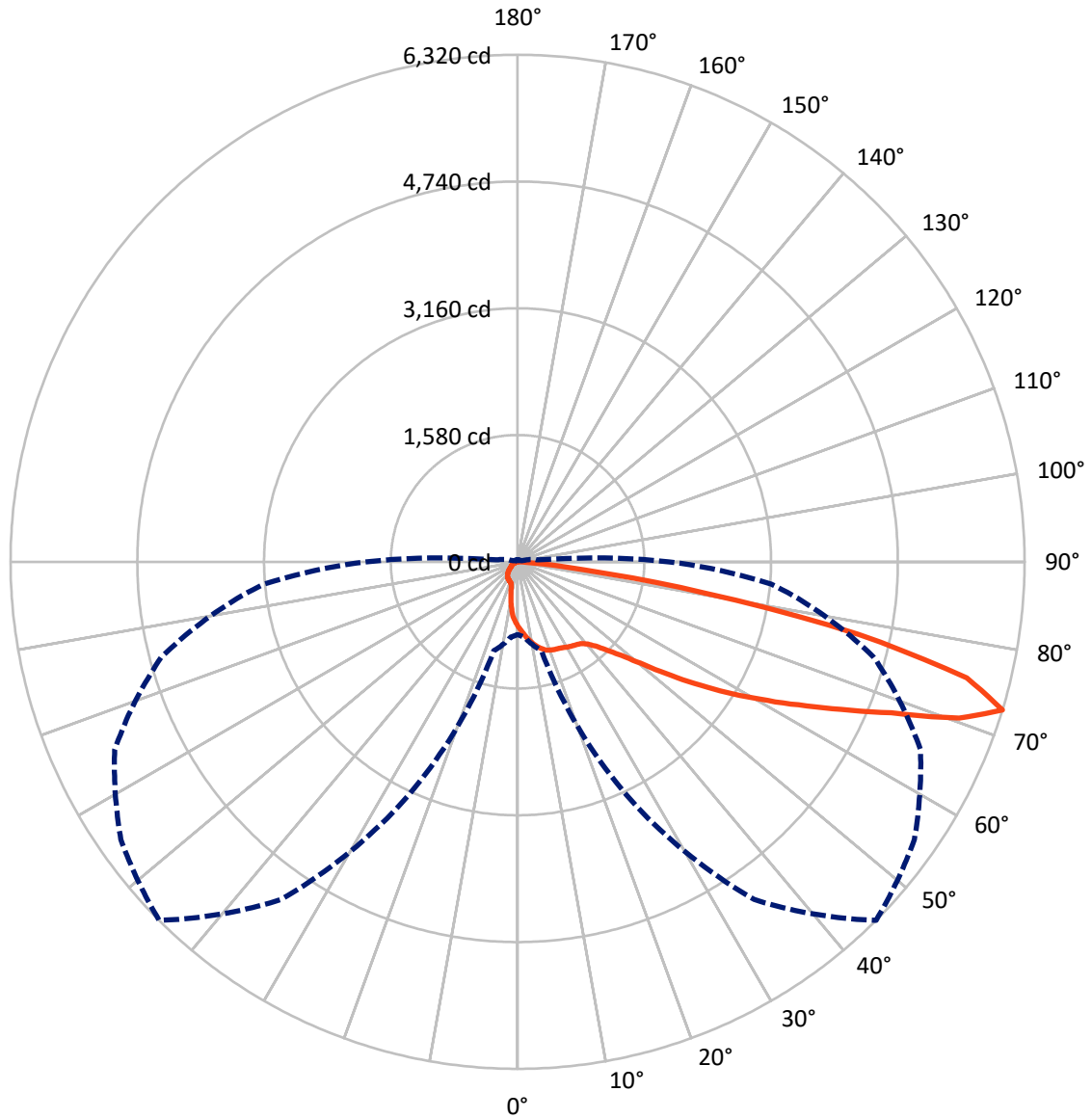
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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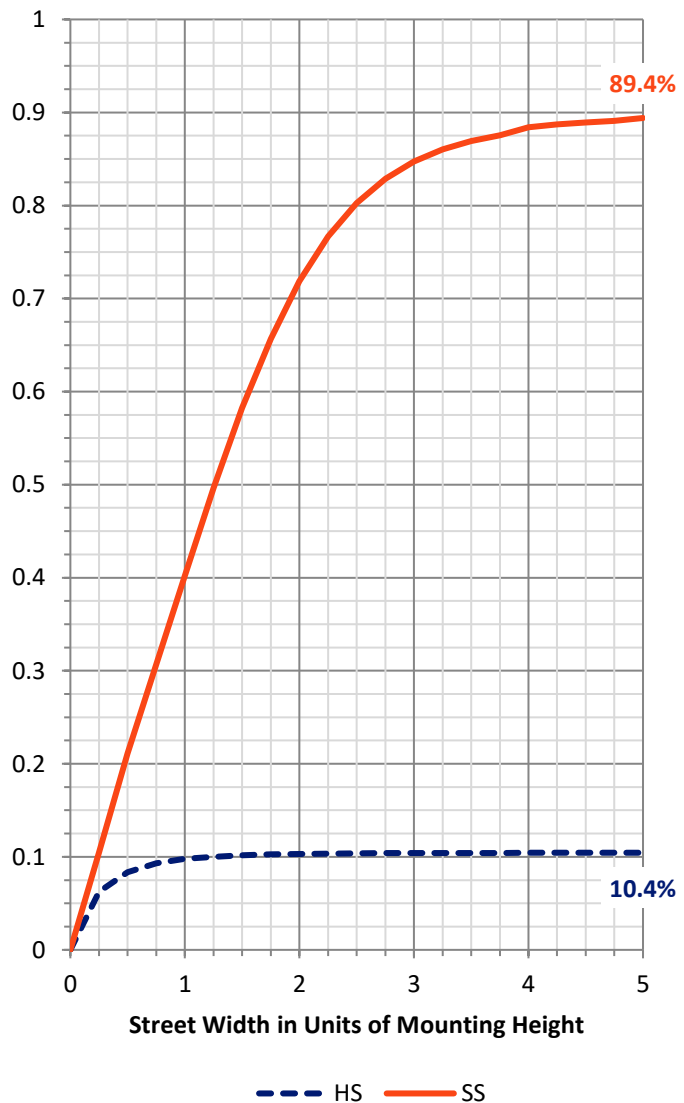
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	771.8	0.0	771.8
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	6573.4	0.0	6573.4
	% Fixture	89.5	0.0	89.5
Total	Lumens	7345.2	0.0	7345.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.8	1.0
10°-20°	221.6	3.0
20°-30°	363.9	5.0
30°-40°	516.1	7.0
40°-50°	853.0	11.6
50°-60°	1532.3	20.9
60°-70°	2127.7	29.0
70°-80°	1543.3	21.0
80°-90°	111.6	1.5
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°	7345.2	100.0
0°-180°	7345.2	100.0

Coefficient of Utilization



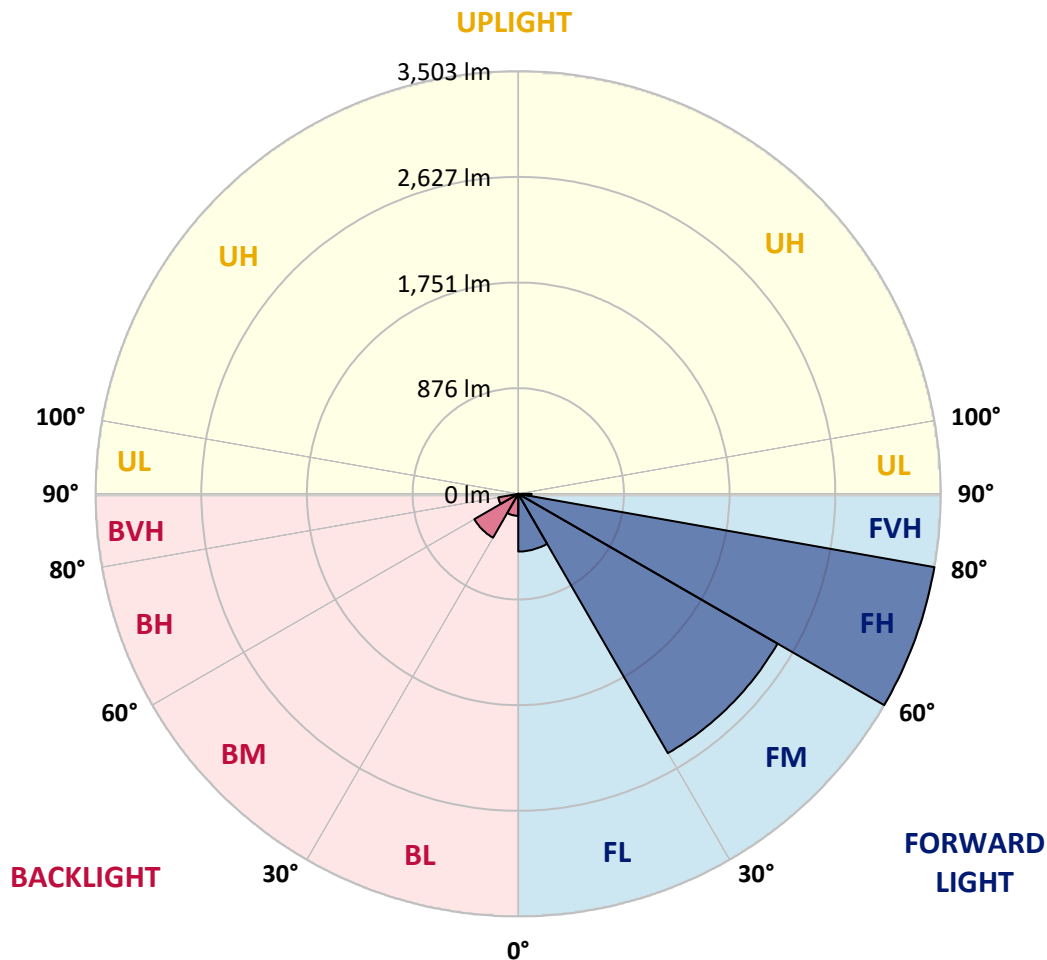
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	478.5	6.5			
FM (30°-60°)	2481.6	33.8			
FH (60°-80°)	3502.7	47.7			G2/5000
FVH (80°-90°)	110.6	1.5			G2/225
BL (0°-30°)	182.8	2.5	B1/500		
BM (30°-60°)	419.7	5.7	B1/1000		
BH (60°-80°)	168.3	2.3	B1/500		G1/500
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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	804.7	804.7	804.7	804.7	804.7	804.7	804.7	804.7	804.7	804.7	804.7
2.5°	878.8	880.4	879.3	873.4	863.4	857.8	854.8	844.8	838.2	826.8	814.7
5°	959.6	965.7	962.1	950.1	931.0	917.5	913.5	892.9	874.3	852.8	827.8
7.5°	1045.3	1048.4	1041.8	1026.2	1000.7	977.6	974.2	945.6	915.9	882.9	848.8
10°	1119.5	1123.0	1113.0	1090.5	1061.4	1032.8	1027.8	996.2	961.1	920.4	876.9
12.5°	1181.7	1185.2	1172.2	1145.1	1113.0	1083.4	1078.4	1045.3	1006.8	961.6	907.4
15°	1228.9	1235.3	1217.8	1188.7	1154.1	1124.5	1122.1	1089.5	1051.9	1001.7	944.0
17.5°	1256.4	1262.9	1246.4	1211.2	1181.7	1156.6	1153.6	1126.6	1091.4	1043.3	979.7
20°	1261.0	1266.9	1249.4	1218.8	1194.2	1174.1	1172.7	1153.1	1127.5	1081.4	1018.2
22.5°	1247.4	1254.9	1238.8	1214.3	1197.2	1186.7	1184.7	1173.6	1159.2	1120.0	1054.3
25°	1233.4	1239.3	1227.3	1205.8	1196.7	1195.8	1197.2	1195.3	1192.2	1159.2	1096.4
27.5°	1232.4	1238.8	1225.3	1204.8	1199.8	1210.3	1211.8	1221.3	1223.8	1194.7	1137.0
30°	1240.9	1245.4	1232.4	1210.7	1208.3	1232.4	1232.9	1249.9	1253.9	1224.8	1177.2
32.5°	1259.4	1264.4	1251.4	1219.8	1216.3	1249.9	1251.4	1274.0	1280.4	1256.9	1219.3
35°	1303.0	1309.0	1294.0	1244.9	1232.4	1266.4	1270.9	1297.5	1310.6	1291.0	1262.9
37.5°	1411.8	1394.3	1373.7	1295.5	1268.9	1292.5	1300.0	1331.1	1354.1	1331.6	1315.1
40°	1682.0	1626.9	1562.7	1381.7	1333.1	1348.2	1354.1	1385.3	1416.9	1394.8	1386.7
42.5°	2087.6	2022.4	1919.2	1580.2	1429.9	1437.4	1441.9	1468.9	1513.6	1496.1	1498.0
45°	2449.1	2425.6	2320.3	1919.2	1610.9	1573.8	1579.3	1593.3	1659.0	1652.5	1665.5
47.5°	2726.9	2713.4	2632.1	2308.2	1916.6	1740.8	1756.2	1762.8	1857.5	1880.6	1915.7
50°	2940.4	2935.4	2862.7	2654.1	2316.3	1986.9	1992.4	1978.4	2120.2	2177.4	2244.0
52.5°	3142.0	3159.0	3105.4	2975.6	2742.9	2309.2	2308.2	2242.1	2433.6	2519.9	2633.6
55°	3324.0	3330.0	3335.6	3303.5	3172.1	2676.3	2666.7	2558.4	2797.0	2886.3	3009.6
57.5°	3494.9	3497.5	3546.6	3612.3	3618.8	3070.3	3052.8	2922.9	3194.1	3257.9	3333.5
60°	3609.7	3621.3	3725.1	3907.6	3987.2	3476.9	3467.4	3335.0	3598.3	3627.8	3613.7
62.5°	3444.3	3514.5	3776.2	4138.2	4335.2	3927.6	3923.1	3798.8	4023.4	3999.3	3879.0
65°	2788.0	2906.9	3367.1	4294.1	4676.7	4431.0	4437.5	4305.1	4460.1	4381.9	4094.6
67.5°	1950.3	2075.6	2620.1	4306.6	5058.2	5022.1	5059.7	4852.1	4923.8	4748.3	4145.7
70°	1348.7	1413.4	1767.8	4037.0	5355.5	5836.2	5835.3	5523.9	5385.0	4915.3	3885.1
72.5°	906.9	940.5	1148.1	3202.7	5136.9	6320.0	6291.0	6037.4	5540.5	4596.9	3174.1
75°	382.5	407.1	531.5	1799.9	4064.0	5782.1	5703.4	5335.4	4922.8	3619.8	1980.4
77.5°	121.4	131.8	209.6	644.2	2238.6	4346.3	4263.1	3332.0	3299.5	1815.9	724.0
80°	57.6	67.1	117.8	258.7	880.9	2363.9	2352.4	1511.6	1419.3	490.4	145.3
82.5°	25.1	29.6	65.2	138.4	394.1	843.3	860.3	514.3	425.7	186.0	44.6
85°	8.0	10.6	30.0	63.7	166.5	209.6	207.0	122.3	171.5	101.3	15.6
87.5°	0.0	0.0	10.0	14.6	17.0	12.0	13.5	10.6	47.7	28.1	5.5
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°	804.7	804.7	804.7	804.7	804.7	804.7	804.7	804.7	804.7	804.7	804.7
2.5°	808.7	800.6	786.6	773.6	762.1	750.5	743.5	733.5	732.5	732.5	735.0
5°	814.2	801.1	776.1	749.5	718.9	689.8	660.8	632.7	623.7	617.2	620.2
7.5°	830.2	809.6	770.1	719.4	661.3	597.6	553.0	504.9	486.4	476.3	477.8
10°	853.3	825.2	765.1	676.3	582.1	495.4	431.6	379.6	359.5	351.0	351.0
12.5°	878.8	844.3	756.0	622.7	495.4	391.5	329.4	305.3	302.3	302.3	302.3
15°	909.5	867.4	740.5	559.5	404.6	309.9	287.8	288.7	291.8	293.8	293.8
17.5°	941.1	892.0	716.0	488.8	324.4	278.8	279.2	280.7	283.3	285.3	285.3
20°	975.2	916.5	683.4	413.6	278.3	269.8	271.2	272.8	274.7	275.7	276.2
22.5°	1011.8	939.5	644.7	339.9	262.7	262.2	262.7	264.2	266.7	266.7	267.7
25°	1050.8	965.1	600.6	286.3	254.7	254.7	255.7	256.7	258.7	258.7	259.2
27.5°	1090.9	988.7	554.0	258.2	247.6	247.1	247.1	248.7	249.7	250.2	250.7
30°	1135.1	1016.3	507.4	252.2	242.1	239.6	238.1	239.1	240.2	240.7	241.7
32.5°	1180.2	1042.8	465.8	254.7	236.7	232.2	227.1	226.1	226.1	228.2	229.6
35°	1230.3	1071.9	433.7	263.2	233.6	221.1	213.1	208.6	209.1	212.1	213.6
37.5°	1290.5	1107.0	410.1	270.7	231.6	208.6	195.6	190.0	186.5	190.0	189.0
40°	1369.2	1158.7	393.1	276.8	229.1	194.0	176.5	167.5	160.9	163.0	162.0
42.5°	1485.0	1239.8	386.5	277.3	223.7	177.0	156.9	144.9	135.4	135.9	133.9
45°	1647.5	1368.2	420.1	270.7	211.6	158.5	136.3	120.3	114.3	112.9	110.8
47.5°	1870.0	1555.2	497.8	257.2	194.0	140.4	116.3	102.8	98.3	95.7	94.3
50°	2168.4	1795.4	584.0	242.1	176.5	123.3	99.7	91.2	88.3	85.7	85.3
52.5°	2514.3	2039.0	654.8	227.1	159.0	108.3	89.3	84.3	81.7	79.7	79.2
55°	2831.7	2206.9	650.8	211.0	141.9	96.2	81.7	78.7	75.7	73.7	72.7
57.5°	3029.2	2230.5	536.5	193.5	122.3	86.7	74.7	72.7	69.2	66.7	66.2
60°	3119.9	2096.1	376.0	170.5	102.8	77.7	67.1	66.2	61.7	58.1	57.2
62.5°	3136.5	1846.5	250.7	141.9	85.7	69.2	59.7	58.1	52.2	46.1	43.2
65°	3069.3	1489.5	173.4	110.8	73.2	60.2	51.1	48.2	41.6	35.6	33.6
67.5°	2856.8	1045.8	120.8	79.7	62.2	47.7	40.6	39.6	34.5	29.6	28.1
70°	2467.2	596.1	80.7	59.7	49.1	32.6	32.1	33.1	28.1	24.1	22.0
72.5°	1891.6	272.8	50.1	43.7	33.6	22.0	25.5	26.0	21.5	18.0	16.1
75°	1113.6	116.8	31.6	28.1	17.0	14.6	18.6	19.1	14.6	11.5	10.0
77.5°	379.0	44.1	20.1	16.5	8.5	8.0	12.0	12.0	8.0	4.5	3.5
80°	86.2	16.5	10.0	6.6	4.0	3.5	4.0	3.5	2.0	0.5	0.0
82.5°	24.6	6.6	4.0	2.5	1.5	1.5	0.5	0.0	0.0	0.0	0.0
85°	7.0	3.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.0	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)