

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: P961417

Luminaire Tested: **NAV-SB2A-735-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961417
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-SB2A-735-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 350mA 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: 7082.7 lumens
Efficiency: N/A
Efficacy: 123.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

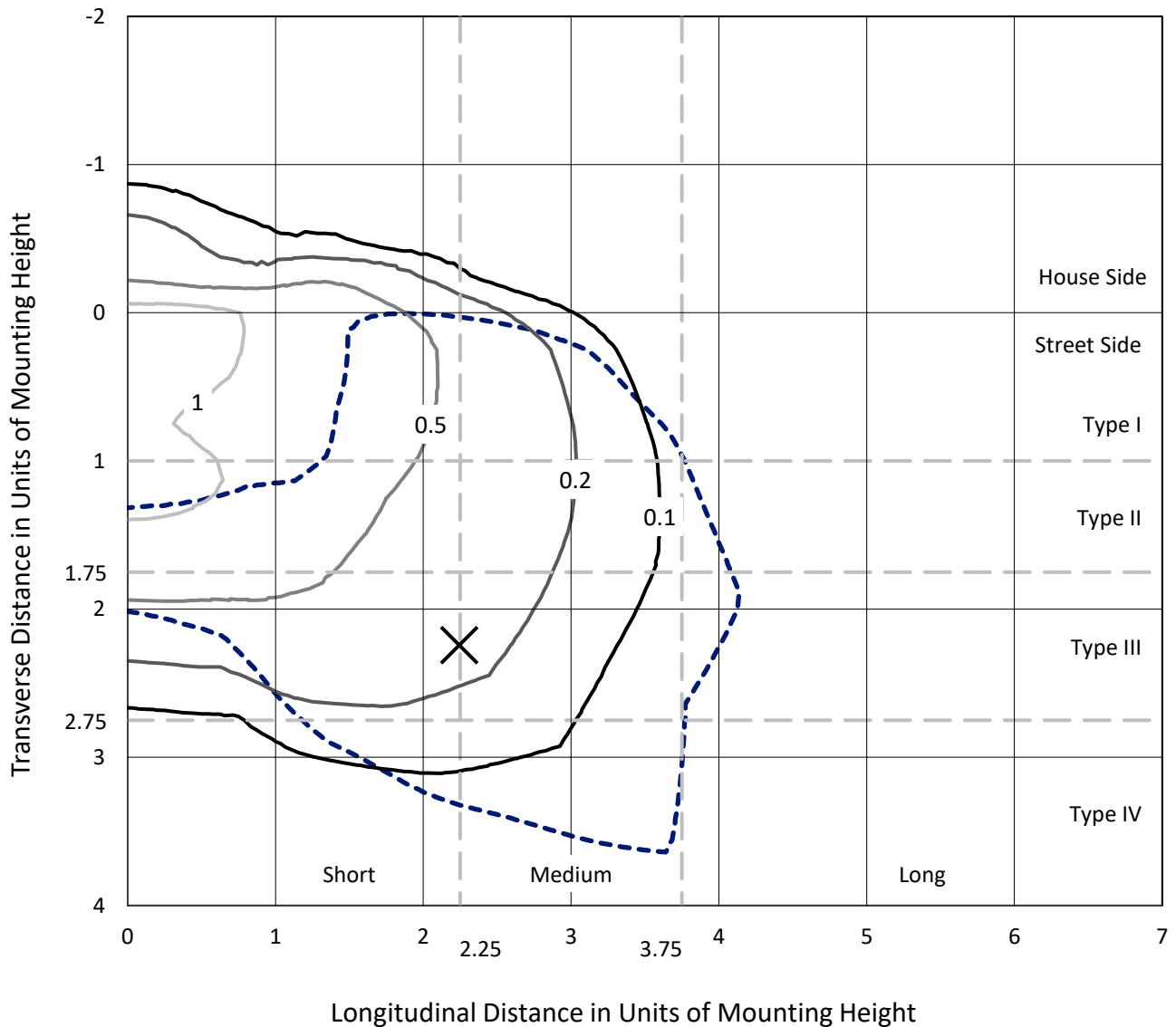
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

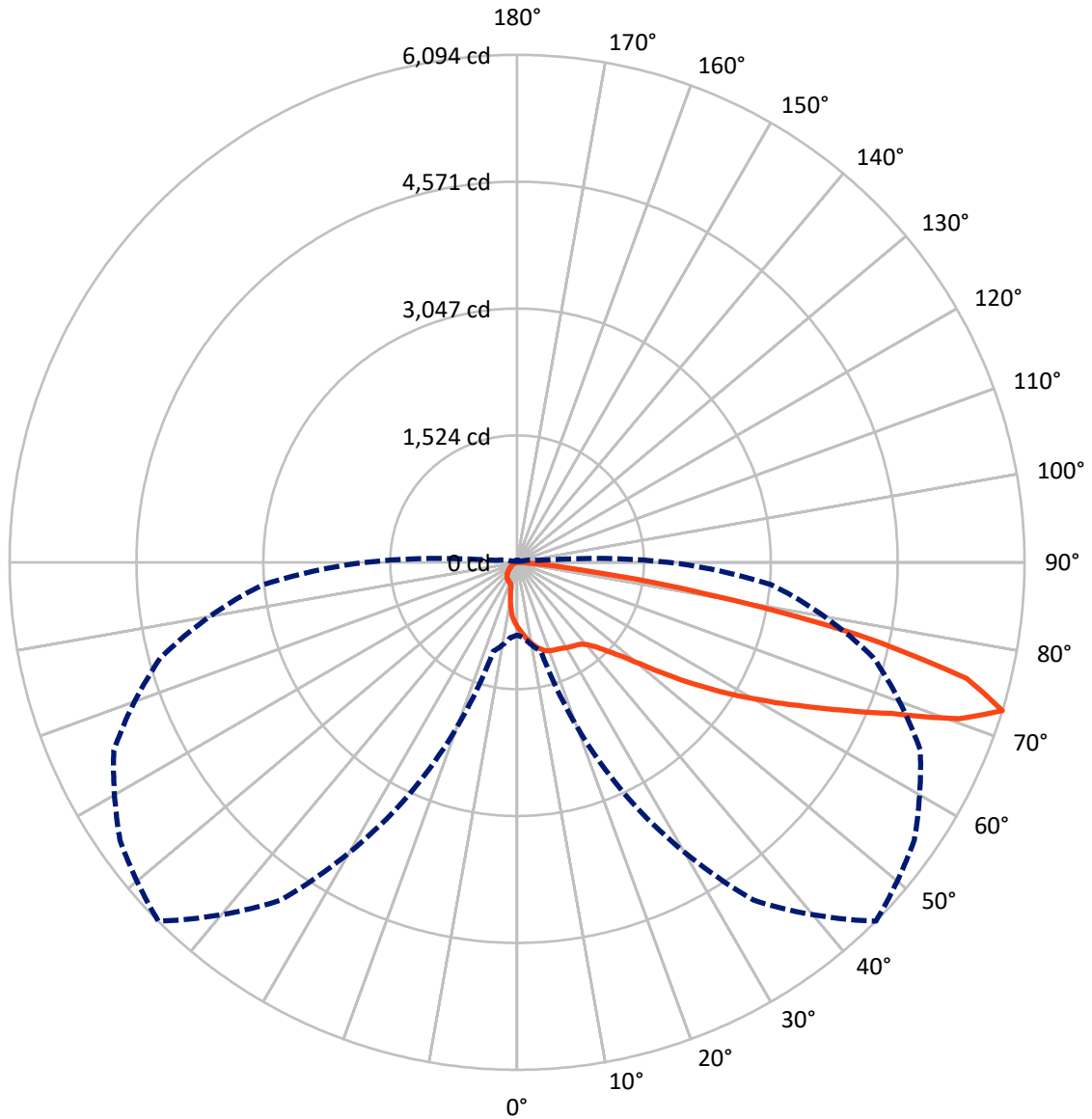
× Max cd
 - - - 1/2 Max cd



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

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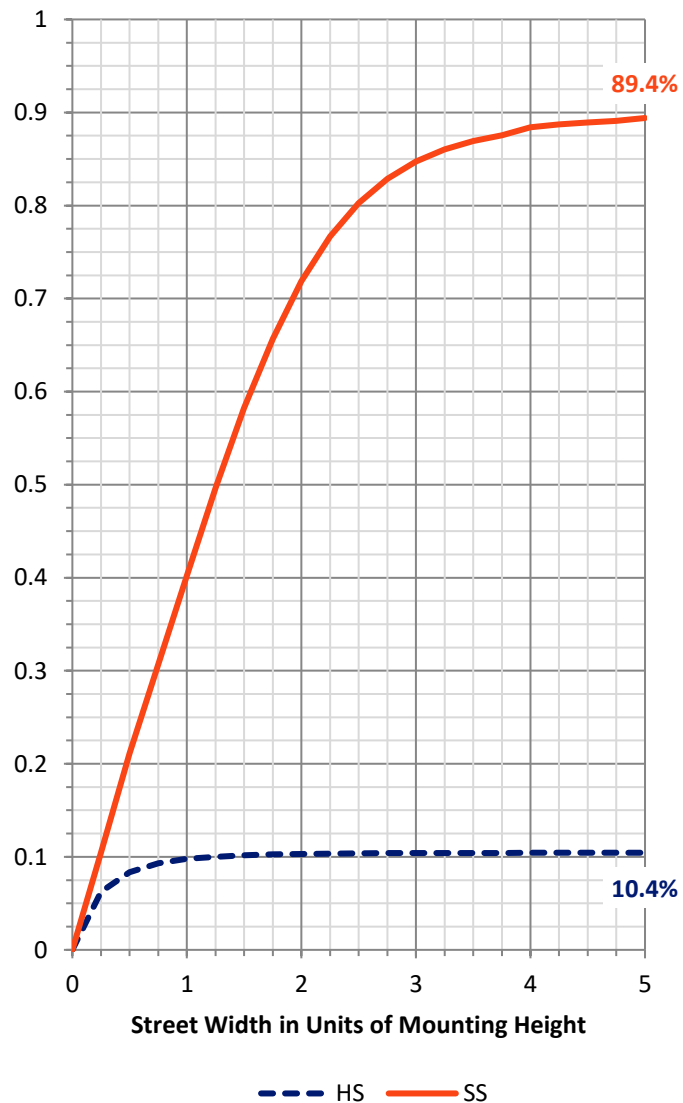
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	744.2	0.0	744.2
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	6338.5	0.0	6338.5
	% Fixture	89.5	0.0	89.5
Total	Lumens	7082.7	0.0	7082.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.1	1.0
10°-20°	213.7	3.0
20°-30°	350.9	5.0
30°-40°	497.6	7.0
40°-50°	822.5	11.6
50°-60°	1477.5	20.9
60°-70°	2051.6	29.0
70°-80°	1488.2	21.0
80°-90°	107.6	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°	7082.7	100.0
0°-180°	7082.7	100.0

Coefficient of Utilization

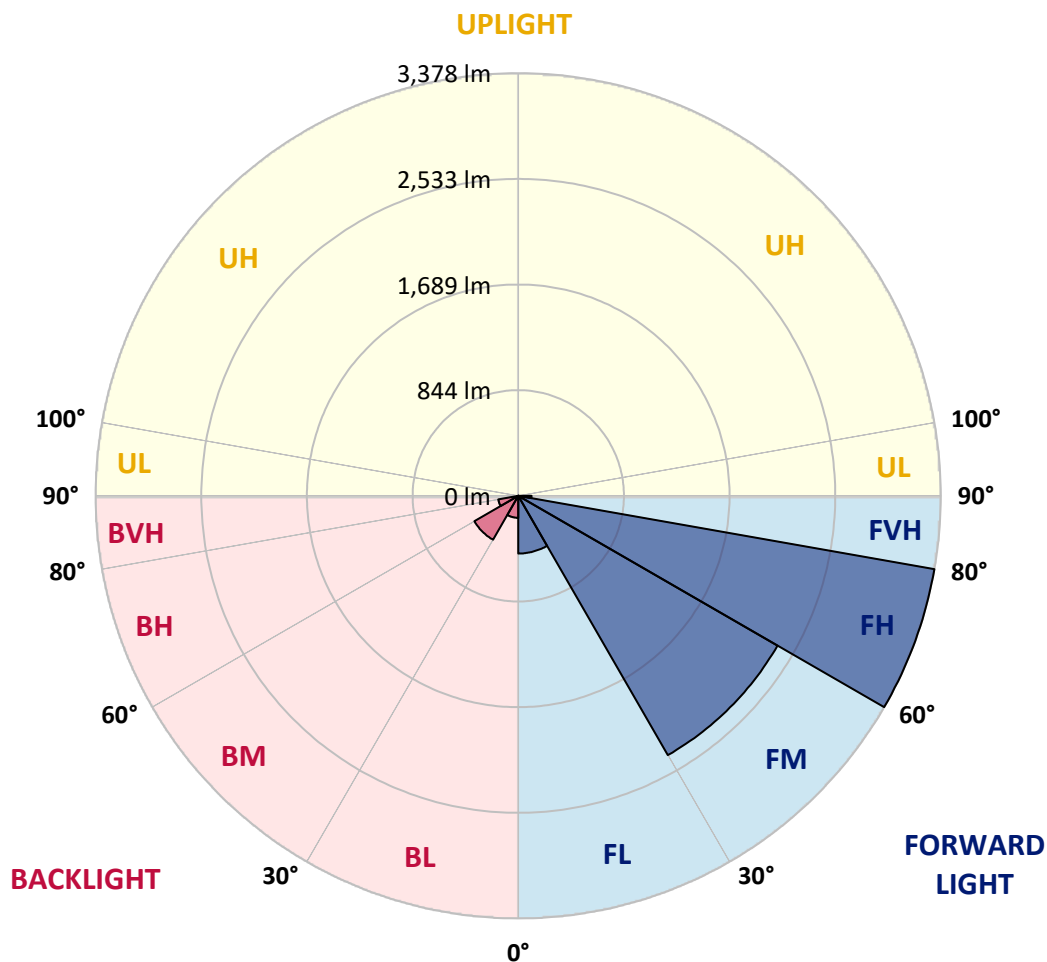


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	461.4	6.5			
FM (30°-60°)	2392.9	33.8			
FH (60°-80°)	3377.6	47.7			G2/5000
FVH (80°-90°)	106.7	1.5			G2/225
BL (0°-30°)	176.3	2.5	B1/500		
BM (30°-60°)	404.7	5.7	B1/1000		
BH (60°-80°)	162.3	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°	775.9	775.9	775.9	775.9	775.9	775.9	775.9	775.9	775.9	775.9	775.9
2.5°	847.5	848.9	848.0	842.1	832.5	827.2	824.3	814.6	808.3	797.2	785.6
5°	925.3	931.1	927.7	916.1	897.8	884.7	880.9	861.0	843.2	822.4	798.2
7.5°	1008.0	1010.9	1004.6	989.6	964.9	942.7	939.3	911.7	883.2	851.4	818.5
10°	1079.5	1082.9	1073.3	1051.4	1023.5	995.9	991.1	960.6	926.8	887.6	845.5
12.5°	1139.5	1142.9	1130.3	1104.2	1073.3	1044.7	1039.9	1008.0	970.8	927.2	875.0
15°	1184.9	1191.3	1174.2	1146.3	1112.8	1084.3	1082.0	1050.5	1014.2	966.0	910.3
17.5°	1211.6	1217.8	1201.8	1168.0	1139.5	1115.3	1112.4	1086.3	1052.5	1006.0	944.6
20°	1215.9	1221.7	1204.8	1175.3	1151.6	1132.2	1130.8	1111.9	1087.3	1042.8	981.8
22.5°	1202.8	1210.1	1194.6	1170.9	1154.5	1144.3	1142.4	1131.7	1117.8	1080.0	1016.7
25°	1189.3	1195.0	1183.5	1162.7	1153.9	1153.0	1154.5	1152.5	1149.6	1117.8	1057.3
27.5°	1188.3	1194.6	1181.5	1161.7	1156.9	1167.1	1168.5	1177.6	1180.1	1152.1	1096.4
30°	1196.5	1200.9	1188.3	1167.5	1165.1	1188.3	1188.8	1205.2	1209.1	1181.1	1135.1
32.5°	1214.4	1219.2	1206.6	1176.2	1172.8	1205.2	1206.6	1228.5	1234.7	1212.0	1175.8
35°	1256.4	1262.3	1247.7	1200.4	1188.3	1221.2	1225.5	1251.1	1263.7	1244.9	1217.8
37.5°	1361.4	1344.5	1324.6	1249.3	1223.6	1246.3	1253.6	1283.5	1305.7	1284.0	1268.0
40°	1622.0	1568.8	1506.9	1332.4	1285.5	1300.0	1305.7	1335.8	1366.2	1344.9	1337.2
42.5°	2013.1	1950.3	1850.6	1523.9	1378.8	1386.0	1390.4	1416.4	1459.5	1442.6	1444.5
45°	2361.6	2338.9	2237.4	1850.6	1553.3	1517.5	1522.8	1536.4	1599.7	1593.5	1606.0
47.5°	2629.4	2616.4	2538.1	2225.8	1848.2	1678.5	1693.5	1699.8	1791.2	1813.4	1847.3
50°	2835.5	2830.5	2760.4	2559.3	2233.5	1915.9	1921.3	1907.6	2044.5	2099.6	2163.9
52.5°	3029.8	3046.2	2994.4	2869.3	2644.9	2226.7	2225.8	2161.9	2346.6	2429.8	2539.5
55°	3205.3	3211.0	3216.3	3185.4	3058.8	2580.6	2571.4	2467.1	2697.2	2783.2	2902.1
57.5°	3370.1	3372.6	3419.9	3483.3	3489.5	2960.6	2943.7	2818.4	3080.0	3141.4	3214.4
60°	3480.8	3492.0	3592.0	3768.0	3844.9	3352.7	3343.6	3215.8	3469.7	3498.2	3484.7
62.5°	3321.3	3389.0	3641.3	3990.3	4180.4	3787.3	3783.0	3663.0	3879.6	3856.5	3740.4
65°	2688.5	2803.1	3246.8	4140.7	4509.6	4272.7	4279.0	4151.4	4300.7	4225.4	3948.3
67.5°	1880.6	2001.4	2526.5	4152.8	4877.5	4842.7	4878.9	4678.8	4747.9	4578.7	3997.6
70°	1300.5	1362.8	1704.7	3892.7	5164.2	5627.8	5626.8	5326.6	5192.6	4739.7	3746.2
72.5°	874.5	906.9	1107.1	3088.2	4953.4	6094.3	6066.3	5821.7	5342.6	4432.7	3060.6
75°	368.9	392.6	512.5	1735.5	3918.8	5575.6	5499.6	5144.8	4747.0	3490.4	1909.6
77.5°	117.0	127.1	202.1	621.3	2158.5	4191.0	4110.8	3213.0	3181.6	1751.0	698.1
80°	55.6	64.8	113.6	249.5	849.4	2279.5	2268.3	1457.6	1368.7	472.8	140.2
82.5°	24.2	28.5	62.8	133.5	380.0	813.1	829.6	496.0	410.4	179.4	43.0
85°	7.7	10.1	29.0	61.4	160.5	202.1	199.7	118.0	165.3	97.7	15.0
87.5°	0.0	0.0	9.6	14.0	16.4	11.6	13.0	10.1	45.9	27.1	5.3
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°	775.9	775.9	775.9	775.9	775.9	775.9	775.9	775.9	775.9	775.9	775.9
2.5°	779.8	772.0	758.5	746.0	734.8	723.8	717.0	707.2	706.3	706.3	708.7
5°	785.2	772.5	748.4	722.7	693.3	665.2	637.1	610.1	601.4	595.1	598.0
7.5°	800.6	780.7	742.6	693.7	637.7	576.3	533.2	486.9	468.9	459.3	460.7
10°	822.9	795.7	737.7	652.2	561.3	477.6	416.3	365.9	346.7	338.5	338.5
12.5°	847.5	814.2	729.1	600.4	477.6	377.6	317.6	294.4	291.5	291.5	291.5
15°	877.0	836.4	714.0	539.6	390.1	298.8	277.5	278.5	281.4	283.3	283.3
17.5°	907.4	860.1	690.3	471.4	312.8	268.8	269.3	270.7	273.2	275.1	275.1
20°	940.3	883.8	659.0	398.8	268.3	260.1	261.6	263.0	265.0	265.9	266.4
22.5°	975.6	906.0	621.7	327.8	253.3	252.9	253.3	254.8	257.2	257.2	258.2
25°	1013.3	930.6	579.1	276.0	245.6	245.6	246.5	247.5	249.5	249.5	249.9
27.5°	1052.0	953.4	534.2	249.0	238.8	238.3	238.3	239.7	240.8	241.3	241.7
30°	1094.5	979.9	489.2	243.1	233.5	231.1	229.6	230.6	231.5	232.1	233.0
32.5°	1138.1	1005.5	449.2	245.6	228.2	223.9	219.0	218.0	218.0	220.0	221.4
35°	1186.3	1033.6	418.2	253.8	225.3	213.2	205.5	201.1	201.6	204.5	205.9
37.5°	1244.4	1067.4	395.4	261.1	223.3	201.1	188.5	183.3	179.9	183.3	182.2
40°	1320.3	1117.2	379.0	266.9	220.9	187.1	170.1	161.4	155.2	157.1	156.1
42.5°	1431.9	1195.6	372.7	267.3	215.7	170.7	151.3	139.7	130.5	131.0	129.0
45°	1588.6	1319.3	405.1	261.1	204.0	152.7	131.5	116.0	110.2	108.8	106.8
47.5°	1803.3	1499.7	480.1	248.0	187.1	135.4	112.1	99.1	94.7	92.4	90.9
50°	2090.9	1731.2	563.2	233.5	170.1	118.9	96.2	87.9	85.1	82.7	82.2
52.5°	2424.4	1966.2	631.4	219.0	153.2	104.4	86.1	81.2	78.8	76.9	76.4
55°	2730.5	2128.1	627.5	203.6	136.8	92.9	78.8	75.8	73.0	71.0	70.1
57.5°	2920.9	2150.9	517.3	186.7	118.0	83.6	72.1	70.1	66.7	64.3	63.9
60°	3008.5	2021.3	362.5	164.4	99.1	74.9	64.8	63.9	59.4	56.1	55.1
62.5°	3024.5	1780.5	241.7	136.8	82.7	66.7	57.5	56.1	50.3	44.5	41.6
65°	2959.7	1436.3	167.3	106.8	70.6	58.0	49.3	46.4	40.1	34.3	32.4
67.5°	2754.7	1008.5	116.5	76.9	60.0	45.9	39.2	38.2	33.3	28.5	27.1
70°	2379.0	574.8	77.8	57.5	47.4	31.5	31.0	31.9	27.1	23.2	21.3
72.5°	1824.1	263.0	48.4	42.0	32.4	21.3	24.7	25.1	20.8	17.4	15.5
75°	1073.7	112.6	30.4	27.1	16.4	14.0	17.9	18.3	14.0	11.1	9.6
77.5°	365.5	42.5	19.4	16.0	8.2	7.7	11.6	11.6	7.7	4.3	3.4
80°	83.1	16.0	9.6	6.3	3.9	3.4	3.9	3.4	1.9	0.5	0.0
82.5°	23.7	6.3	3.9	2.5	1.4	1.4	0.5	0.0	0.0	0.0	0.0
85°	6.8	2.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.9	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)