

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: P959972

Luminaire Tested: **NAV-SB1B-830-U-SL4-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959972
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-830-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3621.3 lumens
Efficiency: N/A
Efficacy: 91.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 39.8
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



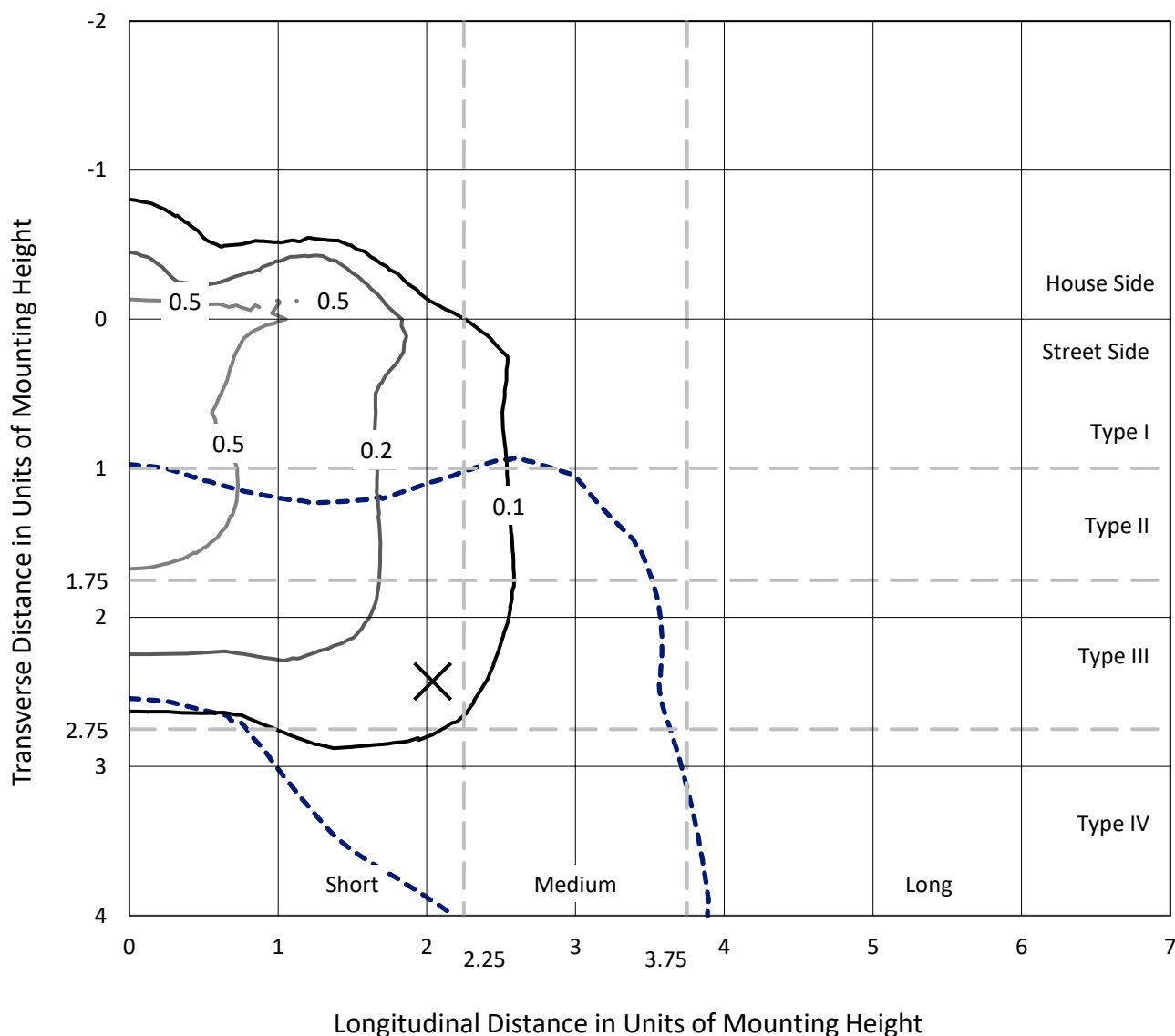
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

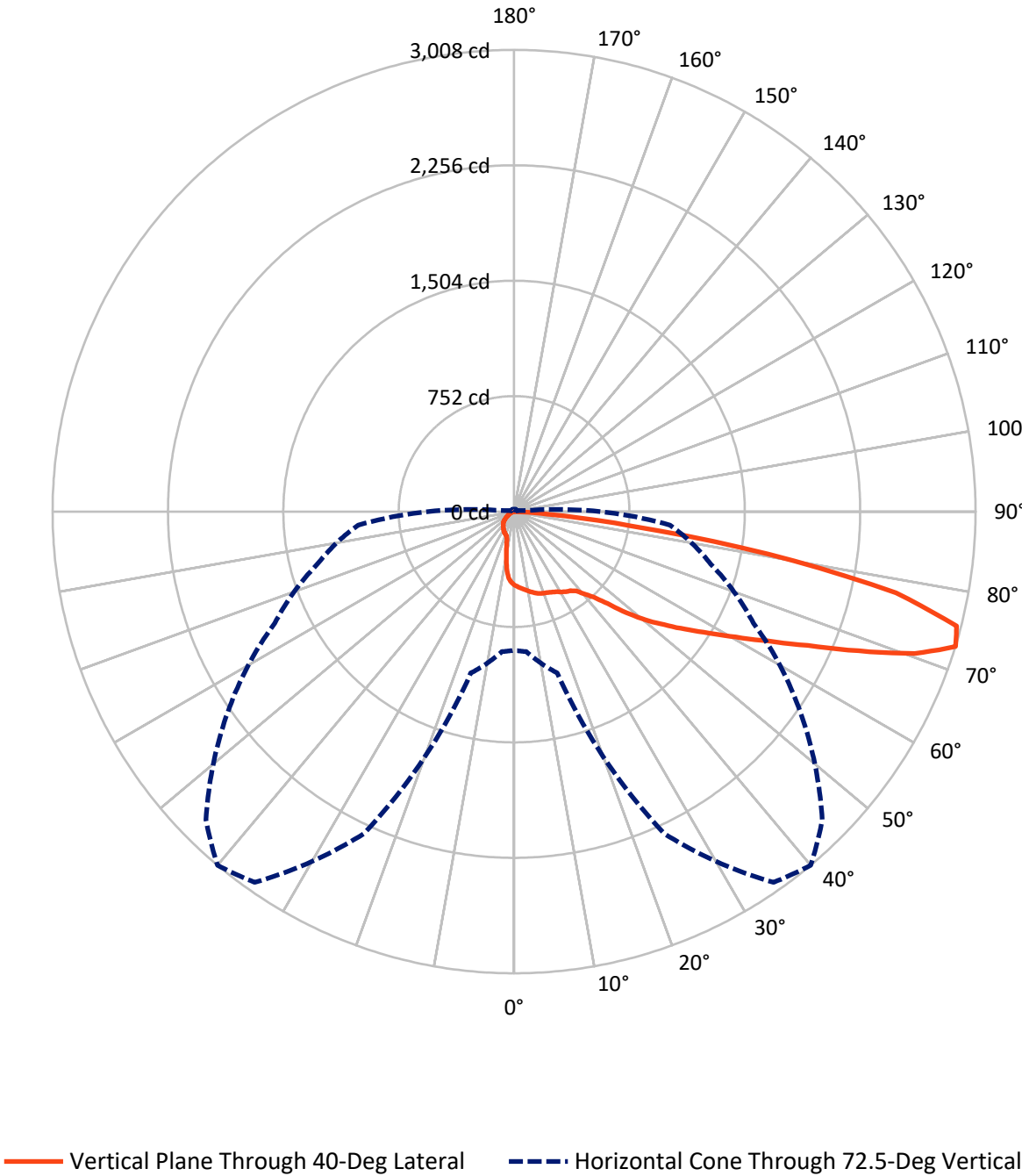


Based on 25 foot mounting height. Maximum calculated value = 0.9 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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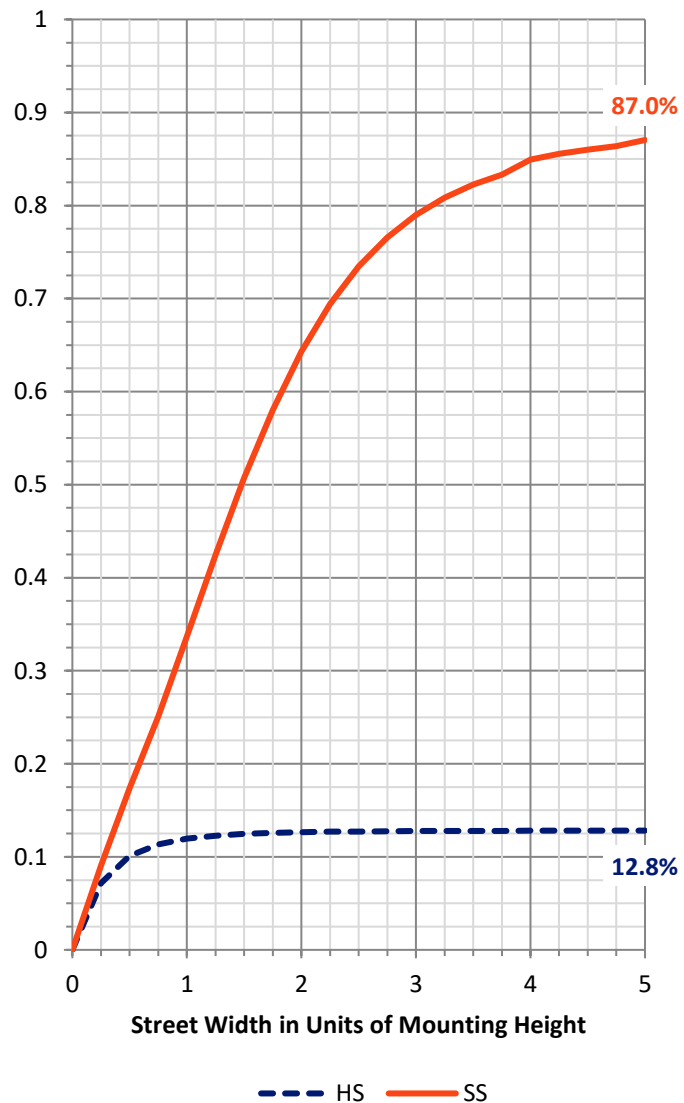
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	467.6	0.0	467.6
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	3153.7	0.0	3153.7
	% Fixture	87.1	0.0	87.1
Total	Lumens	3621.3	0.0	3621.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.8	1.2
10°-20°	118.9	3.3
20°-30°	192.4	5.3
30°-40°	284.1	7.8
40°-50°	478.1	13.2
50°-60°	742.4	20.5
60°-70°	928.9	25.7
70°-80°	760.5	21.0
80°-90°	72.1	2.0
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°	3621.3	100.0
0°-180°	3621.3	100.0

Coefficient of Utilization



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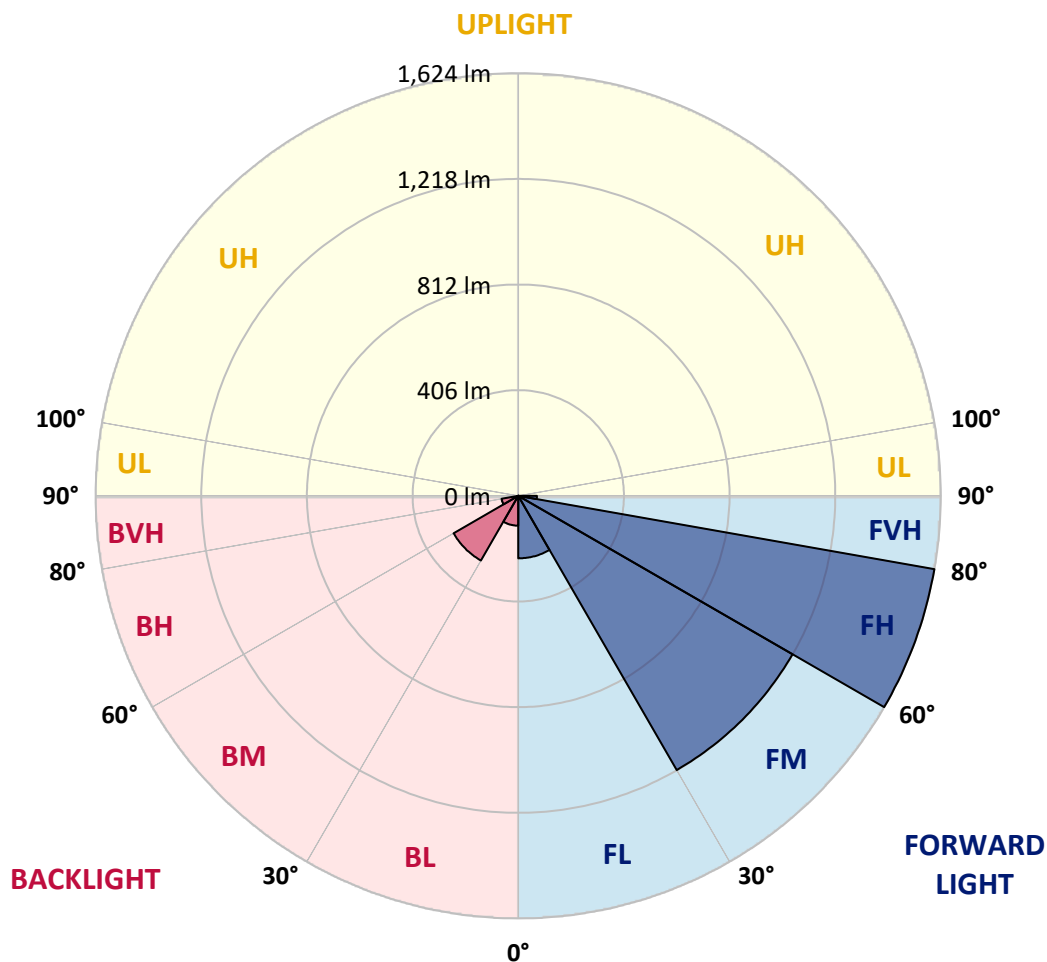
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	240.3	6.6			
FM	(30°-60°)	1217.4	33.6			
FH	(60°-80°)	1624.3	44.9			G1/1800
FVH	(80°-90°)	71.6	2.0			G1/100
BL	(0°-30°)	114.8	3.2	B1/500		
BM	(30°-60°)	287.2	7.9	B1/1000		
BH	(60°-80°)	65.1	1.8	B0/110		G0/110
BVH	(80°-90°)	0.5	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-G1

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	479.5	479.5	479.5	479.5	479.5	479.5	479.5	479.5	479.5	479.5	479.5
2.5°	493.9	495.9	494.8	492.6	492.0	491.0	489.5	489.0	487.1	485.5	483.6
5°	507.9	509.7	508.4	505.4	504.0	502.7	500.8	499.2	495.3	491.8	487.4
7.5°	523.2	524.8	523.2	518.8	516.6	515.0	512.2	509.7	505.4	500.2	494.8
10°	540.1	541.4	538.9	533.2	529.7	527.3	524.8	522.0	517.9	512.2	505.6
12.5°	555.9	557.5	553.7	546.8	542.7	540.3	537.6	535.4	531.4	525.8	519.1
15°	570.3	572.8	566.2	558.8	554.2	552.3	549.6	548.3	545.5	541.7	535.4
17.5°	581.3	582.8	576.0	567.3	562.1	560.8	558.8	559.6	559.1	557.2	553.1
20°	590.5	591.6	582.6	571.9	566.2	566.5	566.0	568.7	569.8	569.8	569.5
22.5°	602.0	602.2	590.8	577.4	570.6	572.5	573.3	576.4	578.5	580.7	585.6
25°	616.9	616.4	602.8	584.5	578.5	581.3	583.1	584.2	586.7	590.2	601.4
27.5°	639.3	637.7	620.2	595.9	588.9	591.3	594.9	594.3	593.3	595.9	614.8
30°	667.7	665.5	642.4	612.0	605.5	607.7	608.7	603.8	595.9	598.4	626.5
32.5°	712.7	708.9	676.7	630.1	619.9	622.4	621.0	611.0	599.2	601.7	638.3
35°	791.0	781.7	736.2	667.7	636.3	633.6	630.3	620.5	606.1	603.6	648.0
37.5°	957.4	941.0	863.3	741.1	673.4	655.7	645.6	635.8	613.5	603.6	659.3
40°	1145.0	1128.3	1038.6	863.8	735.0	705.1	681.0	653.7	621.0	607.1	676.7
42.5°	1340.8	1322.6	1230.4	1016.0	823.2	761.5	716.8	668.2	633.6	618.1	699.9
45°	1559.5	1536.7	1416.1	1174.8	951.1	855.4	774.3	697.9	655.4	637.4	731.5
47.5°	1790.4	1760.6	1601.4	1328.8	1088.9	985.1	879.7	751.1	687.6	666.4	774.3
50°	1994.9	1965.4	1792.5	1490.0	1217.6	1108.7	999.6	824.8	735.8	707.2	831.9
52.5°	2141.9	2119.5	1966.6	1656.4	1351.5	1224.7	1108.4	910.4	796.9	759.6	899.8
55°	2240.3	2219.9	2089.8	1814.0	1507.2	1352.3	1215.6	1003.5	870.6	822.4	974.8
57.5°	2300.1	2288.4	2178.9	1954.8	1661.6	1491.9	1338.3	1105.8	957.4	896.3	1058.5
60°	2321.3	2311.8	2234.4	2089.0	1848.2	1659.7	1482.7	1221.1	1062.6	980.3	1144.4
62.5°	2264.6	2266.6	2274.2	2248.0	2044.8	1856.1	1655.6	1359.7	1179.4	1075.4	1225.2
65°	1997.6	2013.4	2158.5	2424.2	2305.2	2102.1	1875.6	1528.8	1313.0	1183.8	1289.2
67.5°	1653.9	1676.9	1857.4	2527.3	2582.9	2421.5	2182.2	1744.2	1472.3	1294.0	1313.5
70°	1266.1	1290.7	1509.4	2505.7	2842.8	2770.6	2561.4	2018.3	1637.3	1370.3	1251.6
72.5°	903.6	916.1	1088.6	2314.0	2949.5	3008.4	2840.7	2278.0	1721.6	1328.0	1020.9
75°	635.0	632.7	747.0	1863.4	2783.4	2979.5	2742.8	2137.5	1557.9	1055.0	629.6
77.5°	276.5	277.2	373.1	1131.6	2221.6	2544.8	2279.9	1339.0	1086.1	559.1	265.7
80°	71.8	73.9	136.9	450.6	1337.5	1679.6	1390.5	588.6	501.8	136.3	50.7
82.5°	25.3	27.0	63.0	141.6	493.4	770.3	619.1	188.2	130.9	39.1	13.6
85°	7.4	8.7	33.8	43.4	102.0	217.6	150.3	36.6	32.2	20.2	3.6
87.5°	0.0	1.1	6.9	6.0	6.0	4.1	7.7	4.1	5.2	2.5	1.1
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°	479.5	479.5	479.5	479.5	479.5	479.5	479.5	479.5	479.5	479.5	479.5
2.5°	482.0	480.0	475.9	471.6	467.5	463.7	462.6	458.5	456.5	456.8	456.5
5°	484.4	480.8	472.9	463.4	453.6	442.4	433.2	420.0	408.9	407.4	406.7
7.5°	491.0	485.2	472.4	453.9	429.3	398.5	369.8	341.5	325.4	316.6	316.1
10°	501.0	493.4	473.8	438.3	386.2	331.1	287.7	252.0	233.7	225.3	223.7
12.5°	513.0	504.6	475.9	411.8	330.6	258.3	211.4	189.5	185.7	185.2	184.9
15°	529.9	520.7	478.4	376.1	270.3	196.7	175.1	175.4	178.4	180.0	179.8
17.5°	548.8	539.5	474.9	332.5	210.8	168.0	167.5	169.9	174.2	175.9	175.7
20°	567.8	559.1	462.3	281.2	170.5	160.1	162.3	165.0	169.3	171.6	171.6
22.5°	587.5	579.8	442.4	226.6	153.9	154.4	157.1	159.8	164.7	167.2	167.2
25°	608.5	602.0	415.9	181.6	146.8	148.4	151.9	155.2	160.4	163.4	163.4
27.5°	629.8	624.8	385.9	151.6	140.2	142.1	146.2	150.6	155.7	159.3	159.6
30°	652.9	650.3	361.9	140.4	134.0	135.6	140.2	145.1	150.9	155.2	155.7
32.5°	676.7	676.2	350.2	148.6	128.2	129.3	133.4	138.3	145.3	150.9	151.4
35°	700.2	701.2	343.4	171.8	126.3	123.3	126.0	130.4	138.8	145.7	146.8
37.5°	730.1	732.9	343.1	196.9	130.9	117.3	119.2	122.2	129.6	137.5	138.8
40°	774.9	789.4	360.6	218.4	139.1	111.8	112.3	113.0	116.7	123.3	125.5
42.5°	834.4	876.6	423.5	233.2	142.4	106.9	105.0	102.0	101.5	105.0	106.9
45°	908.3	982.2	534.3	241.4	139.1	101.5	96.2	88.4	85.4	87.8	87.8
47.5°	995.3	1097.8	665.5	243.3	133.7	94.6	85.4	75.0	72.6	73.4	73.1
50°	1080.0	1184.6	780.8	227.4	124.6	85.9	73.4	64.7	63.0	63.2	63.2
52.5°	1155.1	1214.3	813.6	190.1	112.6	75.2	63.0	57.0	55.9	55.9	55.7
55°	1204.7	1182.1	725.5	145.3	97.7	64.4	54.0	51.0	50.4	50.2	49.6
57.5°	1215.1	1077.4	548.0	105.0	76.4	54.3	48.0	46.3	45.3	44.2	43.7
60°	1178.0	902.8	348.8	73.4	57.3	46.3	42.5	41.4	39.3	37.1	36.3
62.5°	1097.8	681.8	193.1	51.0	46.1	39.6	37.6	36.3	32.2	28.6	27.6
65°	990.0	453.4	85.4	39.9	37.6	33.3	32.2	30.2	25.3	21.3	20.5
67.5°	881.8	261.1	38.4	31.9	30.2	27.3	26.4	25.1	21.5	17.7	17.2
70°	758.2	132.3	26.4	25.3	23.5	20.7	21.5	21.3	17.7	14.5	13.9
72.5°	564.6	65.7	19.9	19.1	16.9	14.8	17.7	17.4	13.9	10.9	10.4
75°	319.7	32.5	14.5	13.3	10.0	10.9	14.1	13.3	9.5	7.1	6.6
77.5°	126.8	16.6	9.5	8.2	6.0	7.4	10.4	9.0	4.9	3.0	2.8
80°	29.2	8.2	4.9	3.6	2.8	4.4	5.4	3.3	1.3	0.3	0.0
82.5°	8.2	3.6	1.6	1.3	1.3	1.6	1.3	0.5	0.0	0.0	0.0
85°	2.8	1.6	0.5	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0
87.5°	1.1	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)