

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: P959427

Luminaire Tested: **NAV-SB1A-827-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959427
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-827-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3136.5 lumens
Efficiency: N/A
Efficacy: 101.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 30.9
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

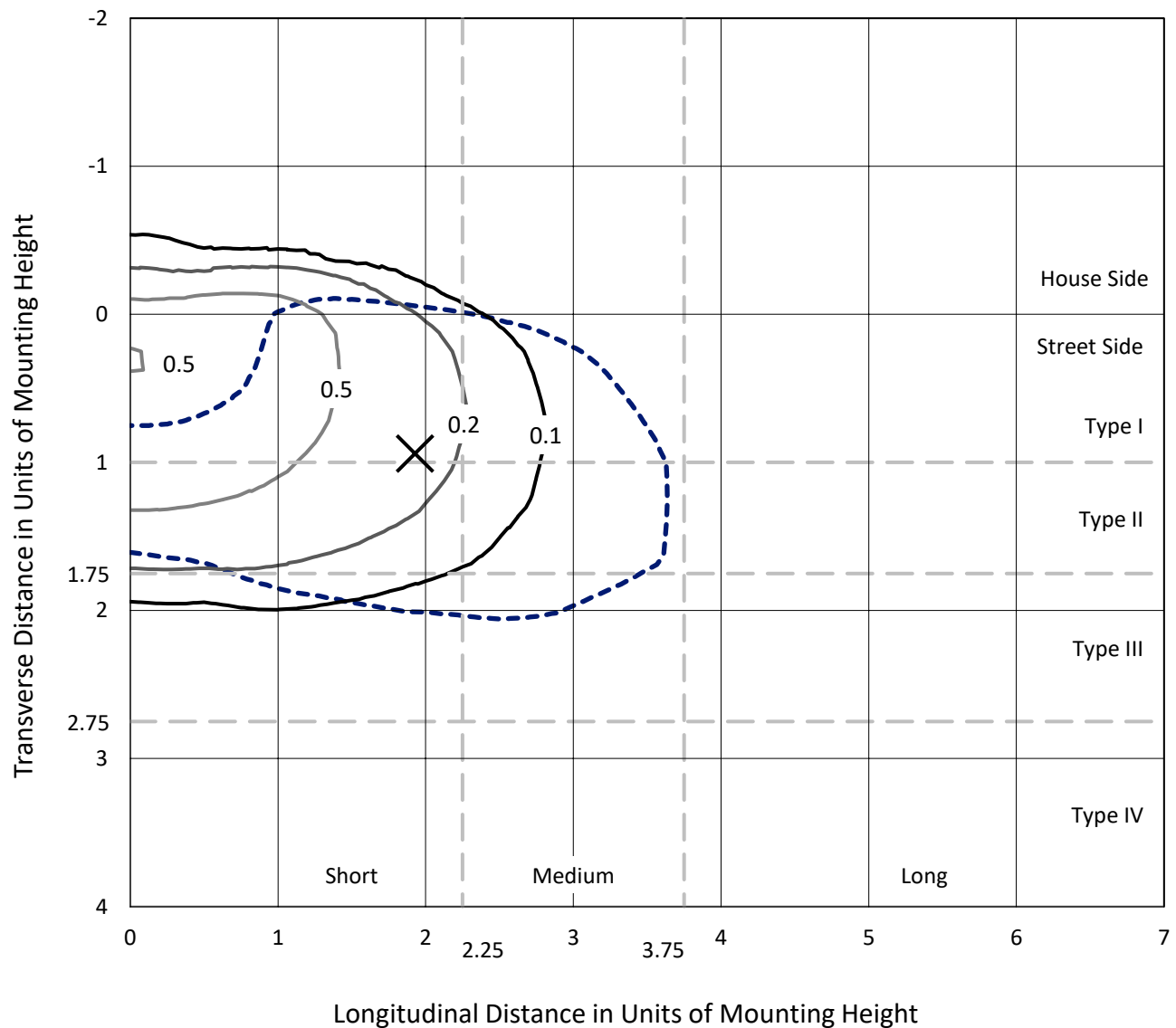


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Iso-Footcandle Lines of Horizontal Illumination

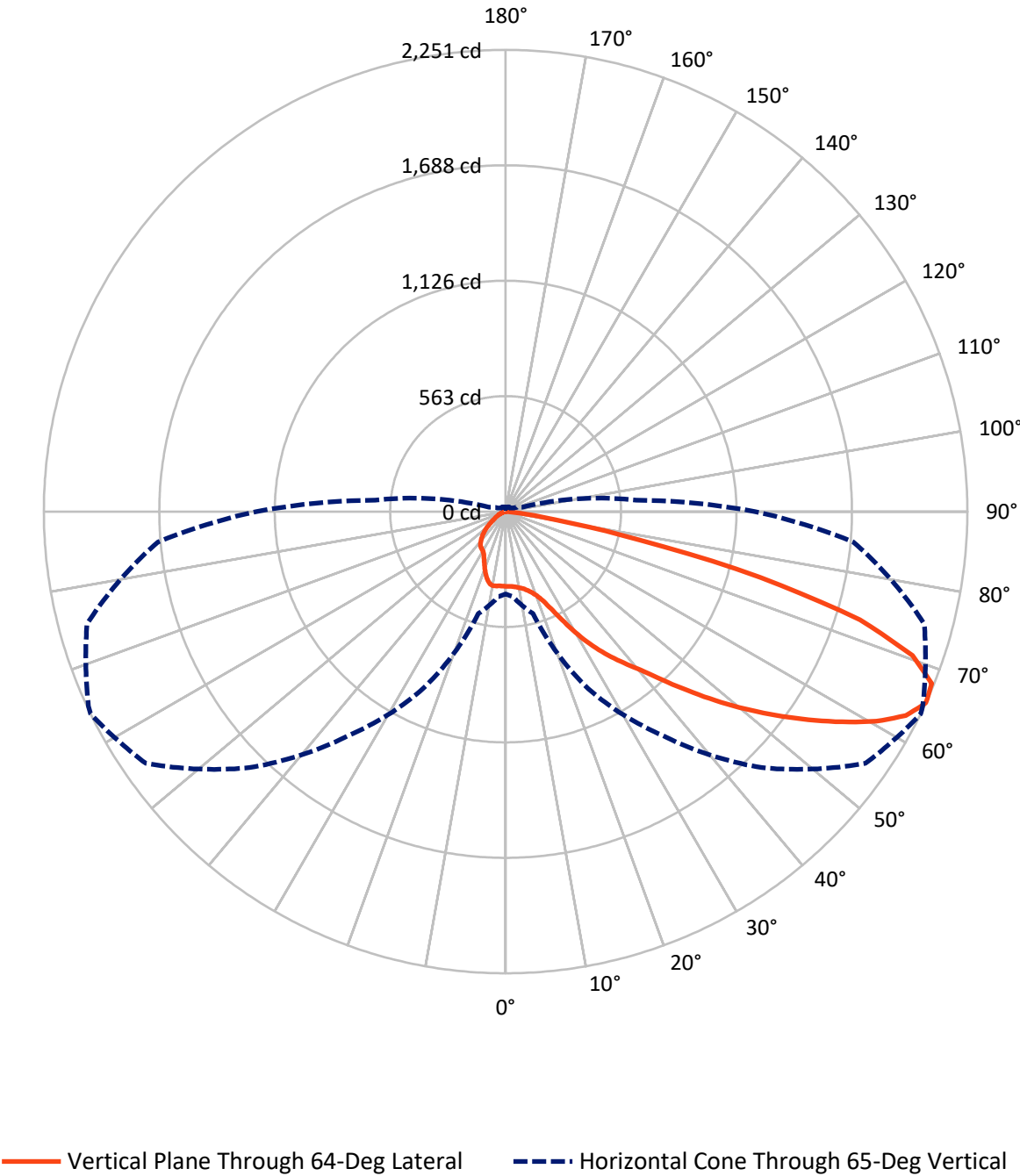
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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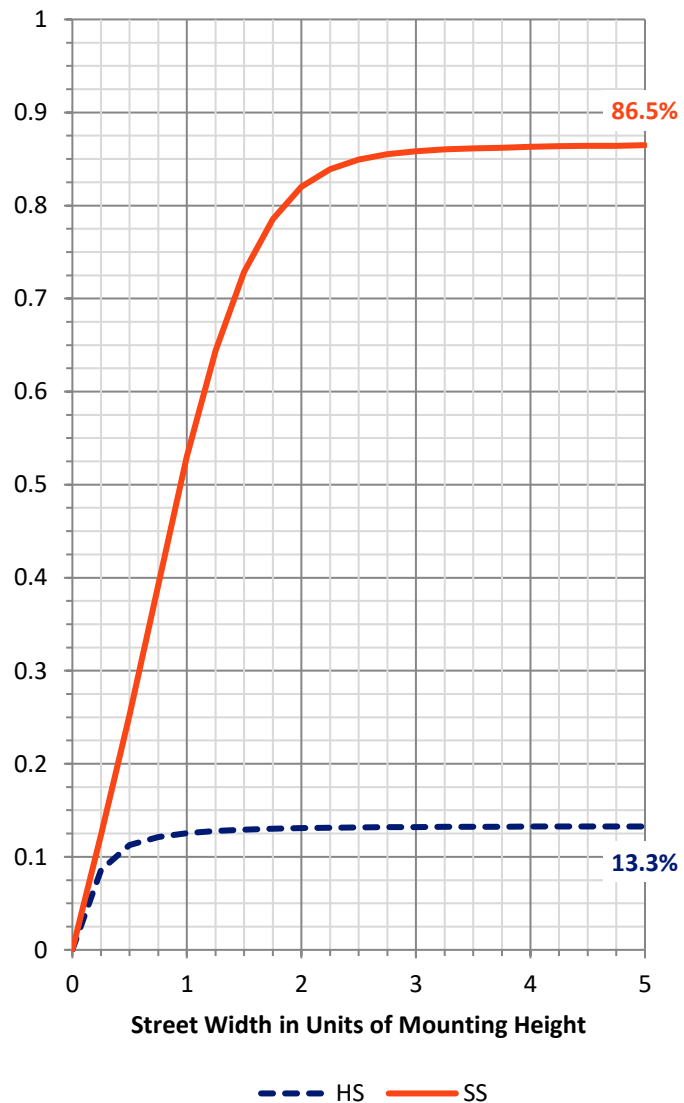
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	419.5	0.0	419.5
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	2717.1	0.0	2717.1
	% Fixture	86.6	0.0	86.6
Total	Lumens	3136.5	0.0	3136.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.7	1.1
10°-20°	91.3	2.9
20°-30°	173.0	5.5
30°-40°	350.0	11.2
40°-50°	596.3	19.0
50°-60°	810.9	25.9
60°-70°	761.5	24.3
70°-80°	305.1	9.7
80°-90°	14.8	0.5
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°	3136.5	100.0
0°-180°	3136.5	100.0

Coefficient of Utilization



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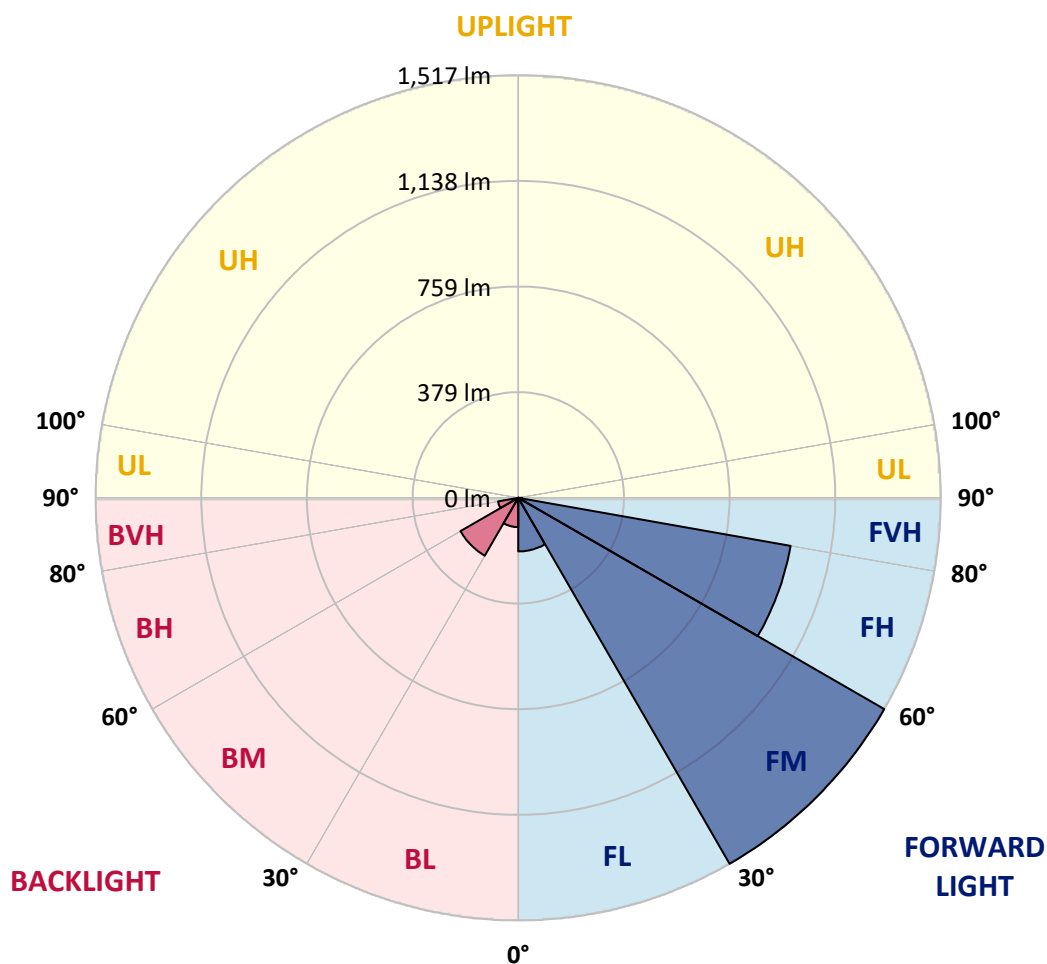
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	192.6	6.1			
FM	(30°-60°)	1517.4	48.4			
FH	(60°-80°)	992.9	31.7			G1/1800
FVH	(80°-90°)	14.1	0.4			G1/100
BL	(0°-30°)	105.3	3.4	B0/110		
BM	(30°-60°)	239.8	7.6	B1/1000		
BH	(60°-80°)	73.6	2.3	B0/110		G0/110
BVH	(80°-90°)	0.7	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	364.8	364.8	364.8	364.8	364.8	364.8	364.8	364.8	364.8	364.8	364.8
2.5°	363.6	366.0	365.4	364.8	364.6	365.0	365.2	365.0	365.0	365.0	365.2
5°	356.6	358.7	358.7	360.2	362.2	364.8	366.7	367.2	367.6	368.2	368.0
7.5°	343.4	345.0	346.3	351.2	356.4	363.2	368.8	371.8	372.2	374.4	375.4
10°	334.4	336.4	338.6	343.6	351.2	361.2	370.9	378.0	379.1	384.6	387.1
12.5°	333.9	336.0	338.8	344.2	353.0	363.8	375.6	385.8	387.8	395.8	401.0
15°	338.4	340.8	343.4	350.1	359.6	372.6	385.2	398.0	400.0	411.2	417.0
17.5°	347.4	350.8	352.6	359.4	369.4	384.0	400.6	415.2	417.0	430.2	437.4
20°	365.2	369.2	369.8	375.4	385.2	400.8	420.6	438.8	441.0	456.0	464.0
22.5°	402.2	408.0	402.8	405.6	414.4	430.0	451.4	474.6	477.5	494.8	501.9
25°	467.4	475.4	462.4	457.8	461.6	477.8	504.6	533.8	537.2	551.1	554.6
27.5°	595.4	585.2	565.4	546.0	534.7	544.0	574.2	610.4	614.6	628.0	623.8
30°	736.2	727.1	700.4	657.5	630.6	629.1	657.0	697.4	702.3	715.1	702.3
32.5°	877.0	868.4	839.4	786.6	739.9	716.8	736.2	780.9	783.4	791.6	772.7
35°	1015.6	1006.8	977.7	923.7	866.3	813.7	810.0	860.4	861.2	869.8	841.7
37.5°	1155.0	1147.6	1116.7	1063.7	1007.2	934.6	899.5	935.7	936.7	945.2	915.9
40°	1254.4	1257.6	1236.4	1195.4	1146.8	1067.5	1000.0	1015.8	1009.5	1023.6	1006.1
42.5°	1339.8	1346.1	1327.6	1307.0	1278.8	1209.0	1124.5	1121.8	1111.7	1119.2	1101.2
45°	1413.6	1418.9	1402.2	1397.4	1396.8	1347.8	1260.5	1244.1	1230.0	1228.6	1206.9
47.5°	1440.7	1450.8	1458.0	1474.2	1505.7	1485.1	1401.2	1375.8	1360.0	1348.4	1314.2
50°	1451.0	1461.8	1486.1	1533.2	1607.9	1616.7	1541.2	1512.6	1493.3	1472.3	1421.8
52.5°	1437.2	1456.3	1489.1	1568.4	1676.6	1722.3	1675.6	1650.6	1628.5	1594.2	1519.4
55°	1355.4	1374.5	1441.6	1567.9	1710.9	1796.3	1802.6	1791.5	1766.6	1712.6	1598.2
57.5°	1183.0	1211.3	1317.5	1514.5	1710.3	1860.0	1927.1	1935.1	1907.3	1829.9	1660.2
60°	944.1	982.6	1112.1	1396.2	1657.5	1894.5	2036.2	2076.1	2046.7	1945.6	1710.5
62.5°	658.8	703.4	825.9	1210.7	1536.8	1869.7	2115.9	2189.7	2167.4	2049.0	1729.8
65°	401.8	416.2	515.0	952.7	1331.6	1765.8	2140.5	2251.1	2243.7	2112.3	1701.2
67.5°	267.6	279.6	308.0	653.3	1033.6	1558.3	2081.6	2240.3	2242.5	2102.0	1596.5
70°	161.2	171.6	190.0	380.0	669.9	1233.4	1899.3	2103.7	2115.9	1964.3	1398.0
72.5°	66.4	73.4	90.2	172.2	347.0	782.8	1512.4	1806.2	1834.5	1651.6	1073.0
75°	37.6	41.2	53.0	86.4	150.6	364.8	916.1	1282.2	1324.0	1138.4	645.5
77.5°	25.0	26.8	34.2	56.0	84.8	124.4	391.5	668.0	747.9	621.8	279.4
80°	16.8	18.2	23.6	37.4	55.0	53.4	124.6	247.4	304.4	213.6	68.2
82.5°	11.4	11.6	16.8	24.6	35.0	25.8	36.8	77.0	96.8	61.8	25.8
85°	6.6	6.4	12.4	14.2	15.6	10.8	11.2	23.2	30.2	26.0	14.8
87.5°	0.8	1.2	4.8	3.8	2.2	2.4	2.4	4.0	5.8	6.4	3.2
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°	364.8	364.8	364.8	364.8	364.8	364.8	364.8	364.8	364.8	364.8	364.8
2.5°	365.2	365.0	364.4	363.8	362.2	361.4	361.8	361.4	361.2	361.4	362.2
5°	368.0	367.4	365.6	363.6	360.6	357.0	354.8	351.4	348.2	346.3	346.8
7.5°	375.4	374.7	372.4	366.5	357.0	342.1	328.4	316.4	307.4	302.2	302.4
10°	387.1	386.0	382.4	369.4	344.6	312.0	285.0	262.4	247.6	240.8	240.2
12.5°	401.0	399.7	393.4	366.7	321.0	270.2	232.8	207.8	194.0	188.0	187.4
15°	417.4	415.7	403.2	353.6	286.8	224.0	189.6	171.0	162.2	156.6	156.8
17.5°	437.8	434.8	410.6	334.2	249.6	188.6	163.2	149.0	141.3	136.0	135.6
20°	464.2	459.4	416.6	310.8	215.4	166.4	145.2	133.6	127.6	123.0	122.2
22.5°	501.2	494.4	423.6	285.6	191.2	151.0	132.0	123.4	118.6	113.4	112.4
25°	547.1	538.9	432.6	262.2	174.6	137.8	122.4	115.2	109.6	103.4	102.8
27.5°	611.2	596.6	443.0	243.0	160.2	126.4	113.6	105.6	99.0	94.0	93.0
30°	682.8	658.6	452.2	231.5	147.2	115.8	102.0	94.0	87.8	84.4	83.6
32.5°	750.4	717.6	458.4	226.4	135.4	103.8	89.4	80.8	76.2	75.0	75.6
35°	814.4	771.0	457.8	221.6	124.9	91.8	77.0	68.2	64.6	65.2	65.2
37.5°	888.0	828.0	453.4	214.0	116.2	81.0	66.2	58.4	55.4	55.6	56.4
40°	973.5	893.8	450.6	199.8	106.8	70.8	57.4	51.0	48.8	48.0	47.8
42.5°	1064.8	957.6	451.0	183.6	95.0	61.8	51.4	46.0	44.0	43.4	43.2
45°	1156.4	1018.3	451.6	166.8	82.6	54.8	46.8	42.4	41.2	40.4	40.4
47.5°	1242.6	1070.0	439.8	148.6	70.4	49.6	43.4	40.4	39.4	38.2	38.2
50°	1323.0	1104.5	411.4	127.6	60.8	45.4	40.6	38.4	37.4	36.4	36.4
52.5°	1385.4	1110.0	364.6	106.0	54.0	42.2	38.9	37.0	35.8	34.6	34.4
55°	1413.2	1075.7	298.0	85.8	48.8	39.6	37.2	35.4	33.8	32.8	32.6
57.5°	1406.0	1003.6	232.4	69.0	43.8	36.8	35.2	33.8	32.2	30.4	30.2
60°	1370.9	907.1	175.2	57.4	39.2	33.8	32.8	31.8	29.4	27.0	26.4
62.5°	1310.2	785.8	124.9	47.6	34.0	30.4	30.0	29.2	25.8	21.2	20.8
65°	1217.2	638.4	84.2	39.6	29.2	26.8	27.0	25.4	21.0	15.8	15.4
67.5°	1081.4	466.8	53.8	32.4	24.4	22.2	22.4	21.6	17.8	13.4	12.8
70°	908.4	309.0	35.2	24.6	19.6	17.2	18.6	18.8	15.2	11.0	10.6
72.5°	665.9	182.6	24.6	18.2	14.2	12.0	15.2	15.6	12.2	8.2	7.8
75°	379.6	86.6	18.6	13.2	8.8	8.4	11.8	11.8	8.4	5.4	5.0
77.5°	159.4	36.2	13.0	8.6	5.0	4.8	8.0	7.4	4.2	2.6	2.6
80°	46.0	16.2	7.0	4.2	2.2	1.8	3.2	2.4	1.0	0.4	0.4
82.5°	18.0	7.2	2.8	1.6	0.8	0.8	0.4	0.0	0.0	0.0	0.0
85°	10.8	3.0	1.2	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.8	0.6	0.4	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)