

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: P959458

Luminaire Tested: **NAV-SB1A-830-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959458
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-830-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 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: 3241 lumens
Efficiency: N/A
Efficacy: 104.9 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

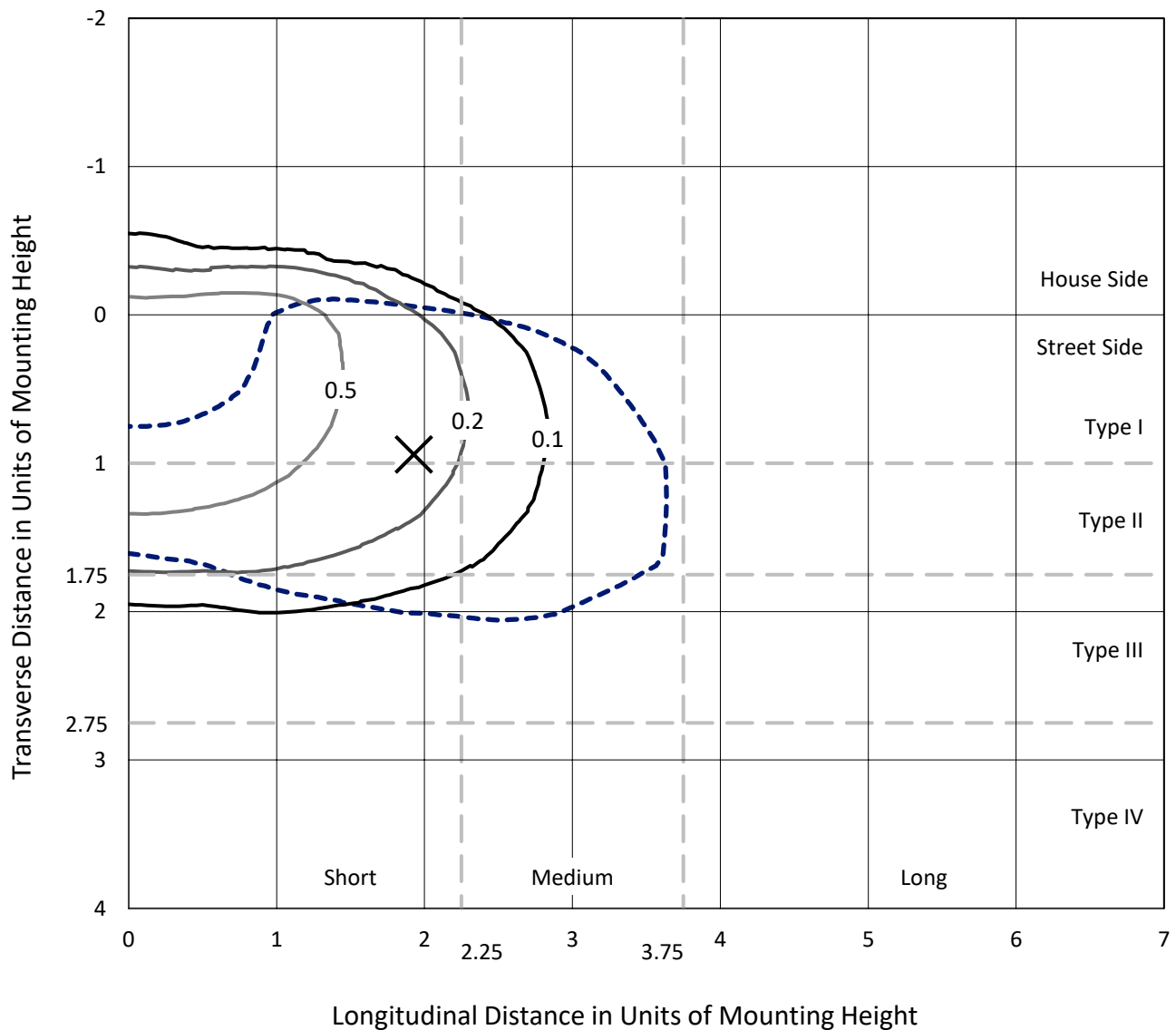


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

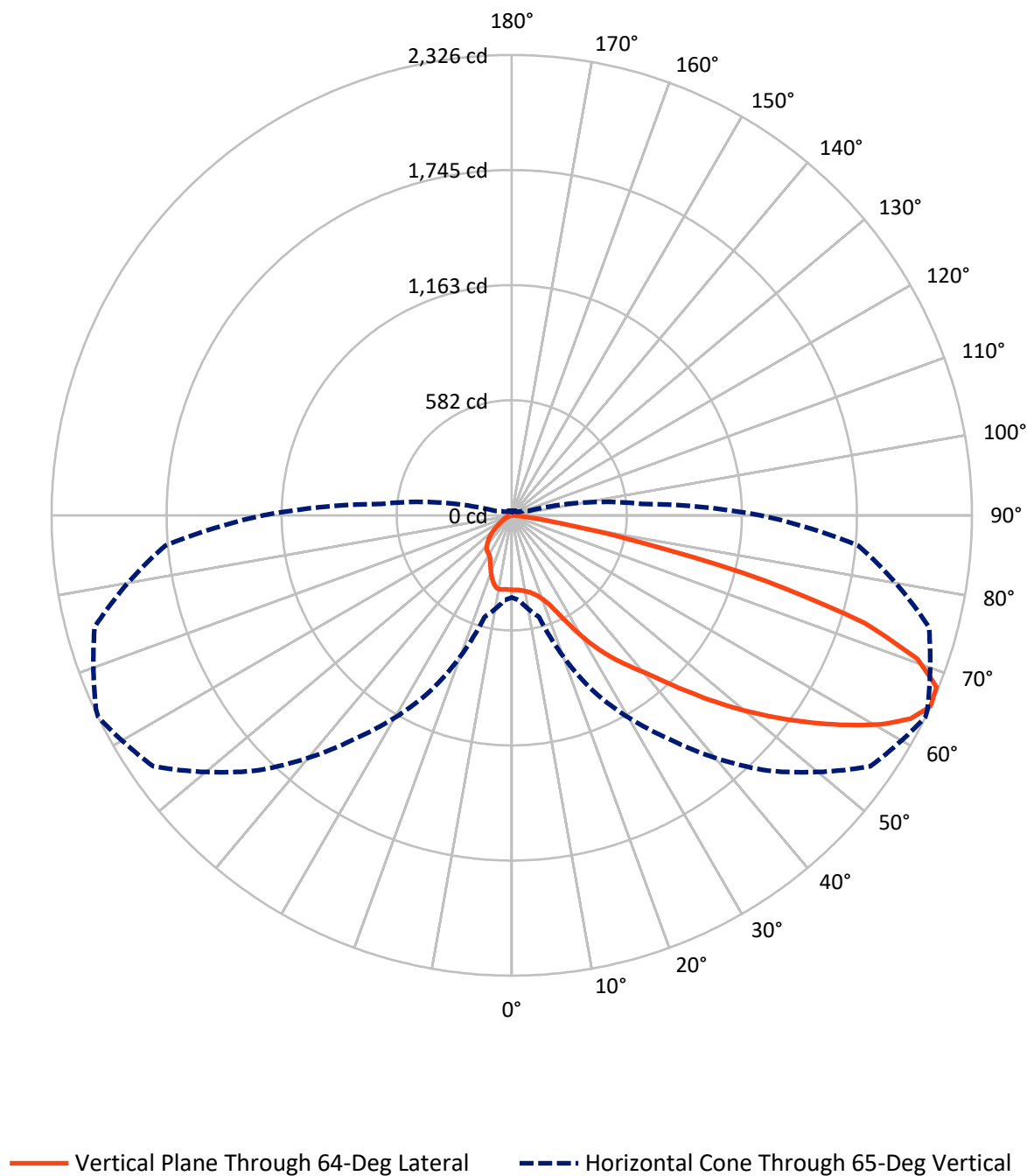


Based on 25 foot mounting height. Maximum calculated value = 0.9 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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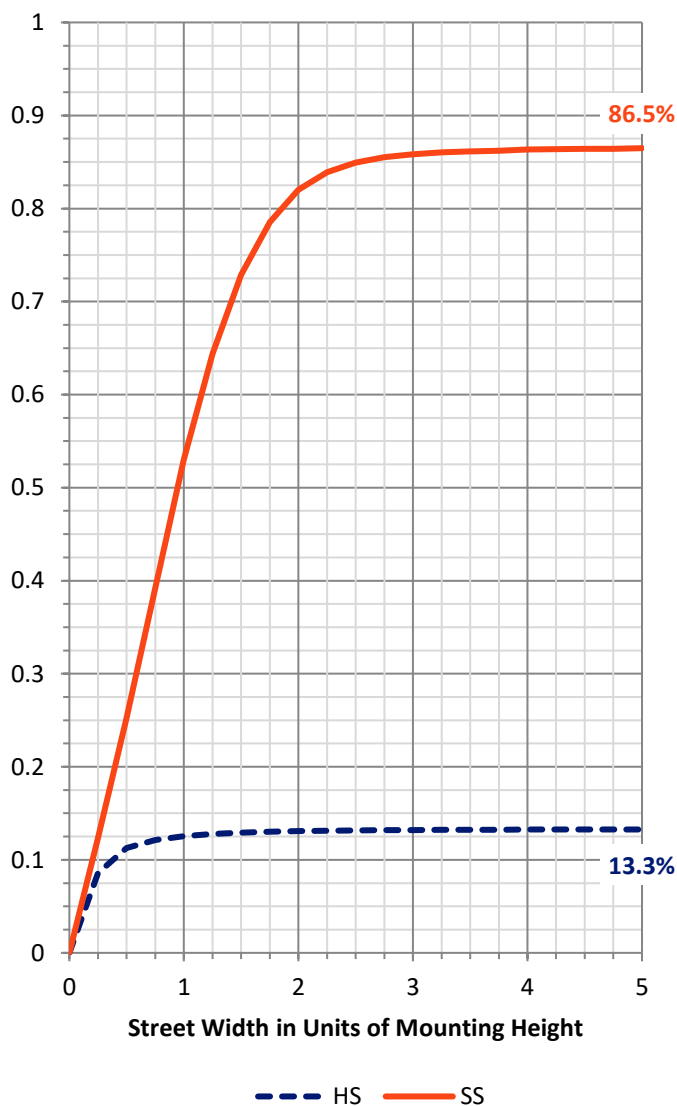
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	433.4	0.0	433.4
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	2807.6	0.0	2807.6
	% Fixture	86.6	0.0	86.6
Total	Lumens	3241.0	0.0	3241.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.8	1.1
10°-20°	94.3	2.9
20°-30°	178.7	5.5
30°-40°	361.7	11.2
40°-50°	616.2	19.0
50°-60°	837.9	25.9
60°-70°	786.9	24.3
70°-80°	315.2	9.7
80°-90°	15.3	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°	3241.0	100.0
0°-180°	3241.0	100.0

Coefficient of Utilization



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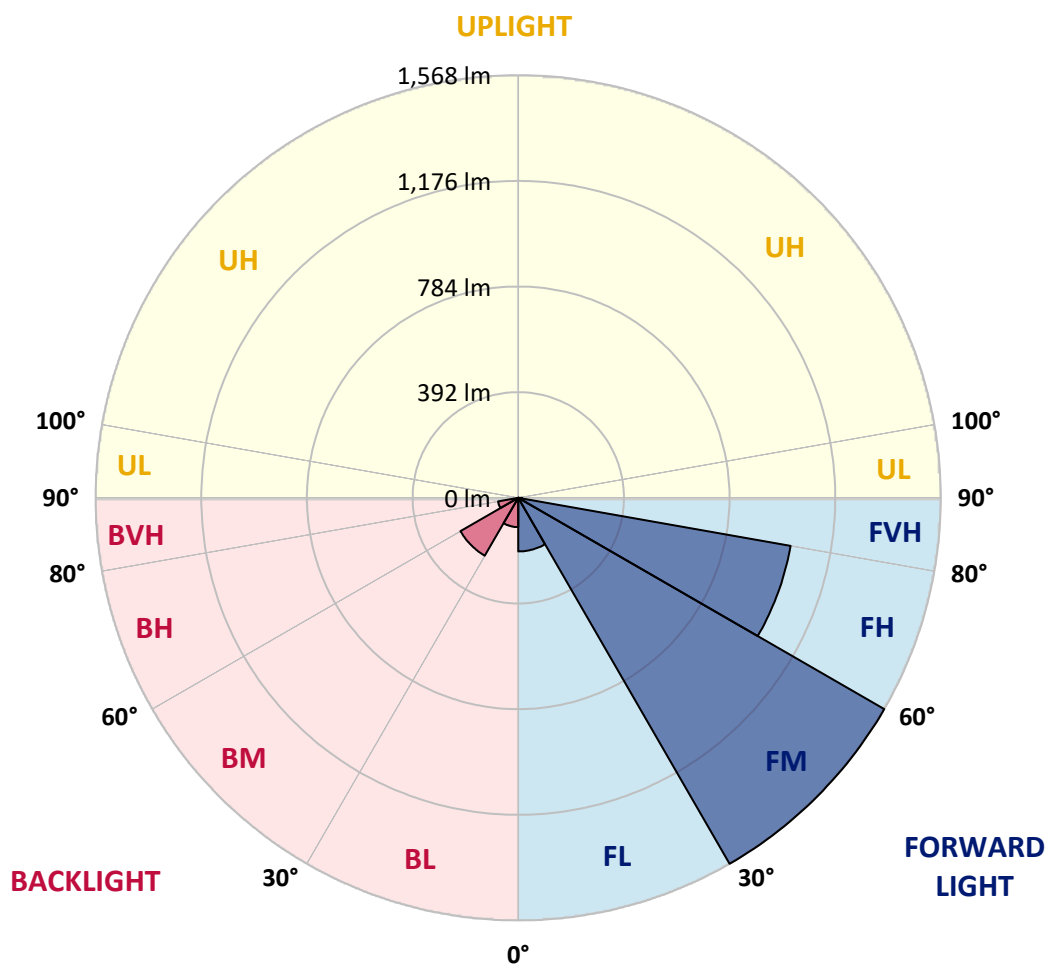
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	199.0	6.1			
FM	(30°-60°)	1568.0	48.4			
FH	(60°-80°)	1026.0	31.7			G1/1800
FVH	(80°-90°)	14.5	0.4			G1/100
BL	(0°-30°)	108.8	3.4	B0/110		
BM	(30°-60°)	247.8	7.6	B1/1000		
BH	(60°-80°)	76.1	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°	377.0	377.0	377.0	377.0	377.0	377.0	377.0	377.0	377.0	377.0	377.0
2.5°	375.7	378.2	377.6	377.0	376.8	377.2	377.4	377.2	377.2	377.2	377.4
5°	368.5	370.6	370.6	372.2	374.3	377.0	378.9	379.4	379.8	380.5	380.3
7.5°	354.9	356.5	357.8	362.8	368.3	375.3	381.1	384.2	384.6	386.9	387.9
10°	345.4	347.7	349.8	355.1	362.8	373.3	383.2	390.6	391.8	397.4	400.0
12.5°	345.0	347.2	350.0	355.7	364.8	375.9	388.1	398.7	400.7	408.9	414.3
15°	349.6	352.2	354.9	361.7	371.6	385.0	398.0	411.3	413.3	425.0	430.8
17.5°	359.0	362.4	364.4	371.4	381.7	396.8	413.9	429.1	430.8	444.5	451.9
20°	377.4	381.5	382.2	387.9	398.0	414.1	434.5	453.5	455.6	471.3	479.5
22.5°	415.6	421.5	416.3	419.1	428.2	444.3	466.5	490.4	493.4	511.3	518.6
25°	483.0	491.3	477.8	473.0	476.9	493.6	521.4	551.7	555.1	569.5	573.2
27.5°	615.3	604.6	584.2	564.3	552.5	562.1	593.4	630.8	635.1	649.0	644.6
30°	760.7	751.3	723.8	679.4	651.6	650.1	679.0	720.7	725.7	738.9	725.7
32.5°	906.2	897.3	867.4	812.8	764.5	740.7	760.7	807.0	809.5	818.1	798.5
35°	1049.4	1040.3	1010.3	954.5	895.1	840.8	836.9	889.1	889.9	898.8	869.7
37.5°	1193.5	1185.8	1153.9	1099.2	1040.8	965.8	929.5	966.9	967.9	976.6	946.5
40°	1296.2	1299.5	1277.6	1235.2	1185.0	1103.1	1033.3	1049.6	1043.1	1057.7	1039.7
42.5°	1384.5	1391.0	1371.9	1350.5	1321.4	1249.3	1161.9	1159.2	1148.7	1156.5	1137.9
45°	1460.7	1466.2	1448.9	1444.0	1443.3	1392.7	1302.6	1285.6	1271.0	1269.6	1247.1
47.5°	1488.7	1499.2	1506.5	1523.3	1555.8	1534.6	1447.9	1421.6	1405.3	1393.4	1357.9
50°	1499.4	1510.4	1535.7	1584.3	1661.5	1670.6	1592.6	1563.0	1543.0	1521.3	1469.2
52.5°	1485.0	1504.8	1538.7	1620.6	1732.6	1779.7	1731.4	1705.6	1682.7	1647.4	1570.0
55°	1400.6	1420.3	1489.6	1620.2	1767.9	1856.2	1862.6	1851.2	1825.5	1769.7	1651.5
57.5°	1222.4	1251.7	1361.4	1565.0	1767.3	1922.0	1991.3	1999.6	1970.9	1890.9	1715.5
60°	975.6	1015.4	1149.1	1442.7	1712.8	1957.6	2104.0	2145.3	2114.9	2010.4	1767.5
62.5°	680.7	726.8	853.4	1251.0	1588.0	1932.0	2186.4	2262.7	2239.6	2117.3	1787.5
65°	415.2	430.0	532.1	984.5	1376.0	1824.7	2211.8	2326.1	2318.5	2182.7	1758.0
67.5°	276.5	288.9	318.3	675.1	1068.2	1610.2	2151.0	2315.1	2317.2	2172.1	1649.7
70°	166.7	177.3	196.4	392.6	692.2	1274.5	1962.7	2173.8	2186.4	2029.8	1444.6
72.5°	68.7	75.8	93.2	177.9	358.5	808.9	1562.8	1866.3	1895.7	1706.6	1108.7
75°	38.8	42.5	54.7	89.3	155.6	377.0	946.7	1324.9	1368.2	1176.3	667.1
77.5°	25.8	27.6	35.5	57.8	87.5	128.6	404.6	690.2	772.8	642.5	288.7
80°	17.4	18.9	24.3	38.6	56.9	55.1	128.8	255.7	314.6	220.8	70.4
82.5°	11.7	12.0	17.4	25.4	36.1	26.8	38.0	79.5	99.9	63.9	26.8
85°	6.8	6.6	12.8	14.8	16.1	11.1	11.5	23.9	31.3	27.0	15.2
87.5°	0.8	1.3	5.0	3.9	2.2	2.4	2.4	4.1	6.0	6.6	3.3
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°	377.0	377.0	377.0	377.0	377.0	377.0	377.0	377.0	377.0	377.0	377.0
2.5°	377.4	377.2	376.5	375.9	374.3	373.5	373.9	373.5	373.3	373.5	374.3
5°	380.3	379.6	377.8	375.7	372.6	368.9	366.5	363.1	359.8	357.8	358.2
7.5°	387.9	387.1	384.8	378.7	368.9	353.5	339.4	327.0	317.6	312.2	312.4
10°	400.0	398.9	395.2	381.7	356.1	322.5	294.4	271.1	255.9	248.8	248.2
12.5°	414.3	413.1	406.5	378.9	331.8	279.2	240.6	214.6	200.6	194.2	193.6
15°	431.3	429.6	416.8	365.4	296.3	231.4	196.0	176.6	167.5	161.8	162.1
17.5°	452.3	449.4	424.4	345.2	257.9	194.9	168.6	154.1	146.0	140.5	140.1
20°	479.7	474.8	430.4	321.1	222.5	171.9	150.2	138.0	131.9	127.1	126.3
22.5°	517.9	510.8	437.8	295.1	197.5	156.0	136.4	127.5	122.6	117.2	116.2
25°	565.4	556.9	446.9	270.9	180.3	142.3	126.5	119.1	113.2	106.9	106.3
27.5°	631.6	616.4	457.8	251.1	165.5	130.6	117.4	109.1	102.3	97.2	96.0
30°	705.5	680.5	467.4	239.2	152.1	119.7	105.4	97.2	90.8	87.1	86.5
32.5°	775.4	741.6	473.7	234.0	139.9	107.3	92.4	83.4	78.6	77.6	78.2
35°	841.5	796.7	473.0	229.0	129.0	94.9	79.5	70.4	66.7	67.3	67.3
37.5°	917.6	855.7	468.4	221.2	120.1	83.6	68.5	60.4	57.1	57.4	58.2
40°	1005.9	923.6	465.7	206.4	110.4	73.2	59.3	52.8	50.4	49.5	49.3
42.5°	1100.2	989.4	466.1	189.7	98.2	63.9	53.0	47.6	45.4	44.8	44.6
45°	1195.0	1052.3	466.7	172.3	85.4	56.7	48.5	43.9	42.5	41.7	41.7
47.5°	1284.1	1105.7	454.5	153.6	72.8	51.2	44.8	41.7	40.6	39.6	39.6
50°	1367.0	1141.3	425.2	131.9	62.8	46.9	41.9	39.8	38.6	37.6	37.6
52.5°	1431.6	1147.0	376.8	109.5	55.9	43.7	40.2	38.2	36.9	35.9	35.7
55°	1460.3	1111.6	307.9	88.7	50.4	40.9	38.4	36.5	35.0	33.9	33.7
57.5°	1452.9	1037.0	240.1	71.2	45.2	38.0	36.3	35.0	33.2	31.5	31.3
60°	1416.7	937.4	181.0	59.3	40.4	35.0	33.9	32.8	30.4	27.8	27.4
62.5°	1353.8	811.9	129.0	49.1	35.2	31.5	31.1	30.2	26.8	21.9	21.5
65°	1257.8	659.7	86.9	40.9	30.2	27.6	27.8	26.2	21.7	16.3	15.9
67.5°	1117.5	482.4	55.7	33.4	25.2	23.1	23.3	22.3	18.4	13.9	13.2
70°	938.6	319.4	36.3	25.4	20.2	17.8	19.2	19.4	15.7	11.3	10.9
72.5°	688.1	188.6	25.4	18.9	14.8	12.4	15.7	16.1	12.6	8.5	8.0
75°	392.2	89.5	19.2	13.7	9.1	8.7	12.2	12.2	8.7	5.6	5.2
77.5°	164.7	37.4	13.4	8.9	5.2	5.0	8.3	7.6	4.3	2.6	2.6
80°	47.6	16.7	7.2	4.3	2.2	1.9	3.3	2.4	1.1	0.4	0.4
82.5°	18.7	7.4	2.9	1.7	0.8	0.8	0.4	0.0	0.0	0.0	0.0
85°	11.1	3.1	1.3	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.9	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)