

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: P881728

Luminaire Tested: **NAV-SB1B-735-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881728
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-735-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4420 lumens
Efficiency: N/A
Efficacy: 111.1 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

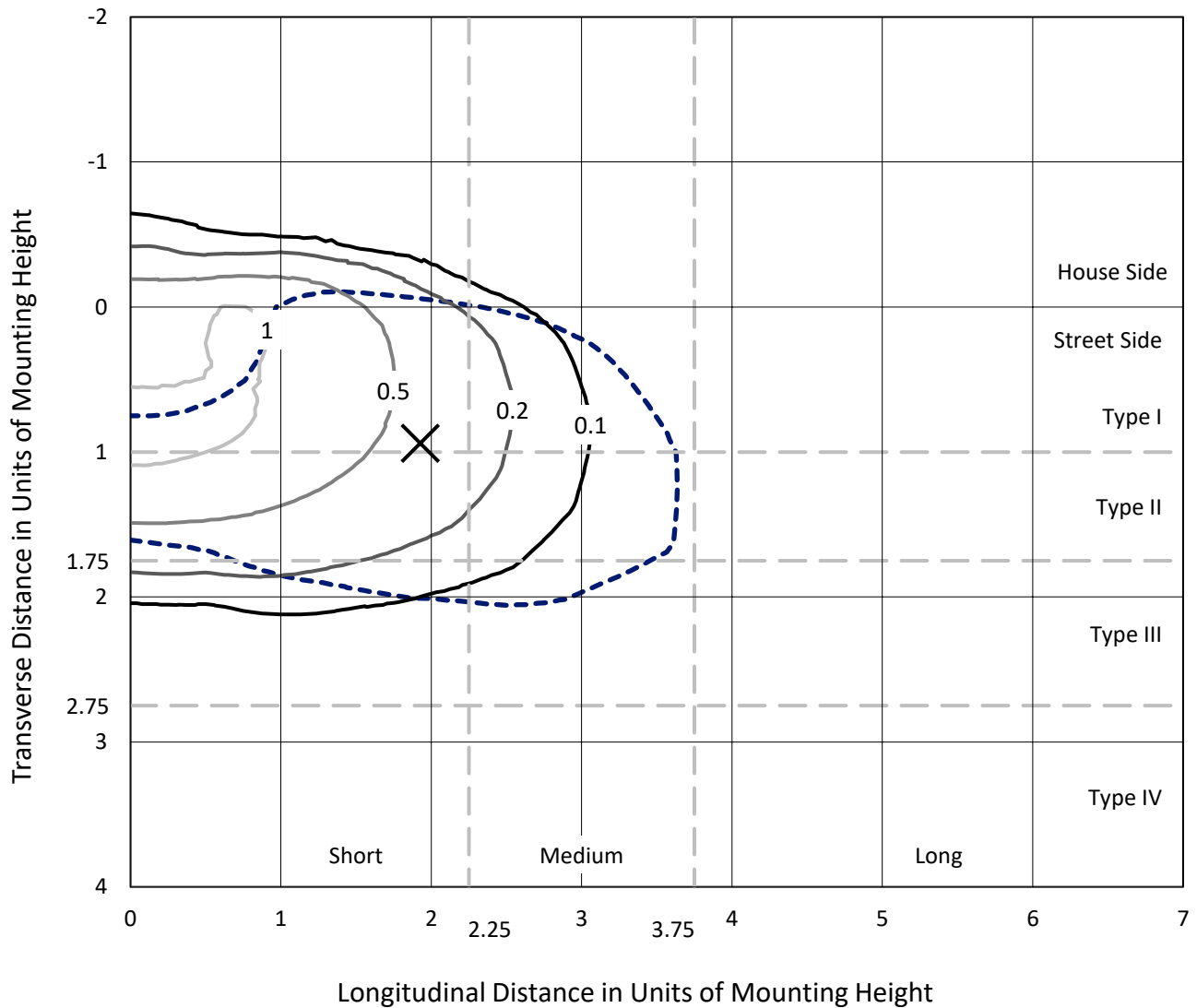
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

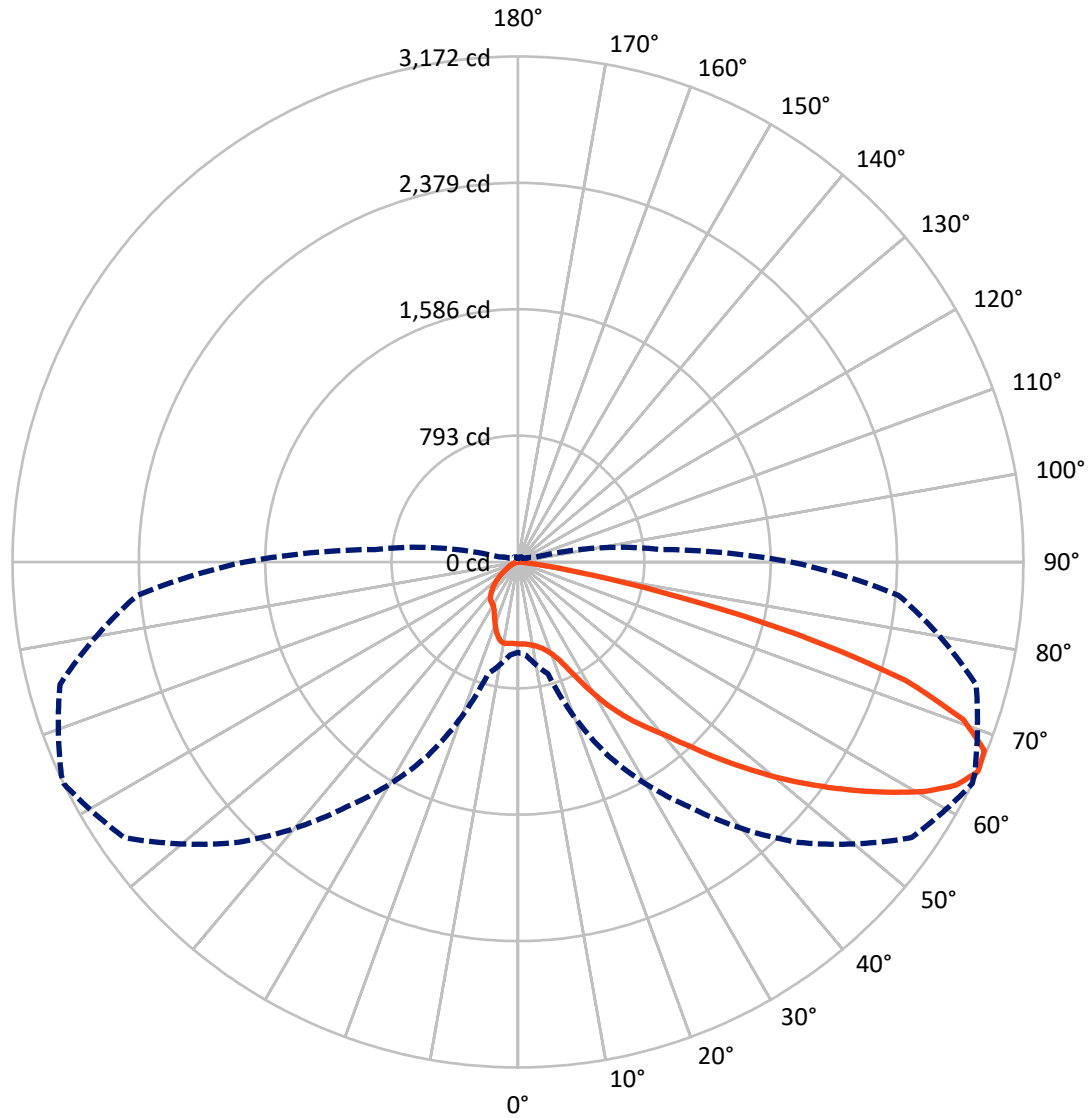
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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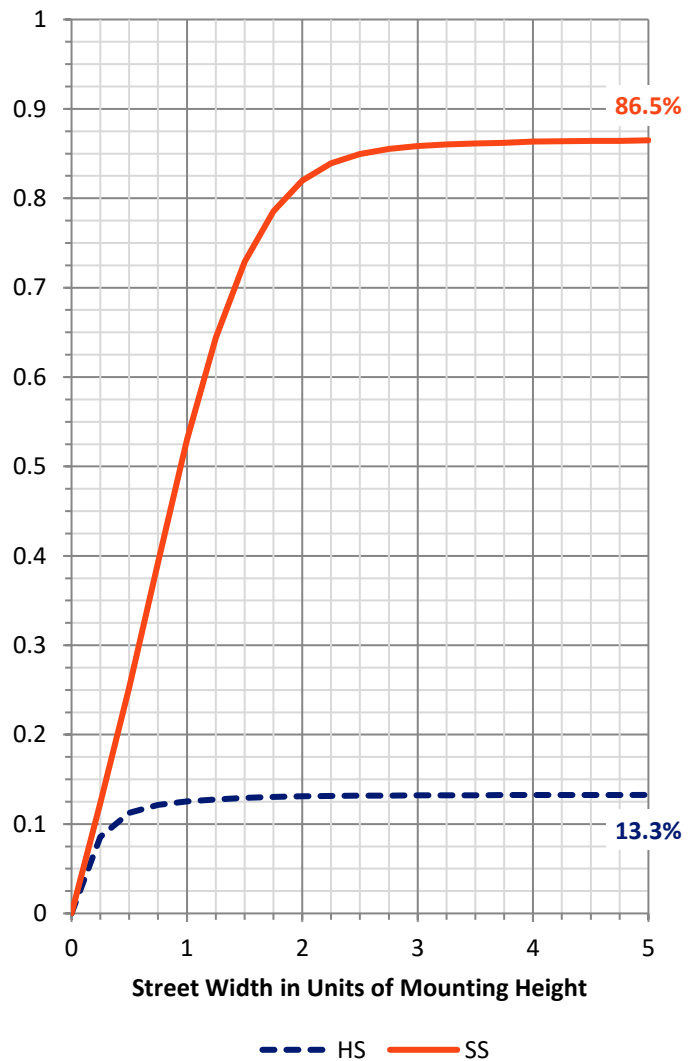
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	591.1	0.0	591.1
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	3828.9	0.0	3828.9
	% Fixture	86.6	0.0	86.6
Total	Lumens	4420.0	0.0	4420.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.4	1.1
10°-20°	128.6	2.9
20°-30°	243.8	5.5
30°-40°	493.3	11.2
40°-50°	840.3	19.0
50°-60°	1142.7	25.9
60°-70°	1073.1	24.3
70°-80°	429.9	9.7
80°-90°	20.8	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°	4420.0	100.0
0°-180°	4420.0	100.0

Coefficient of Utilization



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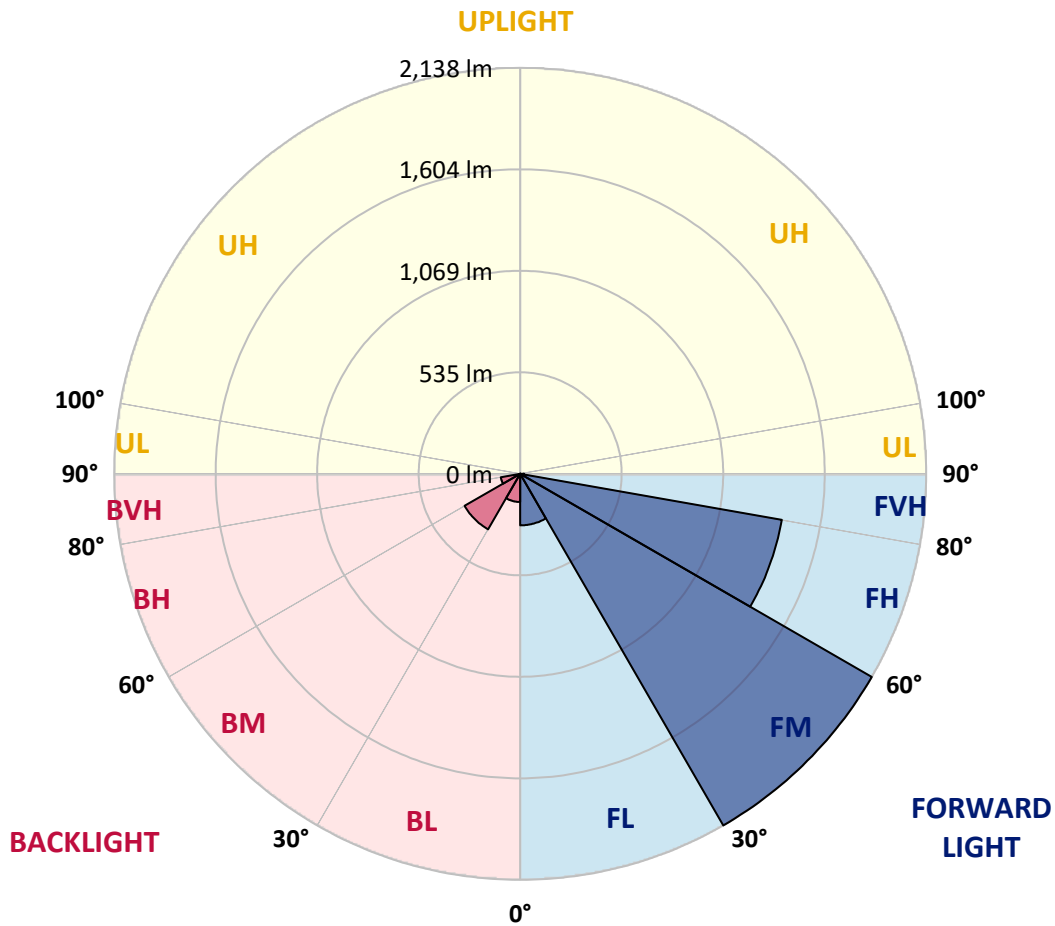
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	271.4	6.1			
FM (30°-60°)	2138.4	48.4			
FH (60°-80°)	1399.3	31.7			G1/1800
FVH (80°-90°)	19.8	0.4			G1/100
BL (0°-30°)	148.4	3.4	B1/500		
BM (30°-60°)	337.9	7.6	B1/1000		
BH (60°-80°)	103.8	2.3	B0/110		G0/110
BVH (80°-90°)	1.0	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°	514.1	514.1	514.1	514.1	514.1	514.1	514.1	514.1	514.1	514.1	514.1
2.5°	512.3	515.9	515.0	514.1	513.8	514.4	514.7	514.4	514.4	514.4	514.7
5°	502.5	505.5	505.5	507.6	510.5	514.1	516.8	517.4	517.9	518.8	518.5
7.5°	483.9	486.2	488.0	494.8	502.2	511.7	519.7	523.9	524.5	527.7	528.9
10°	471.1	474.1	477.1	484.2	494.8	509.1	522.7	532.8	534.2	541.9	545.5
12.5°	470.5	473.5	477.3	485.1	497.5	512.6	529.2	543.7	546.4	557.6	565.1
15°	476.8	480.3	483.9	493.4	506.7	525.1	542.8	560.9	563.6	579.6	587.6
17.5°	489.5	494.2	496.9	506.4	520.6	541.1	564.5	585.2	587.6	606.2	616.3
20°	514.7	520.3	521.2	528.9	542.8	564.8	592.6	618.4	621.4	642.7	653.9
22.5°	566.8	574.8	567.7	571.6	584.0	605.9	636.2	668.8	672.9	697.2	707.3
25°	658.7	669.9	651.6	645.1	650.4	673.2	711.1	752.3	757.1	776.6	781.7
27.5°	839.1	824.6	796.8	769.5	753.5	766.5	809.2	860.2	866.1	885.1	879.1
30°	1037.4	1024.6	987.0	926.6	888.6	886.5	926.0	982.8	989.7	1007.7	989.7
32.5°	1235.9	1223.7	1182.9	1108.5	1042.7	1010.1	1037.4	1100.5	1104.0	1115.6	1088.9
35°	1431.2	1418.7	1377.8	1301.7	1220.8	1146.7	1141.4	1212.5	1213.7	1225.8	1186.1
37.5°	1627.6	1617.2	1573.7	1499.0	1419.3	1317.1	1267.6	1318.6	1320.0	1331.9	1290.7
40°	1767.8	1772.2	1742.3	1684.5	1616.1	1504.3	1409.2	1431.5	1422.6	1442.4	1417.8
42.5°	1888.1	1897.0	1870.9	1841.8	1802.1	1703.8	1584.6	1580.8	1566.6	1577.2	1551.8
45°	1992.1	1999.5	1976.1	1969.3	1968.4	1899.3	1776.4	1753.2	1733.4	1731.3	1700.8
47.5°	2030.3	2044.5	2054.6	2077.4	2121.9	2092.8	1974.6	1938.7	1916.5	1900.2	1851.9
50°	2044.8	2059.9	2094.3	2160.7	2265.9	2278.3	2171.9	2131.6	2104.4	2074.7	2003.6
52.5°	2025.3	2052.2	2098.4	2210.2	2362.7	2427.0	2361.3	2326.0	2294.9	2246.6	2141.1
55°	1910.0	1937.0	2031.5	2209.6	2411.0	2531.3	2540.2	2524.5	2489.6	2413.4	2252.2
57.5°	1667.0	1707.0	1856.7	2134.3	2410.2	2621.1	2715.6	2726.9	2687.8	2578.8	2339.6
60°	1330.4	1384.6	1567.2	1967.5	2335.8	2669.7	2869.4	2925.7	2884.2	2741.7	2410.5
62.5°	928.3	991.1	1163.9	1706.1	2165.7	2634.8	2981.7	3085.7	3054.3	2887.5	2437.7
65°	566.2	586.4	725.7	1342.6	1876.5	2488.4	3016.4	3172.3	3161.9	2976.7	2397.4
67.5°	377.2	394.1	434.1	920.6	1456.6	2195.9	2933.4	3157.1	3160.1	2962.2	2249.9
70°	227.3	241.8	267.9	535.4	944.0	1738.1	2676.5	2964.5	2981.7	2768.1	1970.1
72.5°	93.6	103.4	127.1	242.7	488.9	1103.1	2131.3	2545.3	2585.3	2327.5	1512.1
75°	53.0	58.1	74.7	121.8	212.2	514.1	1291.0	1806.9	1865.8	1604.2	909.7
77.5°	35.3	37.6	48.3	78.8	119.4	175.4	551.7	941.4	1054.0	876.2	393.8
80°	23.7	25.8	33.2	52.7	77.6	75.3	175.7	348.8	429.1	301.0	96.0
82.5°	16.0	16.3	23.7	34.7	49.2	36.4	51.9	108.4	136.3	87.1	36.4
85°	9.2	8.9	17.5	20.1	21.9	15.1	15.7	32.6	42.7	36.7	20.7
87.5°	1.2	1.8	6.8	5.3	3.0	3.3	3.3	5.6	8.3	8.9	4.4
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°	514.1	514.1	514.1	514.1	514.1	514.1	514.1	514.1	514.1	514.1	514.1
2.5°	514.7	514.4	513.5	512.6	510.5	509.4	509.9	509.4	509.1	509.4	510.5
5°	518.5	517.6	515.3	512.3	508.2	503.1	499.9	495.1	490.7	488.0	488.6
7.5°	528.9	528.0	524.8	516.5	503.1	482.1	462.8	445.9	433.2	425.8	426.1
10°	545.5	544.0	539.0	520.6	485.6	439.7	401.5	369.8	349.0	339.3	338.4
12.5°	565.1	563.3	554.4	516.8	452.5	380.8	328.0	292.8	273.5	264.9	264.0
15°	588.2	585.8	568.3	498.4	404.2	315.6	267.3	240.9	228.5	220.7	221.0
17.5°	616.9	612.8	578.7	470.8	351.7	265.8	229.9	210.1	199.1	191.7	191.1
20°	654.2	647.4	587.0	437.9	303.4	234.4	204.7	188.2	179.9	173.3	172.2
22.5°	706.4	696.6	597.1	402.4	269.3	212.7	186.1	173.9	167.1	159.7	158.5
25°	771.0	759.4	609.5	369.5	245.9	194.1	172.5	162.4	154.4	145.8	144.9
27.5°	861.4	840.6	624.3	342.5	225.8	178.1	160.0	148.7	139.6	132.4	131.0
30°	962.1	928.0	637.4	326.2	207.4	163.3	143.7	132.4	123.9	118.8	117.9
32.5°	1057.5	1011.3	645.9	319.1	190.8	146.4	125.9	113.8	107.3	105.8	106.7
35°	1147.6	1086.6	645.1	312.3	176.0	129.5	108.4	96.0	91.0	91.9	91.9
37.5°	1251.3	1166.9	638.8	301.6	163.9	114.1	93.3	82.4	77.9	78.2	79.4
40°	1371.9	1259.6	635.0	281.5	150.5	99.9	80.9	72.0	68.7	67.6	67.3
42.5°	1500.5	1349.4	635.6	258.7	133.9	87.1	72.3	64.9	61.9	61.0	60.7
45°	1629.7	1435.0	636.5	235.0	116.4	77.3	66.1	59.9	58.1	56.9	56.9
47.5°	1751.2	1507.9	619.9	209.5	99.3	69.9	61.0	56.9	55.4	53.9	53.9
50°	1864.4	1556.5	579.9	179.9	85.6	64.0	57.2	54.2	52.7	51.3	51.3
52.5°	1952.4	1564.2	513.8	149.3	76.2	59.6	54.8	52.1	50.4	48.9	48.6
55°	1991.5	1515.9	419.9	120.9	68.7	55.7	52.4	49.8	47.7	46.2	45.9
57.5°	1981.4	1414.3	327.4	97.2	61.6	51.9	49.5	47.7	45.3	43.0	42.7
60°	1931.9	1278.3	246.8	80.9	55.1	47.7	46.2	44.7	41.5	37.9	37.3
62.5°	1846.3	1107.3	176.0	67.0	48.0	43.0	42.4	41.2	36.4	29.9	29.3
65°	1715.3	899.6	118.5	55.7	41.2	37.6	37.9	35.9	29.6	22.2	21.6
67.5°	1523.9	657.8	75.9	45.6	34.4	31.4	31.7	30.5	25.2	19.0	18.1
70°	1280.0	435.6	49.5	34.7	27.6	24.3	26.1	26.4	21.3	15.4	14.8
72.5°	938.4	257.2	34.7	25.8	20.1	16.9	21.3	21.9	17.2	11.6	11.0
75°	534.8	122.1	26.1	18.7	12.4	11.9	16.6	16.6	11.9	7.7	7.1
77.5°	224.6	51.0	18.4	12.1	7.1	6.8	11.3	10.4	5.9	3.6	3.6
80°	64.9	22.8	9.8	5.9	3.0	2.7	4.4	3.3	1.5	0.6	0.6
82.5°	25.5	10.1	3.9	2.4	1.2	1.2	0.6	0.0	0.0	0.0	0.0
85°	15.1	4.1	1.8	0.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.9	0.9	0.6	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)