

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: P881716

Luminaire Tested: **NAV-SB1B-730-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881716
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-730-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4051 lumens
Efficiency: N/A
Efficacy: 101.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

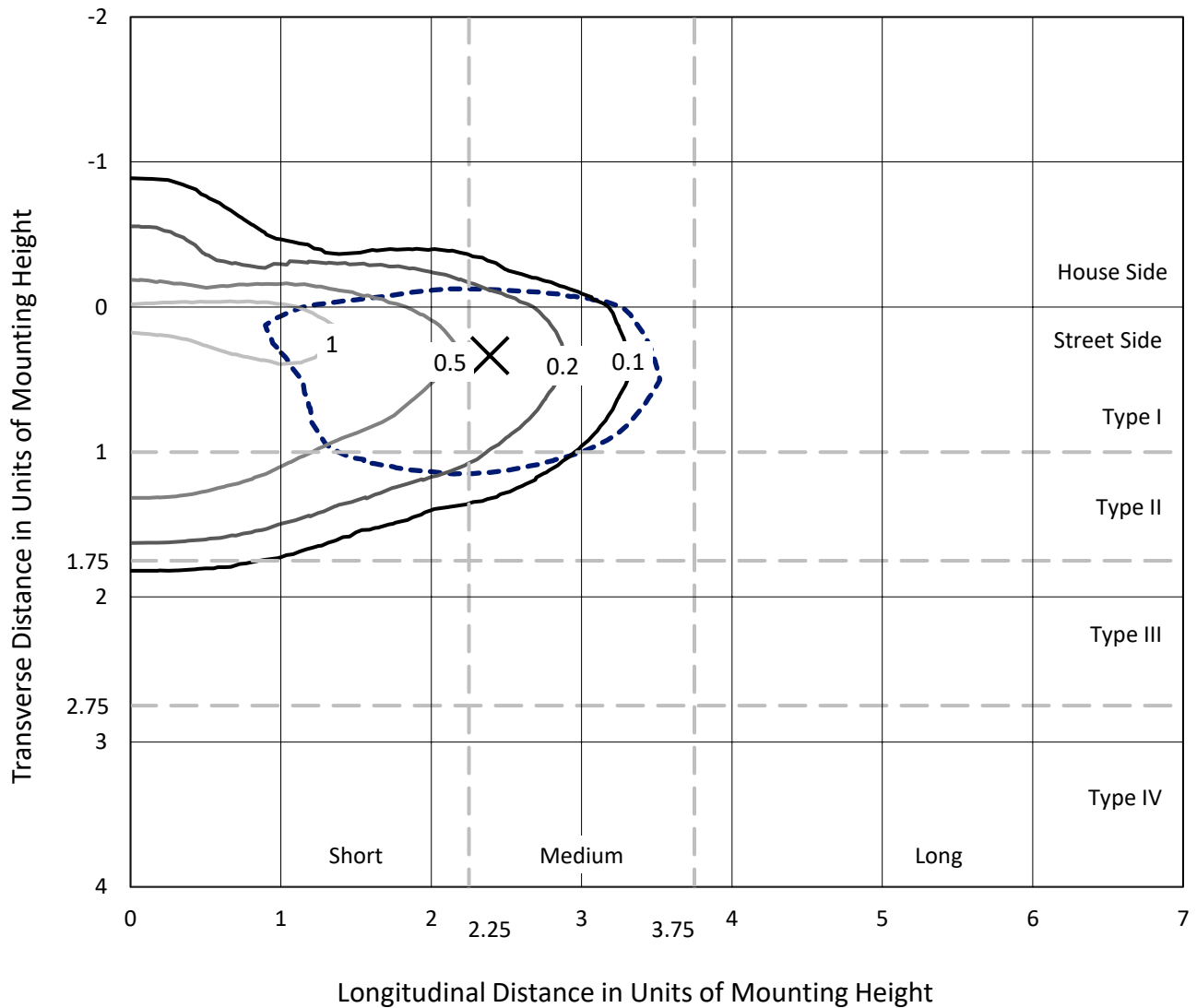
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

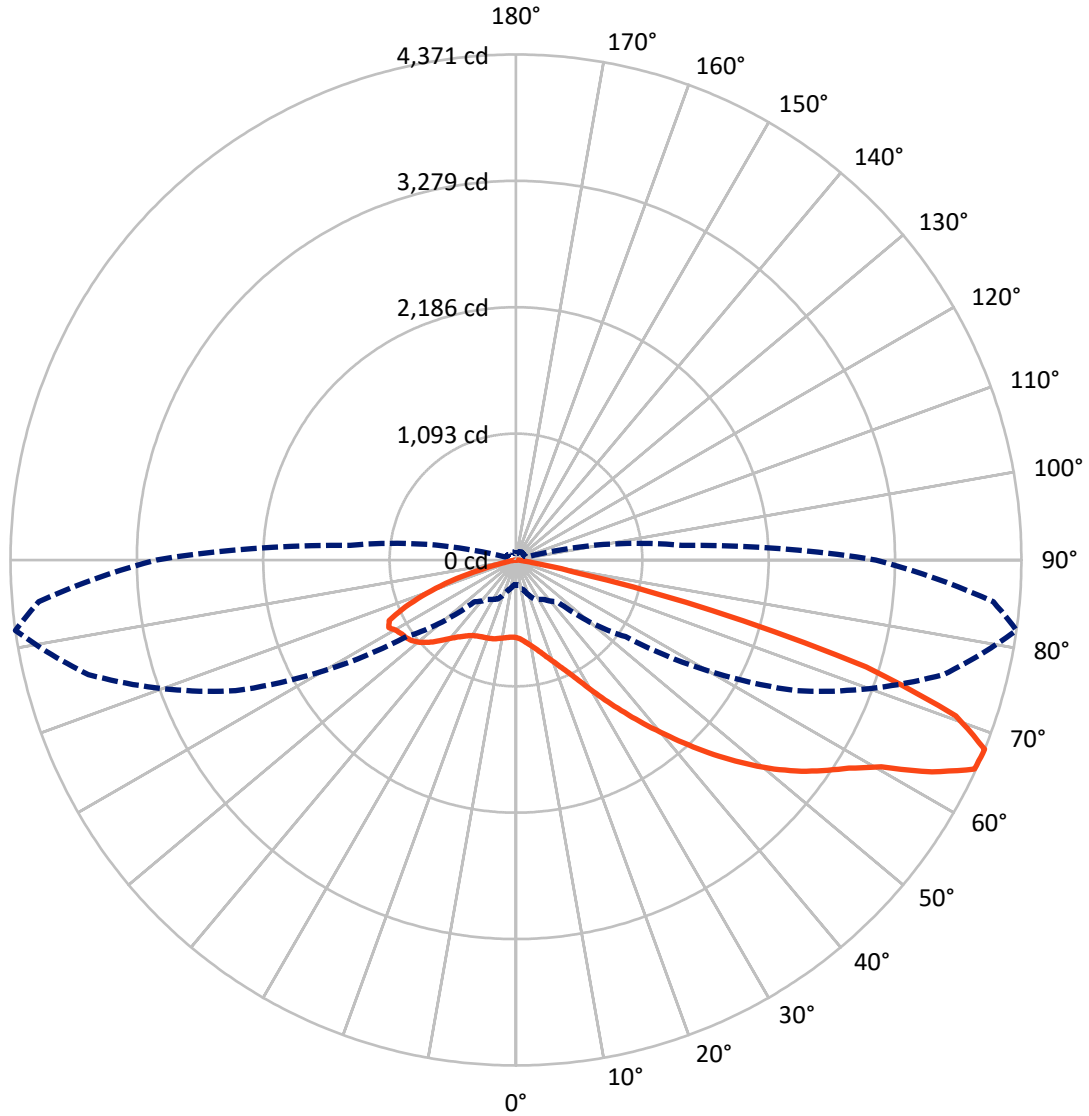
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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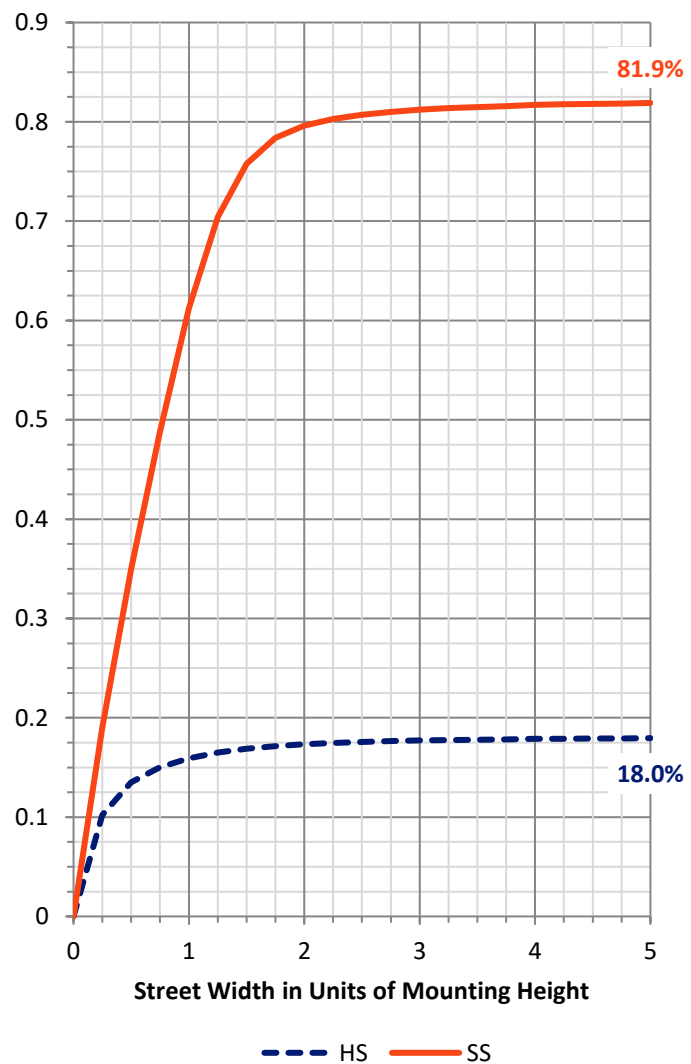
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	733.8	0.0	733.8
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	3317.2	0.0	3317.2
	% Fixture	81.9	0.0	81.9
Total	Lumens	4051.0	0.0	4051.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.8	1.5
10°-20°	155.4	3.8
20°-30°	248.9	6.1
30°-40°	440.1	10.9
40°-50°	771.0	19.0
50°-60°	1028.3	25.4
60°-70°	957.3	23.6
70°-80°	367.4	9.1
80°-90°	22.8	0.6
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°	4051.0	100.0
0°-180°	4051.0	100.0

Coefficient of Utilization



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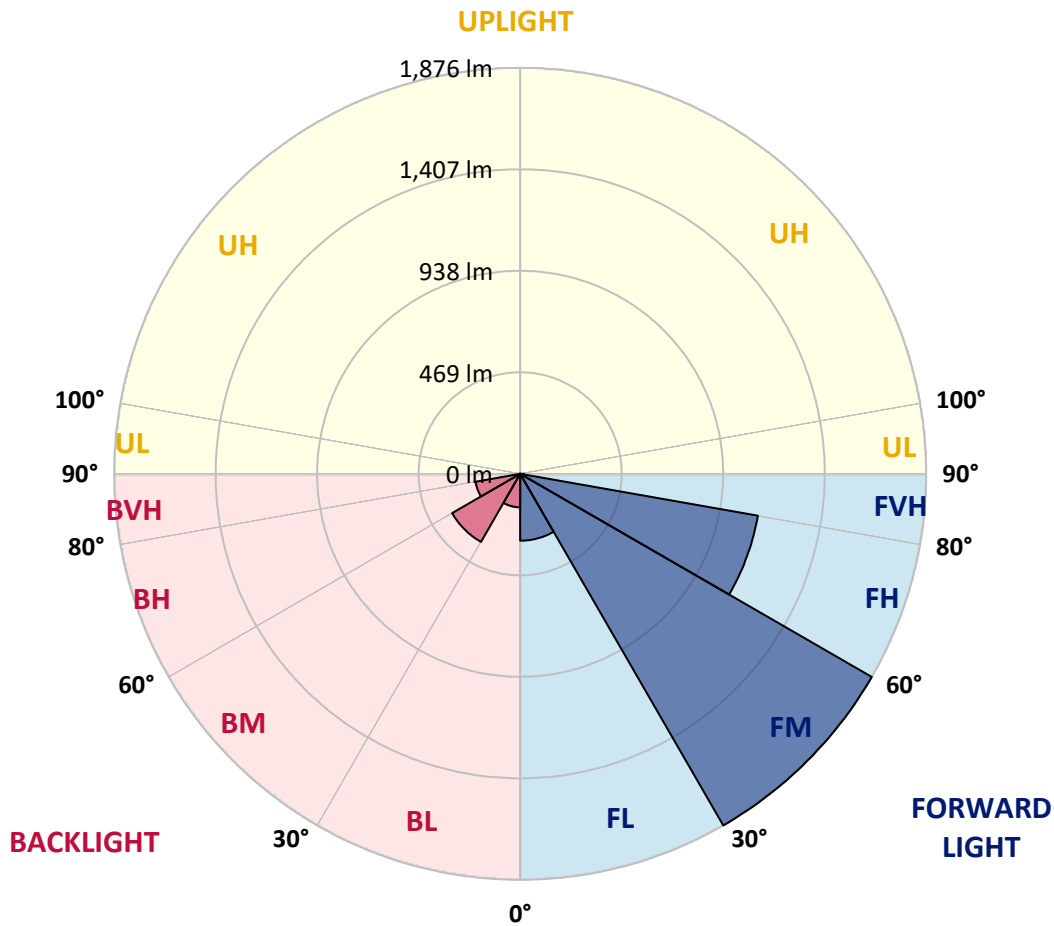
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	309.0	7.6			
FM (30°-60°)	1876.3	46.3			
FH (60°-80°)	1115.3	27.5			G1/1800
FVH (80°-90°)	16.6	0.4			G1/100
BL (0°-30°)	155.0	3.8	B1/500		
BM (30°-60°)	363.2	9.0	B1/1000		
BH (60°-80°)	209.4	5.2	B1/500		G1/500
BVH (80°-90°)	6.2	0.2			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	671.1	671.1	671.1	671.1	671.1	671.1	671.1	671.1	671.1	671.1	671.1
2.5°	709.3	713.4	711.1	709.9	707.9	704.9	702.6	695.3	687.7	682.8	681.0
5°	723.6	727.7	727.4	728.6	730.0	730.9	730.3	722.2	711.4	702.9	697.9
7.5°	711.4	716.0	719.8	725.7	735.9	746.7	751.9	750.2	739.1	727.4	721.3
10°	676.7	681.6	690.7	704.4	725.9	749.3	768.8	777.9	770.9	758.0	749.6
12.5°	613.1	618.0	635.8	665.6	701.7	742.3	779.6	803.8	805.6	792.7	782.8
15°	541.6	546.6	565.5	602.9	658.0	723.0	785.4	831.2	846.7	835.6	823.7
17.5°	497.3	501.7	515.9	546.0	603.4	684.5	783.4	860.4	895.7	886.9	872.7
20°	483.9	487.7	494.4	515.4	563.2	644.6	770.0	887.8	948.5	943.5	927.5
22.5°	498.2	501.7	503.7	513.0	543.1	618.3	753.1	915.8	1009.7	1010.3	990.8
25°	531.1	534.6	532.3	538.1	551.2	610.2	746.7	948.8	1086.7	1093.1	1071.0
27.5°	585.4	585.7	580.1	579.8	581.9	622.4	753.4	984.1	1183.9	1195.8	1168.4
30°	694.2	689.8	668.5	645.4	634.9	659.2	772.0	1025.8	1298.5	1319.8	1285.4
32.5°	861.9	855.4	816.4	761.2	705.8	718.4	805.6	1073.3	1423.3	1461.8	1419.8
35°	1043.9	1042.1	1001.3	919.3	822.5	802.7	860.1	1135.7	1559.5	1620.8	1570.9
37.5°	1213.0	1212.1	1188.8	1092.3	974.4	920.2	947.6	1217.4	1705.3	1794.0	1735.1
40°	1367.6	1370.2	1346.9	1260.6	1141.9	1071.0	1066.6	1318.3	1867.5	1982.7	1912.7
42.5°	1501.2	1504.1	1480.5	1416.6	1307.2	1237.8	1212.7	1442.0	2025.9	2185.4	2102.6
45°	1591.9	1610.0	1606.5	1555.4	1477.0	1404.9	1388.3	1597.1	2206.4	2400.4	2303.3
47.5°	1617.6	1634.2	1660.4	1667.4	1619.6	1548.7	1568.6	1784.1	2389.0	2615.6	2505.1
50°	1554.3	1569.7	1624.3	1696.9	1730.1	1708.3	1743.8	1984.5	2576.0	2830.3	2703.1
52.5°	1429.4	1445.2	1514.0	1628.9	1764.6	1833.4	1919.7	2181.9	2757.1	3033.6	2890.7
55°	1248.9	1265.5	1353.9	1484.0	1698.9	1885.0	2066.4	2379.1	2923.0	3216.4	3059.8
57.5°	1003.3	1015.6	1107.4	1289.4	1533.8	1833.7	2174.6	2594.3	3079.4	3396.1	3227.5
60°	653.9	664.7	771.4	974.4	1260.3	1662.2	2196.2	2834.4	3287.0	3629.7	3453.6
62.5°	434.9	442.2	505.4	654.5	887.5	1332.9	2069.9	3026.0	3591.5	4036.3	3841.2
65°	298.4	305.7	369.0	472.8	573.4	881.7	1706.8	3000.6	3867.4	4359.2	4128.5
67.5°	212.9	219.0	272.7	370.7	415.0	512.2	1157.0	2676.3	3827.8	4371.4	4143.9
70°	152.5	156.0	200.4	288.7	329.9	307.7	643.4	2046.9	3351.5	4036.6	3828.4
72.5°	106.7	107.9	139.1	219.9	265.7	224.6	306.2	1364.7	2534.8	3168.3	2967.9
75°	72.3	73.8	93.6	161.3	213.2	171.5	162.2	731.8	1488.1	1753.8	1572.1
77.5°	44.3	44.9	60.4	110.2	159.5	130.7	104.4	310.0	575.7	565.2	481.8
80°	25.1	25.1	38.5	68.5	108.8	84.3	73.2	131.8	182.3	160.1	141.2
82.5°	14.0	14.3	28.0	42.6	72.0	49.9	40.2	61.0	78.7	69.7	60.7
85°	5.8	6.4	17.2	20.1	34.4	24.8	16.3	25.7	29.2	26.0	19.0
87.5°	0.6	0.9	5.2	3.8	4.1	5.0	2.3	5.0	4.1	4.1	2.9
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°	671.1	671.1	671.1	671.1	671.1	671.1	671.1	671.1	671.1	671.1	671.1
2.5°	675.5	671.1	660.0	647.2	630.3	622.1	611.0	603.4	597.0	597.6	591.8
5°	688.6	677.5	652.7	621.8	583.3	555.9	526.7	506.6	490.3	486.8	478.9
7.5°	706.7	689.2	645.7	590.0	525.0	475.7	431.7	403.4	383.2	376.8	370.4
10°	730.0	704.7	636.7	550.1	456.5	393.7	346.5	324.3	310.6	306.0	302.5
12.5°	757.2	722.4	624.7	501.4	385.9	325.5	295.5	284.4	280.0	278.5	277.7
15°	791.3	744.6	606.7	443.6	326.1	283.8	271.0	269.5	270.1	269.5	269.2
17.5°	831.8	768.8	577.2	384.1	285.8	262.5	257.8	259.0	260.5	260.2	259.6
20°	876.2	792.7	539.6	331.3	258.4	247.3	244.7	245.9	247.0	246.5	246.2
22.5°	926.6	818.4	497.9	290.2	240.0	233.3	230.4	230.7	230.7	229.5	229.0
25°	987.0	846.7	454.1	261.0	226.0	220.8	217.3	216.1	214.4	210.9	210.3
27.5°	1059.0	876.7	412.1	240.6	215.0	210.0	205.9	203.0	198.6	192.8	192.2
30°	1140.1	913.2	376.5	227.8	206.2	201.2	196.6	192.2	185.8	178.5	177.9
32.5°	1235.5	952.3	350.6	219.3	198.3	193.1	187.5	182.3	175.3	168.0	168.3
35°	1349.2	999.5	335.4	213.5	192.2	185.2	179.1	173.2	168.0	161.6	161.0
37.5°	1472.6	1049.7	330.7	210.6	188.1	177.3	170.3	166.2	165.7	161.9	161.6
40°	1607.6	1109.2	334.2	208.8	183.7	169.7	162.2	161.3	162.7	156.0	156.3
42.5°	1750.6	1179.8	340.1	206.8	177.6	162.2	154.9	154.9	153.7	144.4	144.4
45°	1905.1	1261.1	345.9	201.8	170.3	154.6	149.0	147.0	142.0	133.0	132.7
47.5°	2060.9	1344.0	350.3	192.8	161.6	148.2	143.2	138.5	131.2	123.1	122.8
50°	2208.8	1418.4	345.6	179.4	151.7	142.0	136.8	130.4	122.5	117.0	116.1
52.5°	2340.9	1482.8	325.8	163.6	141.2	135.6	131.0	124.2	117.8	112.0	111.4
55°	2455.8	1535.0	290.8	148.7	131.8	130.1	125.4	117.0	108.2	103.2	102.7
57.5°	2566.0	1574.7	247.0	136.5	123.4	124.0	117.0	109.4	101.2	96.0	95.4
60°	2712.7	1627.8	202.7	125.1	114.3	116.1	108.5	103.0	92.7	86.0	85.2
62.5°	2947.2	1710.3	161.0	111.1	103.8	104.4	101.2	94.5	82.2	74.4	73.8
65°	3133.3	1680.0	126.9	96.0	91.9	92.7	92.7	85.5	72.3	63.3	62.4
67.5°	3112.3	1438.5	101.2	81.1	80.5	81.1	83.1	77.0	64.2	56.9	55.7
70°	2867.0	1144.2	81.1	67.4	70.0	68.5	74.4	70.3	57.7	50.5	49.6
72.5°	2339.4	824.2	61.8	55.7	53.7	56.0	67.1	63.3	48.1	40.0	39.1
75°	1367.0	439.8	46.1	44.0	38.8	46.7	59.5	54.0	36.7	29.5	28.6
77.5°	445.1	153.4	33.8	32.4	28.9	37.6	50.7	45.5	30.0	23.3	22.5
80°	119.3	46.4	23.0	21.3	18.7	28.0	40.2	36.2	21.6	15.2	14.9
82.5°	47.8	19.5	13.4	12.0	10.2	19.2	31.8	29.2	16.0	9.6	9.6
85°	15.5	6.4	5.0	3.8	4.7	12.0	19.0	19.8	11.4	5.0	3.8
87.5°	2.0	0.9	0.9	1.2	0.9	2.0	5.8	5.5	3.2	0.6	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)