

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: P959970

Luminaire Tested: **NAV-SB1B-830-U-SL3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959970
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-13)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-830-U-SL3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4177.9 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
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

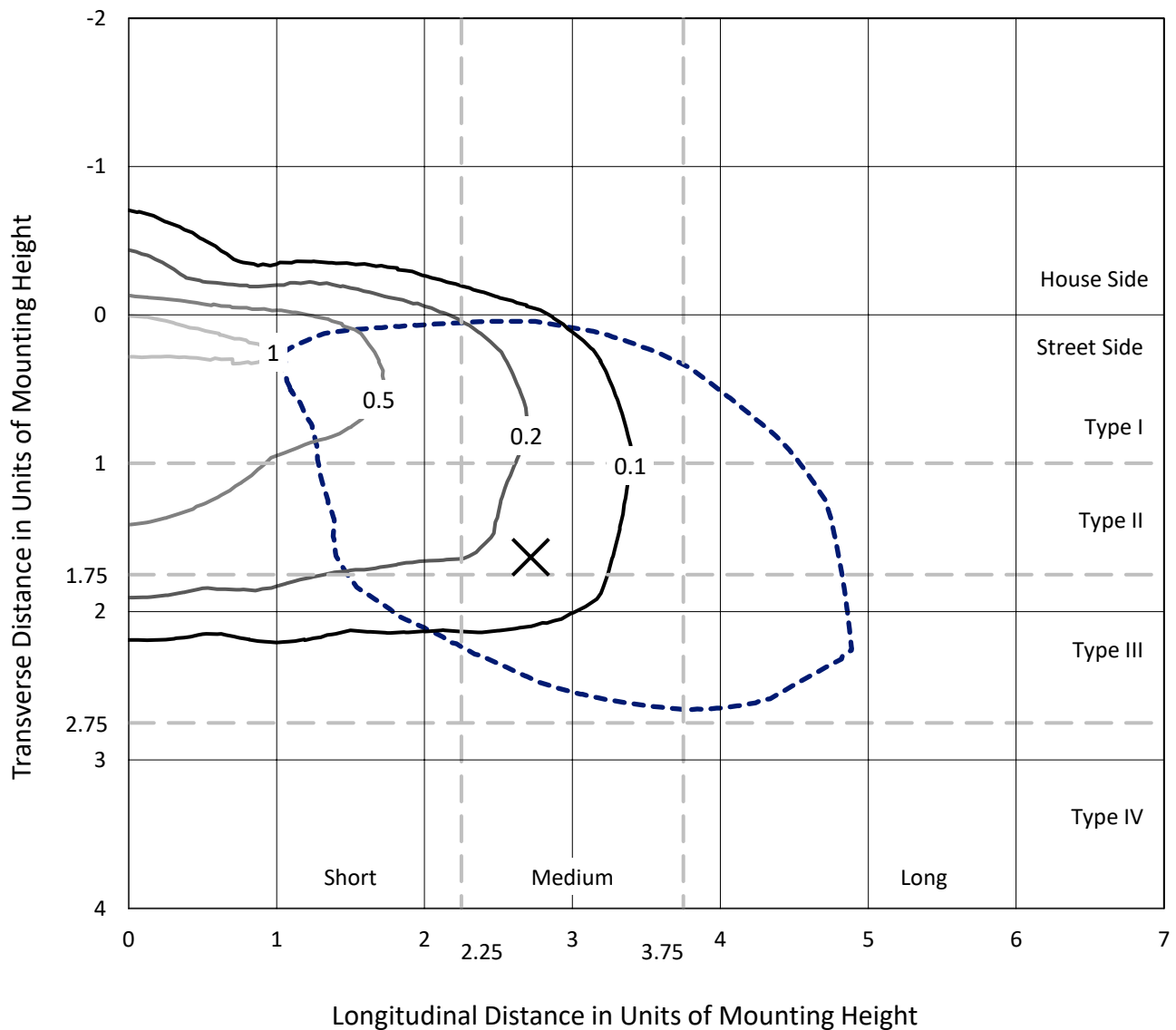


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Iso-Footcandle Lines of Horizontal Illumination

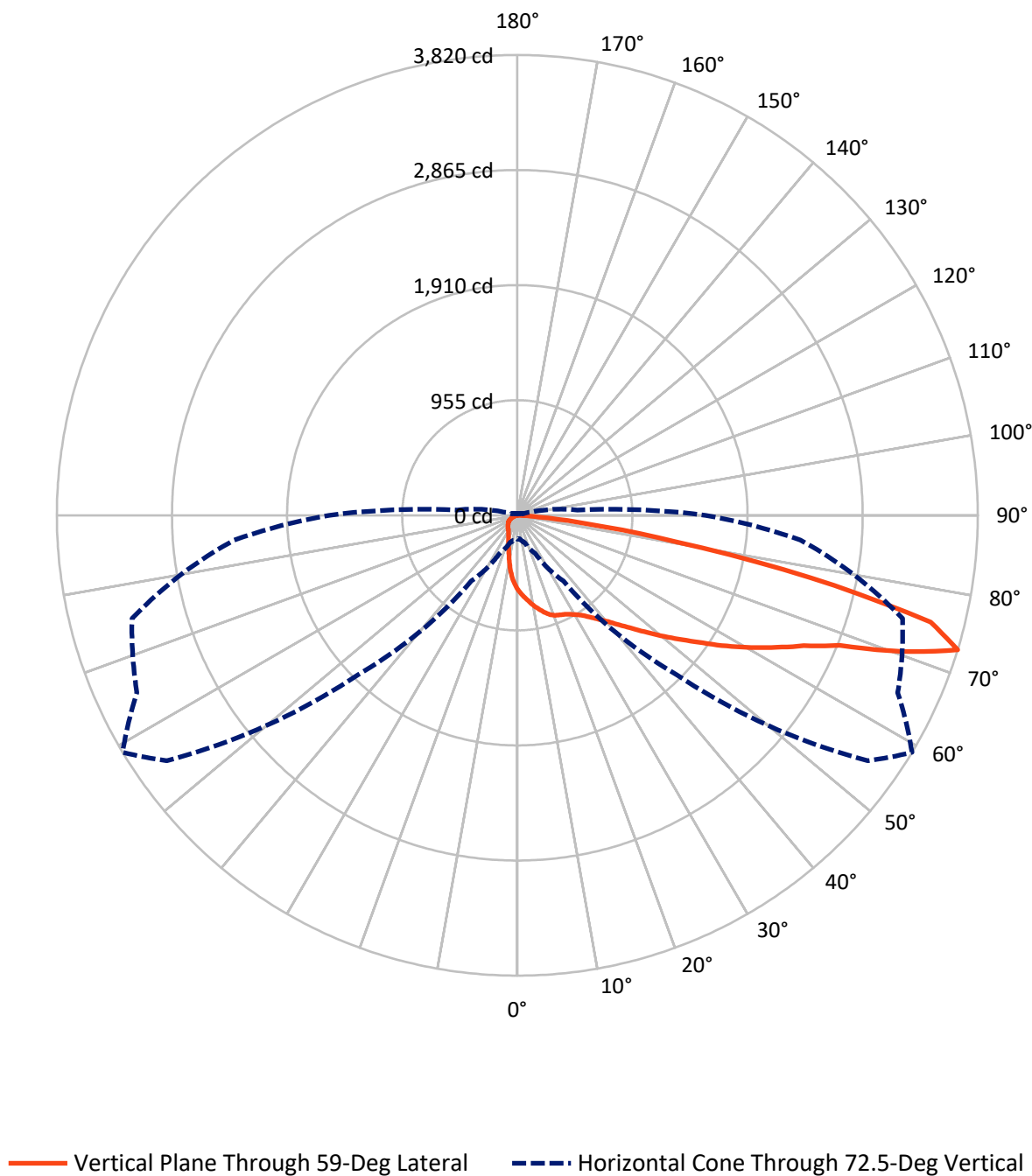
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	441.3	0.0	441.3
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	3736.6	0.0	3736.6
	% Fixture	89.4	0.0	89.4
Total	Lumens	4177.9	0.0	4177.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.9	1.3
10°-20°	148.5	3.6
20°-30°	235.3	5.6
30°-40°	377.6	9.0
40°-50°	603.1	14.4
50°-60°	873.2	20.9
60°-70°	1036.3	24.8
70°-80°	769.3	18.4
80°-90°	78.7	1.9
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°	4177.9	100.0
0°-180°	4177.9	100.0

Coefficient of Utilization



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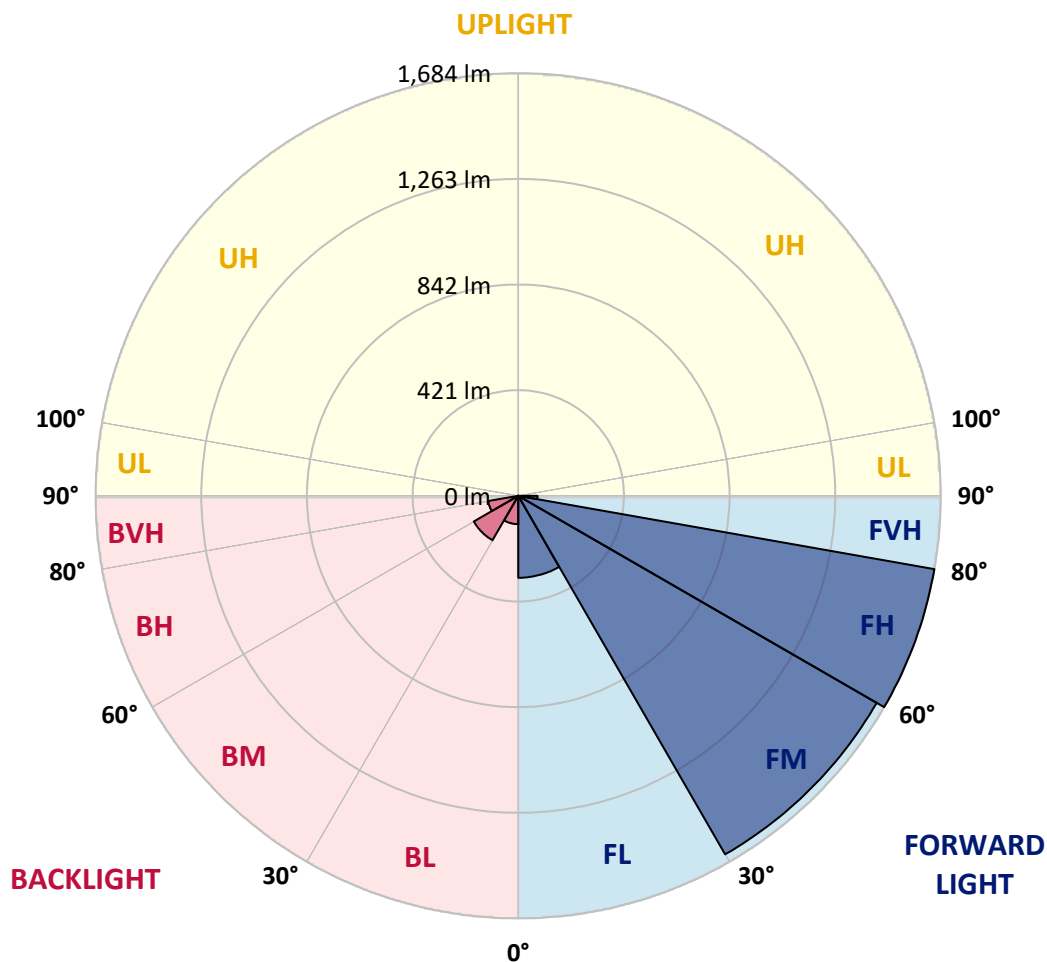
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	326.6	7.8			
FM	(30°-60°)	1649.4	39.5			
FH	(60°-80°)	1683.9	40.3			G1/1800
FVH	(80°-90°)	76.7	1.8			G1/100
BL	(0°-30°)	113.0	2.7	B1/500		
BM	(30°-60°)	204.6	4.9	B0/220		
BH	(60°-80°)	121.7	2.9	B1/500		G1/500
BVH	(80°-90°)	2.0	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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	617.8	617.8	617.8	617.8	617.8	617.8	617.8	617.8	617.8	617.8	617.8
2.5°	685.4	681.6	682.1	675.7	671.0	666.0	656.5	655.2	648.3	636.3	624.1
5°	745.2	742.7	740.6	733.2	723.6	711.7	695.6	689.8	677.3	656.5	632.5
7.5°	788.8	785.9	786.9	779.5	771.9	758.6	736.5	725.8	709.2	677.5	641.2
10°	797.2	795.6	802.8	805.4	805.4	797.0	775.5	764.9	740.6	700.2	650.3
12.5°	749.8	750.1	767.8	789.1	816.9	824.8	810.4	798.9	774.9	724.2	661.7
15°	694.4	694.7	712.0	739.2	784.7	830.2	841.7	834.4	809.5	750.1	675.1
17.5°	661.2	659.8	671.3	693.6	741.4	805.4	860.8	865.7	845.5	778.7	689.8
20°	656.5	654.1	660.1	671.3	705.4	774.4	863.0	886.2	882.6	811.2	706.7
22.5°	684.9	681.1	677.8	678.3	692.8	748.5	857.6	897.7	920.9	850.2	729.9
25°	741.1	735.1	724.5	710.8	707.9	743.0	853.7	910.2	956.3	900.2	760.4
27.5°	809.9	801.3	780.9	760.4	743.0	758.3	861.6	930.1	996.4	958.3	795.9
30°	885.4	875.0	854.5	815.8	788.0	792.4	880.5	956.3	1047.7	1024.0	840.4
32.5°	996.4	972.4	936.6	877.5	840.7	829.2	908.9	989.6	1111.2	1111.5	904.8
35°	1091.6	1078.2	1042.2	968.6	893.1	878.0	946.2	1036.5	1199.4	1227.4	994.8
37.5°	1154.0	1135.8	1104.1	1048.8	974.4	928.2	996.1	1094.1	1292.6	1359.5	1105.8
40°	1223.8	1205.9	1163.9	1111.8	1068.7	1014.4	1059.1	1160.3	1394.9	1495.1	1232.7
42.5°	1308.2	1284.7	1235.1	1178.9	1133.9	1127.9	1141.5	1243.0	1499.9	1642.4	1364.7
45°	1407.2	1385.1	1328.1	1257.2	1217.6	1206.9	1245.2	1339.3	1616.9	1803.8	1498.0
47.5°	1499.9	1474.3	1413.0	1348.3	1304.3	1270.8	1355.4	1453.0	1749.5	1972.6	1624.0
50°	1578.8	1552.6	1496.4	1427.4	1397.7	1353.7	1463.7	1579.8	1881.0	2144.2	1739.1
52.5°	1632.7	1609.6	1543.5	1496.7	1476.5	1454.4	1590.5	1714.3	2011.9	2301.3	1852.9
55°	1620.5	1599.7	1541.7	1538.4	1537.0	1560.3	1742.2	1866.8	2145.3	2450.0	1966.1
57.5°	1581.5	1558.0	1485.4	1535.3	1583.6	1654.6	1906.4	2047.1	2291.5	2590.2	2075.2
60°	1466.7	1458.5	1414.3	1529.7	1603.3	1747.0	2094.0	2228.2	2449.8	2713.5	2172.0
62.5°	1223.6	1230.7	1230.4	1541.7	1638.8	1852.4	2264.5	2411.5	2604.3	2832.1	2258.2
65°	916.2	940.7	972.1	1433.7	1686.2	2040.3	2468.2	2610.4	2761.5	2970.1	2345.8
67.5°	615.6	635.3	656.5	1176.2	1545.0	2237.8	2806.8	2882.8	2949.6	3123.2	2444.2
70°	352.4	358.6	388.4	734.5	1190.8	2183.2	3358.0	3385.6	3230.4	3311.7	2516.0
72.5°	197.5	195.3	234.6	348.6	665.5	1869.5	3551.1	3819.8	3481.6	3308.6	2355.9
75°	132.0	132.3	161.4	219.9	259.4	1308.7	3060.1	3541.9	3331.0	2933.9	1925.0
77.5°	90.0	93.0	118.7	169.9	120.0	638.6	2024.5	2481.1	2696.8	2265.6	1328.9
80°	39.1	39.3	78.3	122.0	81.0	203.3	1049.6	1329.2	1691.5	1272.1	526.4
82.5°	20.2	23.0	49.9	78.8	51.0	71.2	495.9	580.8	709.7	373.4	108.0
85°	7.1	8.4	30.9	38.7	25.6	25.3	172.6	175.9	150.3	56.2	29.7
87.5°	0.0	1.3	12.0	9.5	3.3	3.0	20.5	17.2	13.6	7.9	9.8
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°	617.8	617.8	617.8	617.8	617.8	617.8	617.8	617.8	617.8	617.8	617.8
2.5°	618.4	611.0	599.0	584.2	567.0	557.8	544.5	536.3	528.9	529.2	535.2
5°	619.2	606.9	576.4	543.9	507.9	481.4	451.9	431.2	415.4	411.6	417.4
7.5°	621.7	600.9	550.9	497.0	437.0	392.5	351.9	326.3	311.8	307.9	311.8
10°	624.9	594.4	522.3	439.7	365.2	311.8	278.0	261.6	255.0	250.1	253.2
12.5°	627.6	587.5	486.4	380.5	301.5	259.6	234.0	220.4	214.6	211.2	213.0
15°	632.2	578.5	447.3	325.4	258.3	224.2	200.0	189.8	188.2	188.7	189.5
17.5°	636.9	569.8	403.6	282.3	226.6	193.1	178.4	176.7	179.0	181.1	181.9
20°	642.1	557.3	359.5	249.9	197.5	171.6	167.8	168.8	169.9	173.7	174.9
22.5°	649.7	541.4	320.7	222.3	173.2	161.2	159.3	160.1	160.9	164.7	165.8
25°	660.6	524.5	289.4	196.9	158.0	152.7	150.9	150.9	151.9	155.5	156.8
27.5°	672.1	500.5	264.0	173.4	148.9	143.5	140.2	140.2	141.6	145.7	147.3
30°	684.9	478.7	244.2	156.0	141.2	134.2	129.9	128.7	130.4	135.6	136.9
32.5°	708.1	464.5	229.9	147.8	134.5	125.8	119.7	116.7	118.4	124.3	126.0
35°	743.3	461.2	220.2	143.7	127.9	118.1	109.7	105.1	106.4	112.6	114.6
37.5°	784.4	468.0	210.5	138.3	121.7	110.7	99.5	93.6	95.7	101.5	103.1
40°	843.7	496.4	203.3	134.2	115.4	102.0	89.5	83.4	87.0	91.9	92.8
42.5°	915.1	546.9	201.3	130.4	107.7	92.8	80.2	75.8	78.5	83.2	84.0
45°	1003.8	611.3	210.0	125.5	99.3	83.7	72.9	70.4	71.2	75.8	78.0
47.5°	1099.0	677.3	234.0	121.2	91.9	76.4	67.1	64.9	64.4	68.8	71.4
50°	1195.3	735.9	262.4	117.9	86.7	70.4	62.7	60.0	58.6	61.4	62.4
52.5°	1290.5	782.6	281.0	112.3	81.6	64.4	58.9	54.8	52.4	53.7	54.8
55°	1387.0	823.5	282.1	104.2	76.7	60.6	55.1	50.4	47.5	47.5	48.0
57.5°	1477.3	859.5	266.0	93.3	69.8	57.0	49.9	46.1	42.8	41.7	42.0
60°	1557.2	886.2	239.2	81.0	63.9	52.4	44.7	41.7	37.6	35.5	35.0
62.5°	1628.4	899.3	202.6	68.5	56.5	46.9	39.9	36.6	31.1	28.4	28.1
65°	1688.7	885.9	164.5	56.8	50.2	40.9	34.1	30.9	24.8	21.5	21.5
67.5°	1748.4	824.8	124.3	47.8	43.7	34.3	28.1	25.1	20.7	18.0	18.0
70°	1756.0	696.4	87.0	40.1	36.3	26.4	22.7	20.7	16.9	14.5	14.1
72.5°	1563.2	501.0	52.9	32.7	28.4	18.9	18.0	16.4	12.5	10.9	10.7
75°	1249.6	307.1	31.1	24.6	18.9	13.3	13.3	11.7	8.4	7.1	7.1
77.5°	863.6	160.6	18.2	15.8	11.2	7.9	8.7	7.1	4.1	3.3	3.3
80°	345.8	61.1	9.8	7.4	5.2	3.6	3.0	1.6	0.8	0.5	0.8
82.5°	69.0	16.1	3.3	1.9	1.9	0.8	0.0	0.0	0.0	0.0	0.0
85°	17.7	3.6	0.8	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.4	0.0	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)