

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: P884606

Luminaire Tested: **NAV-SB5C-730-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884606
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-SB5C-730-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27317 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

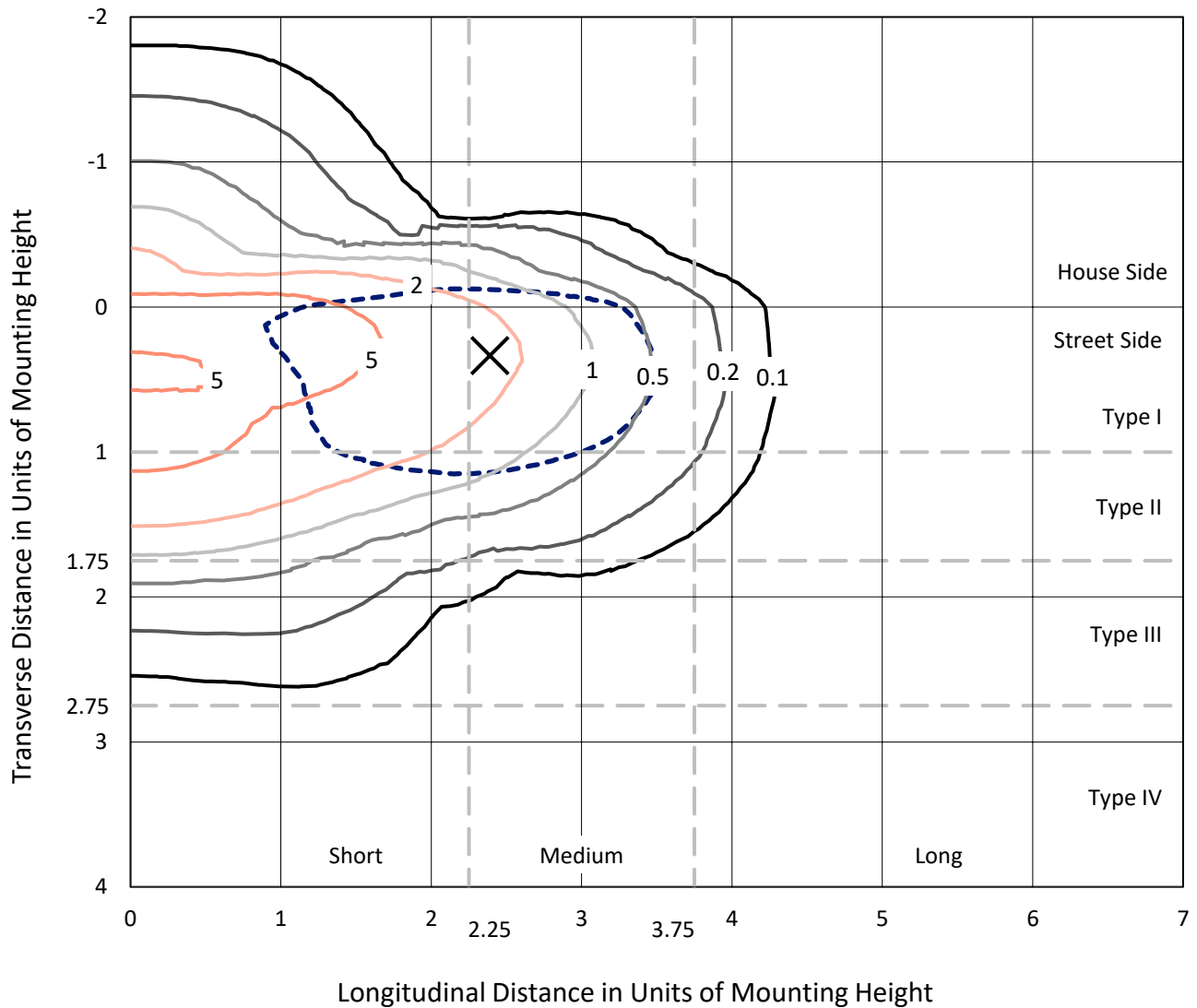
Input Watts (W): 249.5
Input Voltage (V): 120.0
Input Current (Ain): 2.116
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 7.885
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

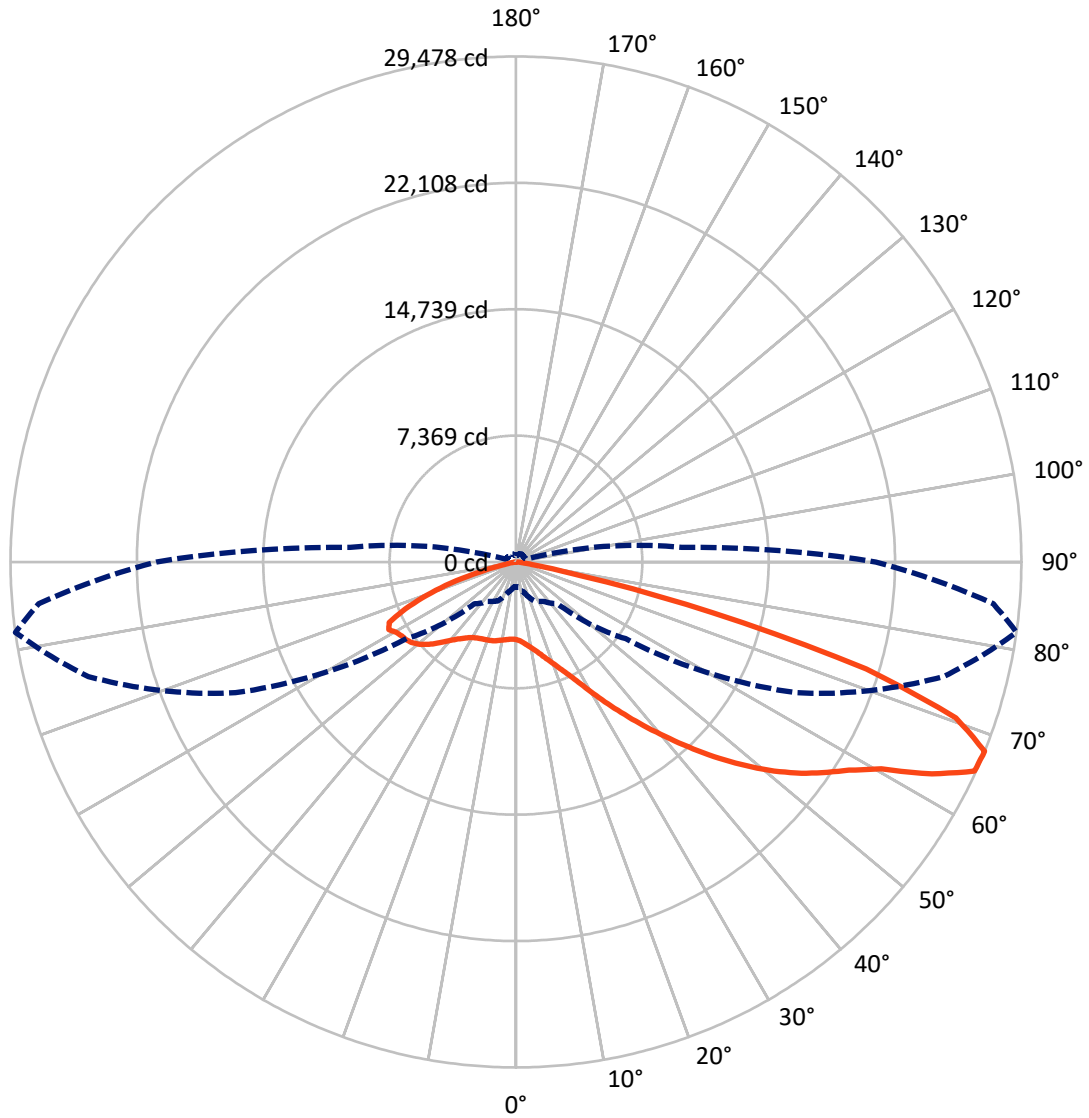
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.6 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	4948.2	0.0	4948.2
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	22368.8	0.0	22368.8
	% Fixture	81.9	0.0	81.9
Total	Lumens	27317.0	0.0	27317.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	403.2	1.5
10°-20°	1047.7	3.8
20°-30°	1678.1	6.1
30°-40°	2967.4	10.9
40°-50°	5199.2	19.0
50°-60°	6934.3	25.4
60°-70°	6455.5	23.6
70°-80°	2477.6	9.1
80°-90°	153.9	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°	27317.0	100.0
0°-180°	27317.0	100.0

Coefficient of Utilization



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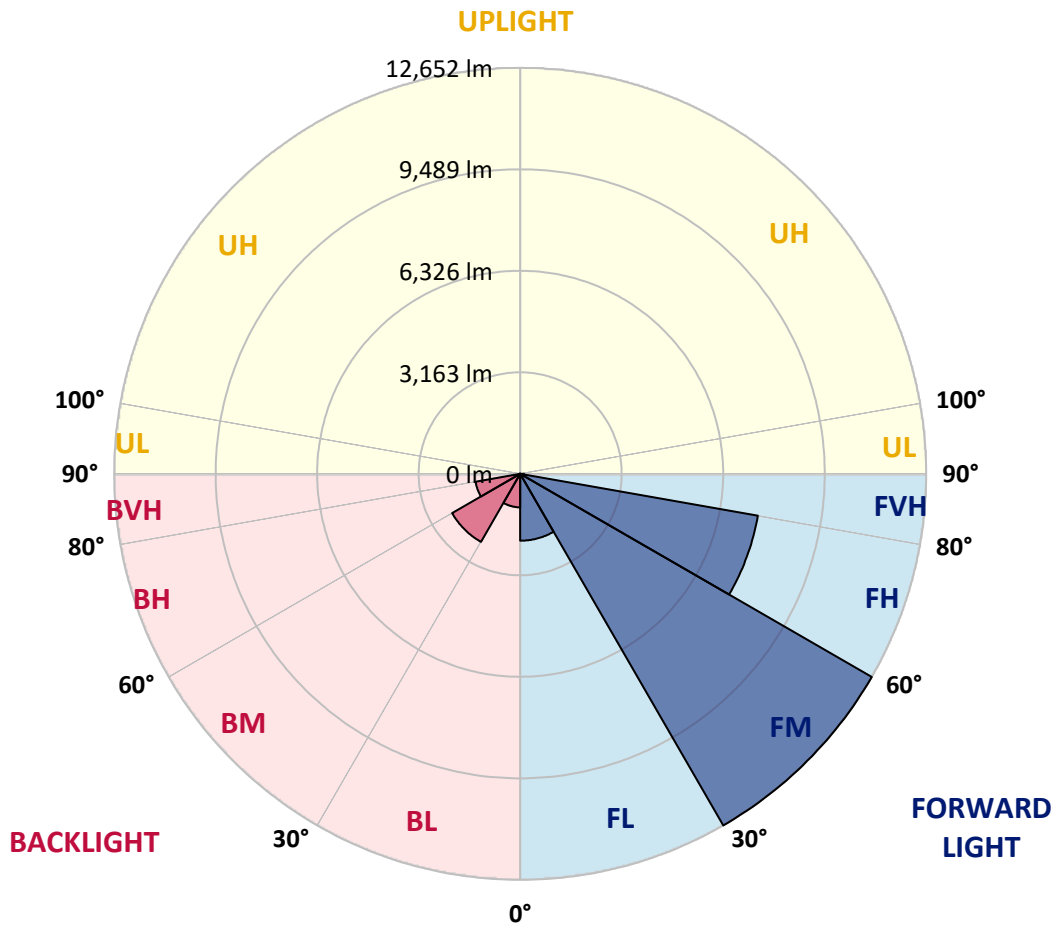
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2084.0	7.6			
FM (30°-60°)	12652.1	46.3			
FH (60°-80°)	7520.8	27.5			G4/12000
FVH (80°-90°)	111.9	0.4			G2/225
BL (0°-30°)	1045.1	3.8	B3/2500		
BM (30°-60°)	2448.9	9.0	B2/2500		
BH (60°-80°)	1412.3	5.2	B3/2500		G3/2500
BVH (80°-90°)	42.0	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4525.5	4525.5	4525.5	4525.5	4525.5	4525.5	4525.5	4525.5	4525.5	4525.5	4525.5
2.5°	4783.1	4810.7	4794.9	4787.1	4773.3	4753.6	4737.9	4688.7	4637.6	4604.2	4592.4
5°	4879.5	4907.1	4905.1	4913.0	4922.8	4928.7	4924.8	4869.7	4796.9	4739.9	4706.4
7.5°	4796.9	4828.4	4854.0	4893.3	4962.1	5034.9	5070.3	5058.5	4983.8	4905.1	4863.8
10°	4562.9	4596.3	4657.3	4749.7	4895.3	5052.6	5184.4	5245.3	5198.1	5111.6	5054.6
12.5°	4134.1	4167.6	4287.5	4488.1	4732.0	5005.4	5257.1	5420.4	5432.2	5345.6	5278.8
15°	3652.3	3685.7	3813.5	4065.3	4437.0	4875.6	5296.5	5605.3	5709.5	5634.8	5554.1
17.5°	3353.3	3382.8	3479.2	3681.8	4069.2	4616.0	5282.7	5801.9	6039.9	5980.9	5884.5
20°	3262.8	3288.4	3333.6	3475.3	3797.8	4346.5	5192.2	5986.8	6395.9	6362.5	6254.3
22.5°	3359.2	3382.8	3396.6	3459.5	3662.1	4169.5	5078.2	6175.6	6808.9	6812.8	6681.1
25°	3581.5	3605.1	3589.3	3628.7	3717.2	4114.5	5034.9	6397.9	7328.1	7371.4	7221.9
27.5°	3947.3	3949.2	3911.9	3909.9	3923.7	4197.1	5080.1	6635.8	7983.1	8063.7	7878.8
30°	4680.9	4651.4	4507.8	4352.4	4281.6	4444.9	5206.0	6917.1	8756.0	8899.6	8667.5
32.5°	5811.8	5768.5	5504.9	5133.2	4759.5	4844.1	5432.2	7237.7	9597.8	9857.4	9574.2
35°	7039.0	7027.2	6751.9	6199.2	5546.2	5412.5	5800.0	7658.5	10516.2	10929.3	10592.9
37.5°	8179.7	8173.8	8016.5	7365.5	6570.9	6205.1	6390.0	8209.2	11499.6	12097.5	11700.2
40°	9222.1	9239.8	9082.5	8500.3	7699.8	7221.9	7192.4	8889.7	12593.1	13370.0	12898.0
42.5°	10122.9	10142.6	9983.2	9552.5	8815.0	8346.9	8177.8	9723.6	13661.1	14736.9	14178.3
45°	10734.5	10856.5	10832.9	10488.7	9959.6	9473.9	9361.8	10769.9	14878.5	16186.4	15531.5
47.5°	10907.6	11019.7	11196.7	11243.9	10921.4	10443.5	10577.2	12030.6	16109.7	17637.9	16892.5
50°	10480.8	10585.1	10952.9	11442.6	11666.8	11519.3	11759.2	13381.8	17370.4	19085.4	18227.9
52.5°	9639.1	9745.3	10209.4	10984.3	11898.9	12363.0	12945.2	14713.3	18591.7	20456.2	19492.5
55°	8421.6	8533.7	9129.7	10006.8	11456.3	12711.1	13934.5	16042.8	19710.8	21689.4	20633.2
57.5°	6765.6	6848.2	7467.8	8695.0	10343.2	12365.0	14664.1	17494.3	20765.0	22900.9	21764.1
60°	4409.5	4482.2	5202.1	6570.9	8498.3	11208.5	14809.7	19112.9	22165.3	24476.3	23288.3
62.5°	2932.4	2981.6	3408.4	4413.4	5984.8	8988.1	13958.1	20405.1	24218.6	27217.9	25902.2
65°	2012.0	2061.2	2487.9	3188.1	3866.6	5945.5	11509.4	20234.0	26079.2	29395.1	27839.4
67.5°	1435.7	1477.0	1838.9	2499.7	2798.7	3453.6	7802.1	18046.9	25811.7	29477.7	27943.7
70°	1028.6	1052.2	1351.2	1947.1	2224.4	2074.9	4338.7	13802.7	22600.0	27219.9	25815.6
72.5°	719.8	727.7	938.1	1482.9	1791.7	1514.4	2065.1	9202.4	17093.1	21364.9	20013.7
75°	487.8	497.6	631.3	1087.6	1437.7	1156.5	1093.5	4934.6	10034.4	11826.1	10600.8
77.5°	298.9	302.9	407.1	743.4	1075.8	881.1	704.1	2090.7	3882.4	3811.6	3249.1
80°	169.1	169.1	259.6	462.2	733.6	568.4	493.7	889.0	1229.2	1079.7	951.9
82.5°	94.4	96.4	188.8	287.1	485.8	336.3	271.4	411.1	531.0	470.1	409.1
85°	39.3	43.3	116.0	135.7	232.1	167.2	110.1	173.1	196.7	175.0	127.8
87.5°	3.9	5.9	35.4	25.6	27.5	33.4	15.7	33.4	27.5	27.5	19.7
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°	4525.5	4525.5	4525.5	4525.5	4525.5	4525.5	4525.5	4525.5	4525.5	4525.5	4525.5
2.5°	4555.0	4525.5	4450.8	4364.2	4250.2	4195.1	4120.4	4069.2	4025.9	4029.9	3990.5
5°	4643.5	4568.8	4401.6	4193.1	3933.5	3748.6	3552.0	3416.3	3306.1	3282.5	3229.4
7.5°	4765.4	4647.4	4354.4	3978.7	3540.2	3207.8	2910.8	2720.0	2584.3	2541.0	2497.8
10°	4922.8	4751.7	4293.4	3709.3	3078.0	2655.1	2336.5	2187.0	2094.6	2063.1	2039.5
12.5°	5105.7	4871.7	4212.8	3380.9	2602.0	2194.9	1992.3	1917.6	1888.1	1878.3	1872.4
15°	5335.8	5021.1	4090.8	2991.4	2198.8	1913.7	1827.1	1817.3	1821.2	1817.3	1815.3
17.5°	5609.2	5184.4	3892.2	2590.2	1927.4	1770.1	1738.6	1746.5	1756.3	1754.3	1750.4
20°	5908.1	5345.6	3638.5	2234.2	1742.5	1667.8	1650.1	1658.0	1665.8	1661.9	1659.9
22.5°	6248.4	5518.7	3357.3	1956.9	1618.6	1573.4	1553.7	1555.7	1555.7	1547.8	1543.9
25°	6655.5	5709.5	3062.2	1760.2	1524.2	1488.8	1465.2	1457.4	1445.6	1422.0	1418.0
27.5°	7141.3	5912.1	2779.0	1622.6	1449.5	1416.1	1388.5	1368.9	1339.4	1300.0	1296.1
30°	7688.0	6157.9	2539.1	1536.0	1390.5	1357.1	1325.6	1296.1	1252.8	1203.7	1199.7
32.5°	8331.2	6421.5	2364.0	1479.0	1337.4	1302.0	1264.6	1229.2	1182.0	1132.9	1134.8
35°	9098.2	6740.1	2261.8	1439.7	1296.1	1248.9	1207.6	1168.3	1132.9	1089.6	1085.6
37.5°	9930.1	7078.3	2230.3	1420.0	1268.6	1195.8	1148.6	1121.1	1117.1	1091.5	1089.6
40°	10840.8	7479.6	2253.9	1408.2	1239.1	1144.7	1093.5	1087.6	1097.4	1052.2	1054.2
42.5°	11804.5	7955.5	2293.2	1394.4	1197.8	1093.5	1044.3	1044.3	1036.5	973.5	973.5
45°	12846.8	8504.2	2332.6	1361.0	1148.6	1042.4	1005.0	991.2	957.8	896.8	894.9
47.5°	13897.1	9062.8	2362.1	1300.0	1089.6	999.1	965.7	934.2	885.0	830.0	828.0
50°	14894.2	9564.3	2330.6	1209.6	1022.7	957.8	922.4	879.1	826.0	788.7	782.8
52.5°	15785.2	9999.0	2196.9	1103.3	951.9	914.5	883.1	837.8	794.6	755.2	751.3
55°	16560.1	10351.0	1960.9	1003.0	889.0	877.2	845.7	788.7	729.7	696.2	692.3
57.5°	17303.5	10618.5	1665.8	920.4	831.9	835.9	788.7	737.5	682.5	647.1	643.1
60°	18292.8	10976.5	1366.9	843.7	771.0	782.8	731.6	694.3	625.4	580.2	574.3
62.5°	19874.1	11533.0	1085.6	749.3	700.2	704.1	682.5	637.2	554.6	501.5	497.6
65°	21128.8	11328.5	855.5	647.1	619.5	625.4	625.4	576.3	487.8	426.8	420.9
67.5°	20987.2	9700.0	682.5	546.8	542.8	546.8	560.5	519.2	432.7	383.5	375.7
70°	19333.2	7715.6	546.8	454.3	472.0	462.2	501.5	474.0	389.4	340.2	334.3
72.5°	15775.3	5558.0	417.0	375.7	361.9	377.6	452.4	426.8	324.5	269.4	263.5
75°	9218.2	2965.9	310.7	297.0	261.6	314.7	401.2	363.8	247.8	198.6	192.7
77.5°	3001.3	1034.5	228.1	218.3	194.7	253.7	342.2	306.8	202.6	157.3	151.4
80°	804.4	312.7	155.4	143.6	125.9	188.8	271.4	243.9	145.5	102.3	100.3
82.5°	322.5	131.8	90.5	80.6	68.8	129.8	214.4	196.7	108.2	64.9	64.9
85°	104.2	43.3	33.4	25.6	31.5	80.6	127.8	133.7	76.7	33.4	25.6
87.5°	13.8	5.9	5.9	7.9	5.9	13.8	39.3	37.4	21.6	3.9	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)