

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: P884616

Luminaire Tested: **NAV-SB5C-735-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884616
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-735-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 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: 27750 lumens
Efficiency: N/A
Efficacy: 111.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

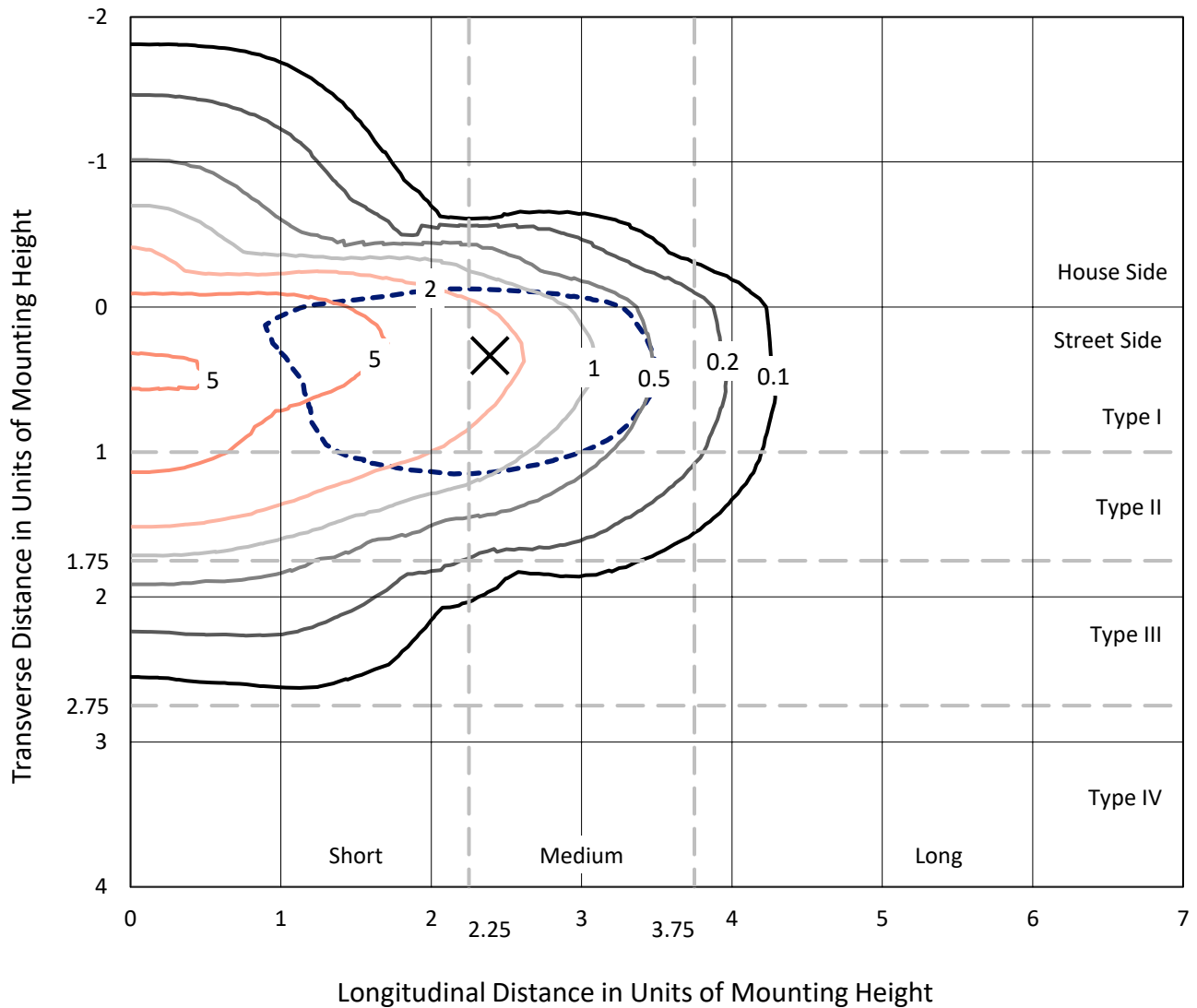
Input Watts (W): 249.5
Input Voltage (V): 120.0
Input Current (Ain): 2.116
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 7.885
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

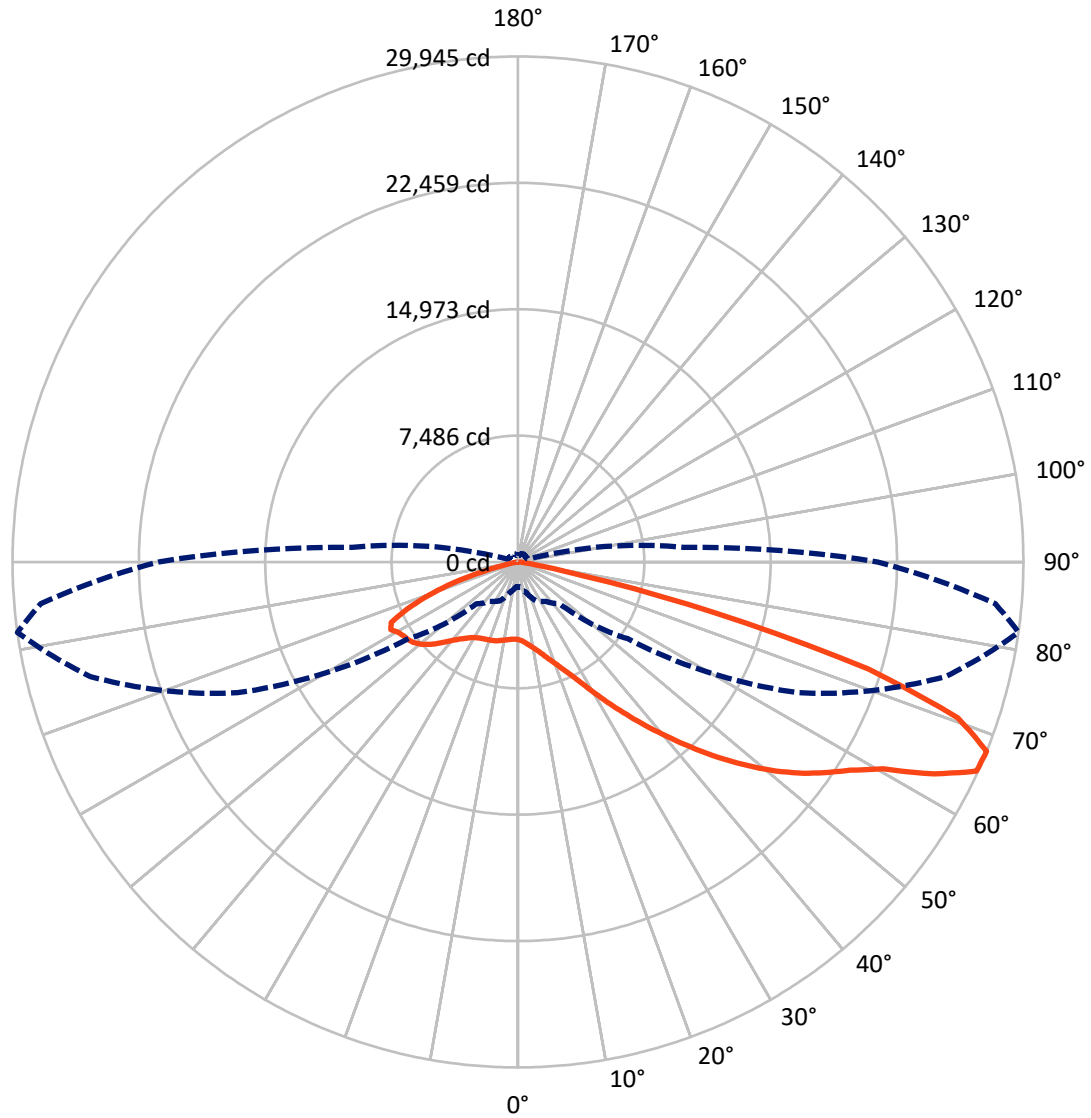
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.7 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	5026.7	0.0	5026.7
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	22723.3	0.0	22723.3
	% Fixture	81.9	0.0	81.9
Total	Lumens	27750.0	0.0	27750.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	409.6	1.5
10°-20°	1064.3	3.8
20°-30°	1704.7	6.1
30°-40°	3014.5	10.9
40°-50°	5281.6	19.0
50°-60°	7044.2	25.4
60°-70°	6557.8	23.6
70°-80°	2516.9	9.1
80°-90°	156.3	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°	27750.0	100.0
0°-180°	27750.0	100.0

Coefficient of Utilization



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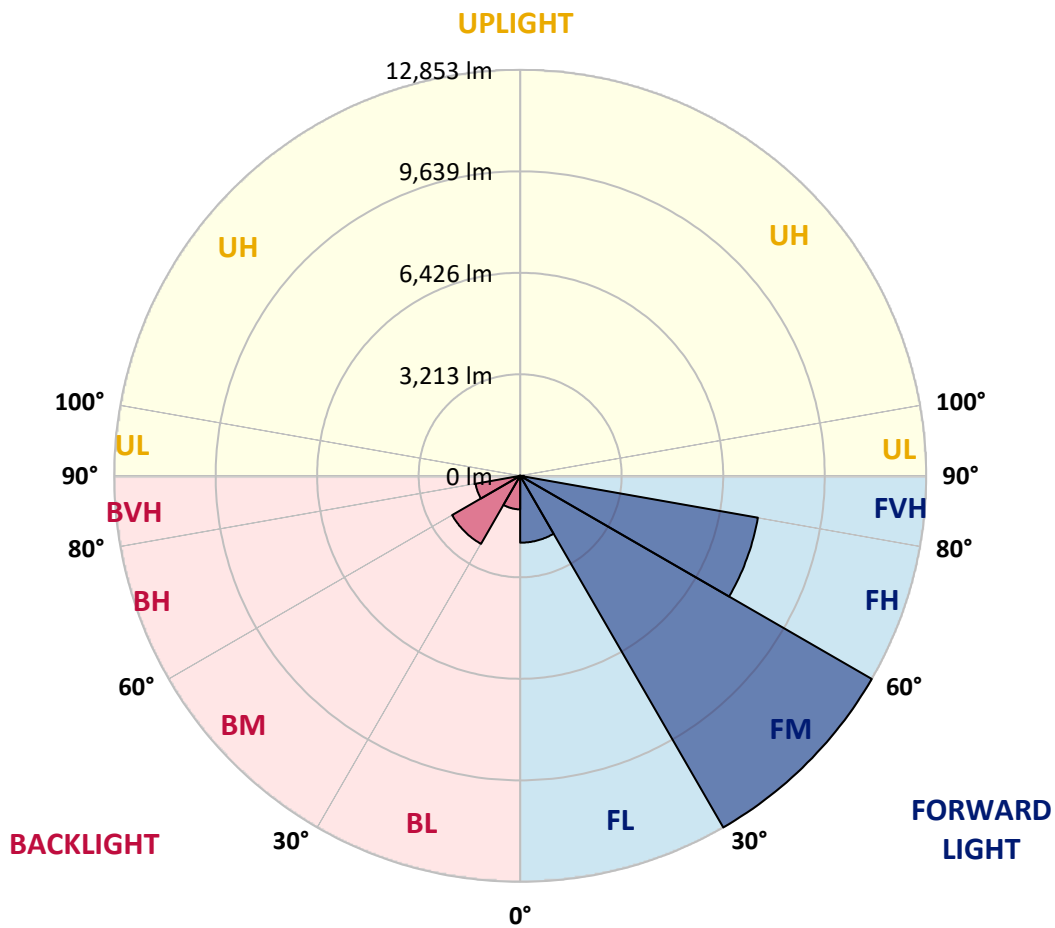
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2117.0	7.6			
FM (30°-60°)	12852.7	46.3			
FH (60°-80°)	7640.0	27.5			G4/12000
FVH (80°-90°)	113.7	0.4			G2/225
BL (0°-30°)	1061.6	3.8	B3/2500		
BM (30°-60°)	2487.7	9.0	B2/2500		
BH (60°-80°)	1434.7	5.2	B3/2500		G3/2500
BVH (80°-90°)	42.7	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°	4597.2	4597.2	4597.2	4597.2	4597.2	4597.2	4597.2	4597.2	4597.2	4597.2	4597.2
2.5°	4859.0	4886.9	4871.0	4863.0	4849.0	4829.0	4813.0	4763.1	4711.1	4677.2	4665.2
5°	4956.9	4984.8	4982.8	4990.8	5000.8	5006.8	5002.8	4946.9	4873.0	4815.0	4781.0
7.5°	4873.0	4904.9	4930.9	4970.8	5040.8	5114.7	5150.7	5138.7	5062.8	4982.8	4940.9
10°	4635.2	4669.2	4731.1	4825.0	4972.8	5132.7	5266.5	5328.5	5280.5	5192.6	5134.7
12.5°	4199.6	4233.6	4355.5	4559.3	4807.0	5084.7	5340.5	5506.3	5518.3	5430.4	5362.4
15°	3710.2	3744.1	3874.0	4129.7	4507.3	4952.9	5380.4	5694.1	5800.0	5724.1	5642.2
17.5°	3406.5	3436.4	3534.3	3740.1	4133.7	4689.1	5366.4	5893.9	6135.6	6075.7	5977.8
20°	3314.6	3340.5	3386.5	3530.3	3858.0	4415.4	5274.5	6081.7	6497.3	6463.3	6353.4
22.5°	3412.5	3436.4	3450.4	3514.4	3720.1	4235.6	5158.7	6273.5	6916.8	6920.8	6787.0
25°	3638.2	3662.2	3646.2	3686.2	3776.1	4179.7	5114.7	6499.3	7444.3	7488.2	7336.4
27.5°	4009.8	4011.8	3973.9	3971.9	3985.9	4263.6	5160.7	6741.0	8109.6	8191.5	8003.7
30°	4755.1	4725.1	4579.3	4421.4	4349.5	4515.3	5288.5	7026.7	8894.8	9040.6	8804.9
32.5°	5903.9	5859.9	5592.2	5214.6	4835.0	4920.9	5518.3	7352.4	9749.9	10013.6	9725.9
35°	7150.6	7138.6	6858.9	6297.5	5634.2	5498.3	5891.9	7779.9	10682.9	11102.5	10760.8
37.5°	8309.4	8303.4	8143.6	7482.2	6675.1	6303.5	6491.3	8339.4	11681.9	12289.3	11885.7
40°	9368.3	9386.3	9226.4	8635.1	7821.9	7336.4	7306.4	9030.6	12792.7	13581.9	13102.4
42.5°	10283.3	10303.3	10141.5	9703.9	8954.7	8479.2	8307.4	9877.8	13877.6	14970.5	14403.1
45°	10904.7	11028.6	11004.6	10655.0	10117.5	9624.0	9510.1	10940.7	15114.3	16443.0	15777.6
47.5°	11080.5	11194.4	11374.2	11422.2	11094.5	10609.0	10744.9	12221.3	16365.0	17917.4	17160.2
50°	10647.0	10752.9	11126.5	11624.0	11851.7	11701.9	11945.6	13593.9	17645.7	19387.9	18516.8
52.5°	9791.9	9899.7	10371.3	11158.4	12087.5	12559.0	13150.4	14946.5	18886.4	20780.5	19801.5
55°	8555.1	8669.0	9274.4	10165.5	11637.9	12912.6	14155.3	16297.1	20023.2	22033.2	20960.3
57.5°	6872.9	6956.8	7586.1	8832.8	10507.1	12561.0	14896.6	17771.6	21094.1	23263.9	22109.1
60°	4479.4	4553.3	5284.5	6675.1	8633.1	11386.2	15044.4	19415.9	22516.7	24864.2	23657.5
62.5°	2978.9	3028.9	3462.4	4483.4	6079.7	9130.5	14179.3	20728.5	24602.5	27649.3	26312.7
65°	2043.9	2093.8	2527.4	3238.6	3927.9	6039.7	11691.9	20554.7	26492.5	29861.1	28280.7
67.5°	1458.5	1500.4	1868.1	2539.4	2843.1	3508.4	7925.8	18333.0	26220.8	29945.0	28386.6
70°	1044.9	1068.9	1372.6	1978.0	2259.7	2107.8	4407.4	14021.5	22958.2	27651.3	26224.8
72.5°	731.2	739.2	953.0	1506.4	1820.1	1538.4	2097.8	9348.3	17364.0	21703.5	20330.9
75°	495.5	505.5	641.3	1104.9	1460.5	1174.8	1110.8	5012.8	10193.4	12013.6	10768.8
77.5°	303.7	307.7	413.6	755.2	1092.9	895.1	715.3	2123.8	3943.9	3872.0	3300.6
80°	171.8	171.8	263.7	469.5	745.2	577.4	501.5	903.1	1248.7	1096.9	967.0
82.5°	95.9	97.9	191.8	291.7	493.5	341.6	275.7	417.6	539.4	477.5	415.6
85°	40.0	44.0	117.9	137.9	235.8	169.8	111.9	175.8	199.8	177.8	129.9
87.5°	4.0	6.0	36.0	26.0	28.0	34.0	16.0	34.0	28.0	28.0	20.0
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°	4597.2	4597.2	4597.2	4597.2	4597.2	4597.2	4597.2	4597.2	4597.2	4597.2	4597.2
2.5°	4627.2	4597.2	4521.3	4433.4	4317.5	4261.6	4185.7	4133.7	4089.8	4093.8	4053.8
5°	4717.1	4641.2	4471.4	4259.6	3995.9	3808.1	3608.3	3470.4	3358.5	3334.5	3280.6
7.5°	4841.0	4721.1	4423.4	4041.8	3596.3	3258.6	2956.9	2763.1	2625.3	2581.3	2537.4
10°	5000.8	4827.0	4361.5	3768.1	3126.8	2697.2	2373.5	2221.7	2127.8	2095.8	2071.9
12.5°	5186.6	4948.9	4279.6	3434.4	2643.3	2229.7	2023.9	1948.0	1918.0	1908.0	1902.0
15°	5420.4	5100.7	4155.7	3038.9	2233.7	1944.0	1856.1	1846.1	1850.1	1846.1	1844.1
17.5°	5698.1	5266.5	3953.9	2631.3	1958.0	1798.1	1766.2	1774.2	1784.2	1782.2	1778.2
20°	6001.8	5430.4	3696.2	2269.6	1770.2	1694.2	1676.3	1684.3	1692.2	1688.3	1686.3
22.5°	6347.4	5606.2	3410.5	1987.9	1644.3	1598.3	1578.4	1580.4	1580.4	1572.4	1568.4
25°	6761.0	5800.0	3110.8	1788.1	1548.4	1512.4	1488.5	1480.5	1468.5	1444.5	1440.5
27.5°	7254.5	6005.8	2823.1	1648.3	1472.5	1438.5	1410.5	1390.6	1360.6	1320.6	1316.6
30°	7809.9	6255.5	2579.3	1560.4	1412.5	1378.6	1346.6	1316.6	1272.7	1222.7	1218.7
32.5°	8463.2	6523.2	2401.5	1502.4	1358.6	1322.6	1284.7	1248.7	1200.8	1150.8	1152.8
35°	9242.4	6846.9	2297.6	1462.5	1316.6	1268.7	1226.7	1186.8	1150.8	1106.9	1102.9
37.5°	10087.5	7190.5	2265.7	1442.5	1288.7	1214.7	1166.8	1138.8	1134.8	1108.9	1106.9
40°	11012.6	7598.1	2289.6	1430.5	1258.7	1162.8	1110.8	1104.9	1114.8	1068.9	1070.9
42.5°	11991.6	8081.6	2329.6	1416.5	1216.7	1110.8	1060.9	1060.9	1052.9	989.0	989.0
45°	13050.5	8639.0	2369.5	1382.6	1166.8	1058.9	1020.9	1007.0	973.0	911.1	909.1
47.5°	14117.4	9206.5	2399.5	1320.6	1106.9	1014.9	981.0	949.0	899.1	843.1	841.1
50°	15130.3	9715.9	2367.5	1228.7	1038.9	973.0	937.0	893.1	839.1	801.2	795.2
52.5°	16035.4	10157.5	2231.7	1120.8	967.0	929.0	897.1	851.1	807.2	767.2	763.2
55°	16822.6	10515.1	1991.9	1018.9	903.1	891.1	859.1	801.2	741.2	707.3	703.3
57.5°	17577.8	10786.8	1692.2	935.0	845.1	849.1	801.2	749.2	693.3	657.3	653.3
60°	18582.7	11150.4	1388.6	857.1	783.2	795.2	743.2	705.3	635.3	589.4	583.4
62.5°	20189.1	11715.9	1102.9	761.2	711.3	715.3	693.3	647.3	563.4	509.5	505.5
65°	21463.8	11508.1	869.1	657.3	629.3	635.3	635.3	585.4	495.5	433.6	427.6
67.5°	21319.9	9853.8	693.3	555.4	551.4	555.4	569.4	527.5	439.5	389.6	381.6
70°	19639.6	7837.9	555.4	461.5	479.5	469.5	509.5	481.5	395.6	345.6	339.6
72.5°	16025.4	5646.1	423.6	381.6	367.6	383.6	459.5	433.6	329.7	273.7	267.7
75°	9364.3	3012.9	315.7	301.7	265.7	319.7	407.6	369.6	251.7	201.8	195.8
77.5°	3048.8	1050.9	231.8	221.8	197.8	257.7	347.6	311.7	205.8	159.8	153.8
80°	817.2	317.7	157.8	145.8	127.9	191.8	275.7	247.7	147.8	103.9	101.9
82.5°	327.7	133.9	91.9	81.9	69.9	131.9	217.8	199.8	109.9	65.9	65.9
85°	105.9	44.0	34.0	26.0	32.0	81.9	129.9	135.9	77.9	34.0	26.0
87.5°	14.0	6.0	6.0	8.0	6.0	14.0	40.0	38.0	22.0	4.0	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)