

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: P884608

Luminaire Tested: **NAV-SB5C-730-U-T3-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884608  
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-SB5C-730-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

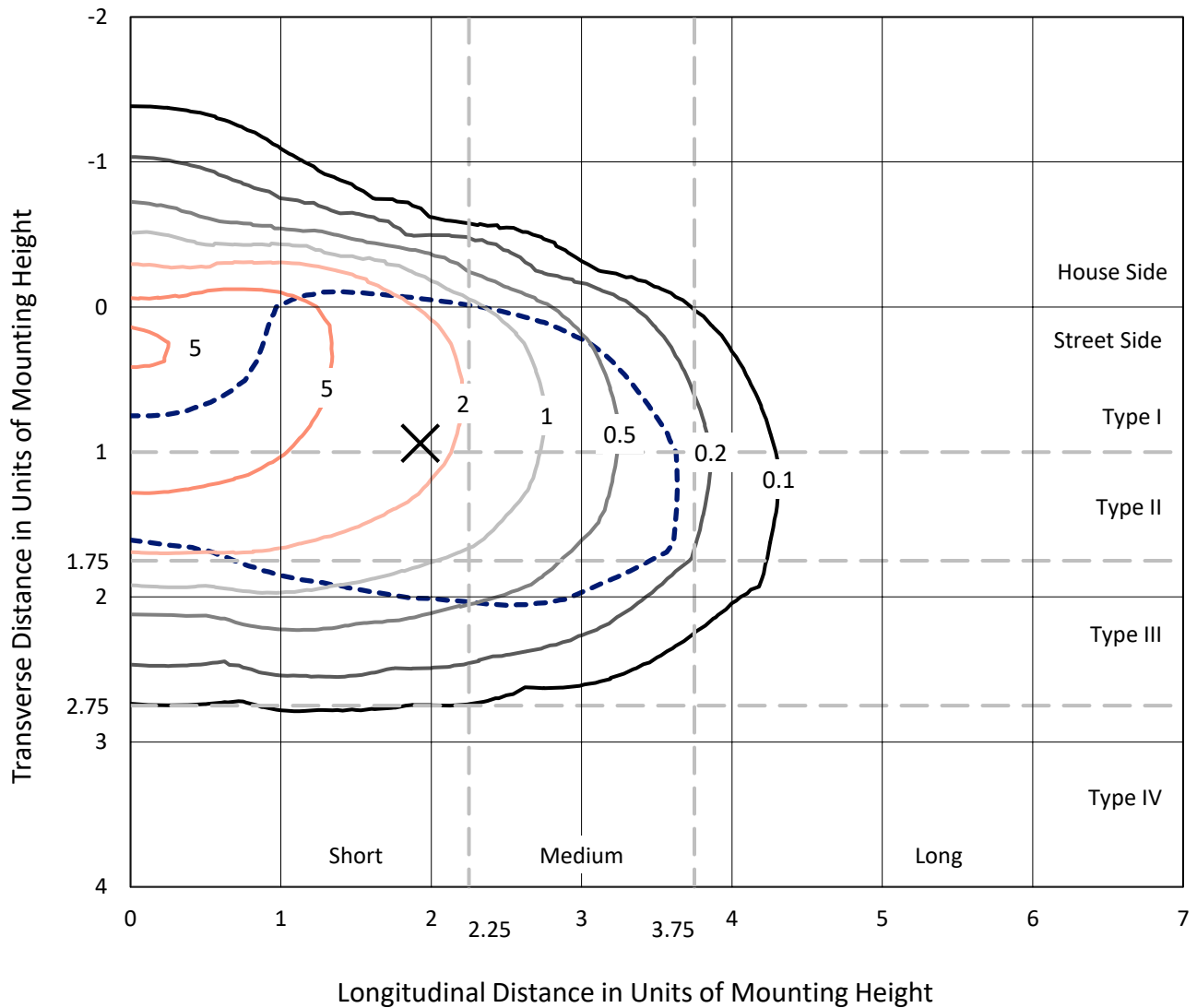
Lumens per Lamp: N/A  
Luminaire Lumens: 29338 lumens  
Efficiency: N/A  
Efficacy: 117.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G4  
  
Input Watts (W): 249.5  
Input Voltage (V): 120.0  
Input Current (Ain): 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

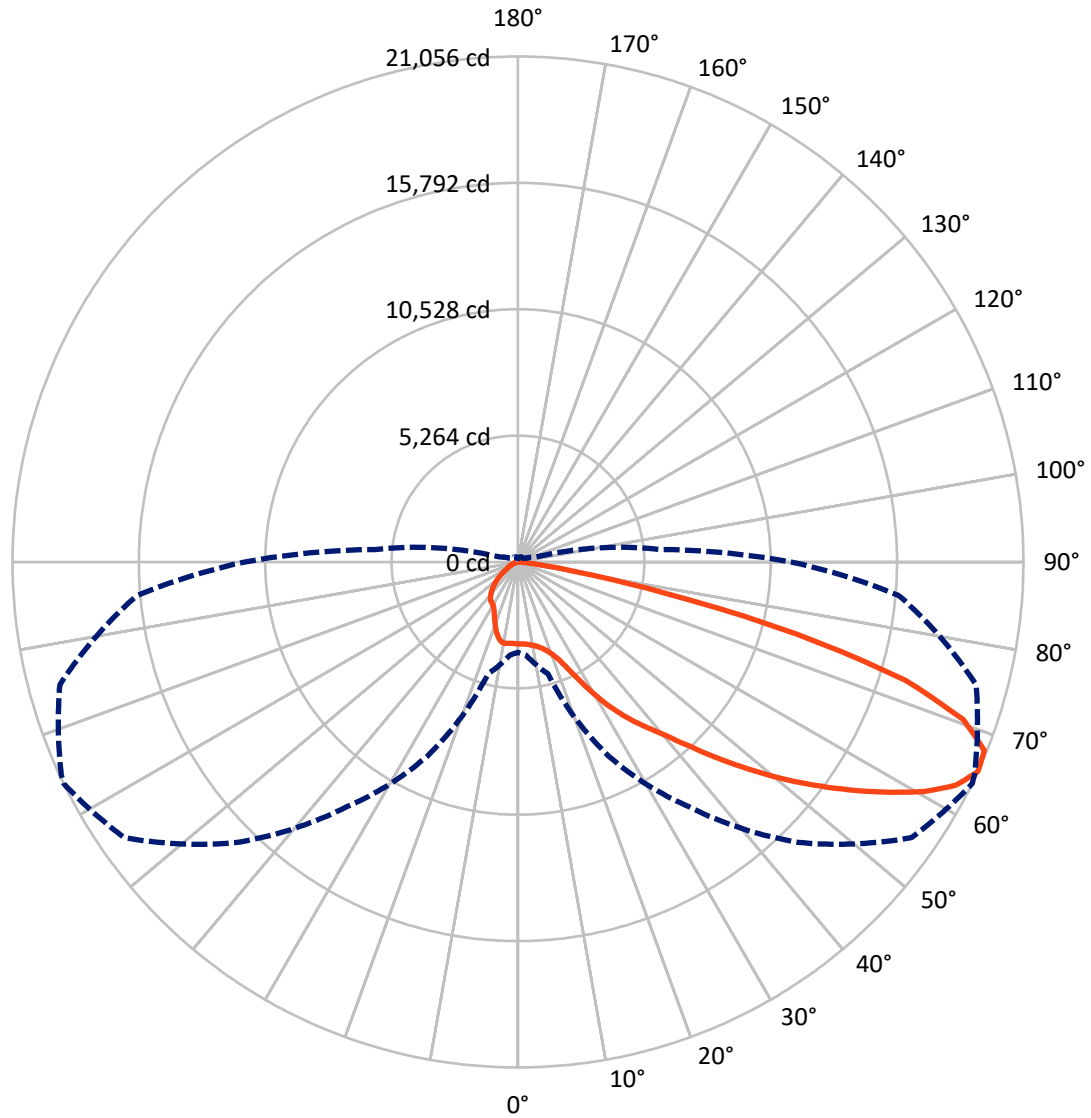
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 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
<b>House Side</b>	Lumens	3923.4	0.0	3923.4
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	25414.6	0.0	25414.6
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	29338.0	0.0	29338.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	314.8	1.1
10°-20°	853.9	2.9
20°-30°	1618.0	5.5
30°-40°	3274.1	11.2
40°-50°	5577.5	19.0
50°-60°	7585.0	25.9
60°-70°	7122.7	24.3
70°-80°	2853.6	9.7
80°-90°	138.2	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°	29338.0	100.0
0°-180°	29338.0	100.0

**Coefficient of Utilization**



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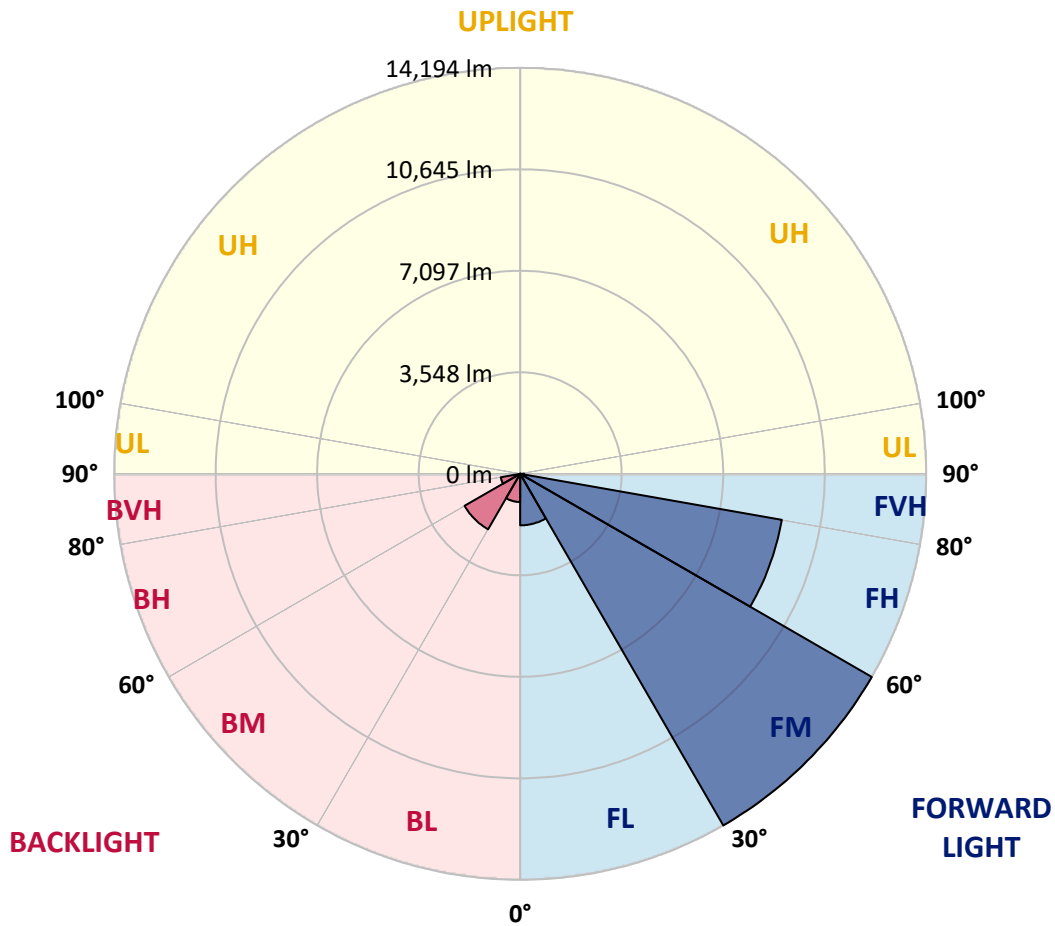
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1801.7	6.1			
FM (30°-60°)	14193.7	48.4			
FH (60°-80°)	9287.7	31.7			G4/12000
FVH (80°-90°)	131.5	0.4			G2/225
BL (0°-30°)	985.0	3.4	B2/1000		
BM (30°-60°)	2243.0	7.6	B2/2500		
BH (60°-80°)	688.6	2.3	B2/1000		G2/1000
BVH (80°-90°)	6.8	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	3412.3	3412.3	3412.3	3412.3	3412.3	3412.3	3412.3	3412.3	3412.3	3412.3	3412.3
2.5°	3400.5	3424.1	3418.2	3412.3	3410.3	3414.3	3416.2	3414.3	3414.3	3414.3	3416.2
5°	3335.6	3355.3	3355.3	3369.0	3388.7	3412.3	3430.0	3433.9	3437.9	3443.8	3441.8
7.5°	3211.7	3227.4	3239.2	3284.5	3333.6	3396.6	3449.7	3477.2	3481.2	3502.8	3510.7
10°	3127.1	3146.8	3166.5	3213.7	3284.5	3378.9	3469.3	3536.2	3546.1	3597.2	3620.8
12.5°	3123.2	3142.9	3168.4	3219.6	3302.2	3402.5	3512.6	3609.0	3626.7	3701.4	3750.6
15°	3164.5	3188.1	3211.7	3274.6	3363.1	3485.1	3603.1	3723.1	3740.8	3847.0	3900.1
17.5°	3249.1	3280.5	3298.2	3361.2	3455.6	3591.3	3746.7	3884.3	3900.1	4024.0	4090.8
20°	3416.2	3453.6	3459.5	3510.7	3603.1	3748.6	3933.5	4104.6	4124.3	4265.9	4340.6
22.5°	3762.4	3815.5	3768.3	3793.9	3876.5	4022.0	4222.6	4439.0	4466.5	4627.8	4694.6
25°	4372.1	4446.8	4324.9	4281.6	4317.0	4468.5	4720.2	4993.6	5025.1	5154.9	5188.3
27.5°	5569.8	5473.5	5288.6	5107.7	5001.4	5088.0	5371.2	5709.5	5748.8	5874.7	5835.4
30°	6885.6	6801.0	6551.2	6150.0	5898.3	5884.5	6146.1	6523.7	6569.0	6688.9	6569.0
32.5°	8203.3	8122.7	7851.3	7357.6	6921.0	6704.7	6885.6	7304.5	7328.1	7404.8	7227.8
35°	9499.4	9416.8	9145.4	8639.9	8103.0	7611.3	7575.9	8047.9	8055.8	8136.5	7872.9
37.5°	10803.4	10734.5	10445.4	9949.8	9420.7	8742.2	8413.8	8752.0	8761.9	8840.5	8567.2
40°	11733.6	11763.1	11564.5	11181.0	10726.7	9985.2	9353.9	9501.4	9442.4	9574.1	9410.9
42.5°	12532.1	12591.1	12418.1	12225.3	11961.8	11308.8	10518.2	10492.6	10398.2	10469.0	10299.9
45°	13222.5	13271.6	13116.3	13071.0	13065.1	12606.9	11790.7	11637.3	11505.5	11491.7	11289.2
47.5°	13476.2	13570.6	13637.5	13788.9	14083.9	13891.2	13106.4	12868.5	12720.9	12612.8	12292.2
50°	13572.6	13672.9	13901.0	14341.6	15039.7	15122.4	14416.3	14148.8	13967.9	13771.2	13299.2
52.5°	13442.7	13621.7	13928.5	14670.0	15682.9	16109.7	15673.0	15439.0	15232.5	14911.9	14211.7
55°	12677.7	12856.7	13484.0	14666.1	16003.5	16802.0	16861.0	16756.7	16524.6	16019.2	14949.3
57.5°	11064.9	11330.5	12323.7	14166.5	15997.6	17397.9	18025.3	18100.0	17840.4	17116.6	15529.5
60°	8830.7	9190.6	10402.1	13059.2	15503.9	17720.4	19046.0	19419.7	19144.4	18198.4	15999.5
62.5°	6161.8	6578.8	7725.4	11324.6	14375.0	17488.4	19791.4	20481.8	20273.3	19166.0	16180.5
65°	3758.5	3892.2	4816.6	8911.4	12455.4	16516.8	20021.5	21056.0	20987.2	19758.0	15913.0
67.5°	2503.7	2615.8	2881.3	6110.7	9668.6	14575.6	19470.8	20955.7	20975.4	19661.6	14933.5
70°	1508.5	1604.9	1777.9	3553.9	6266.1	11537.0	17765.7	19677.3	19791.4	18373.4	13076.9
72.5°	621.5	686.4	843.7	1610.8	3245.1	7322.2	14146.8	16894.4	17159.9	15448.8	10036.3
75°	352.0	385.5	495.6	808.3	1408.2	3412.3	8569.1	11993.3	12384.6	10648.0	6037.9
77.5°	234.0	249.8	320.6	523.2	792.6	1164.3	3662.1	6248.4	6995.7	5815.7	2613.8
80°	157.3	171.1	220.3	350.1	515.3	499.6	1166.3	2314.9	2847.9	1998.2	637.2
82.5°	106.2	108.2	157.3	230.1	326.5	241.9	344.2	719.8	904.7	578.2	241.9
85°	61.0	59.0	116.0	133.7	145.5	100.3	104.2	216.3	283.2	243.9	137.7
87.5°	7.9	11.8	45.2	35.4	19.7	21.6	21.6	37.4	55.1	59.0	29.5
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°	3412.3	3412.3	3412.3	3412.3	3412.3	3412.3	3412.3	3412.3	3412.3	3412.3	3412.3
2.5°	3416.2	3414.3	3408.4	3402.5	3388.7	3380.8	3384.8	3380.8	3378.9	3380.8	3388.7
5°	3441.8	3435.9	3420.2	3400.5	3373.0	3339.5	3317.9	3286.4	3256.9	3239.2	3243.2
7.5°	3510.7	3504.8	3483.1	3428.0	3339.5	3199.9	3072.1	2960.0	2875.4	2826.2	2828.2
10°	3620.8	3611.0	3577.5	3455.6	3223.5	2918.7	2664.9	2454.5	2316.8	2251.9	2246.0
12.5°	3750.6	3738.8	3679.8	3430.0	3003.2	2527.3	2177.2	1943.2	1815.3	1758.3	1752.4
15°	3904.0	3888.3	3772.2	3308.1	2682.6	2094.6	1774.0	1599.0	1516.4	1465.2	1467.2
17.5°	4094.8	4067.2	3841.1	3125.2	2334.5	1764.2	1526.2	1394.4	1321.7	1272.5	1268.6
20°	4342.6	4297.4	3896.1	2906.9	2014.0	1555.7	1359.0	1248.9	1193.8	1150.5	1142.7
22.5°	4688.7	4623.8	3963.0	2670.8	1787.8	1412.1	1235.1	1154.5	1109.2	1060.1	1052.2
25°	5117.5	5040.8	4045.6	2452.5	1632.4	1288.2	1144.6	1077.8	1024.7	967.6	961.7
27.5°	5717.3	5579.7	4143.9	2273.6	1498.7	1182.0	1062.0	987.3	926.3	879.1	869.3
30°	6386.0	6159.9	4230.5	2165.4	1376.7	1083.7	953.9	879.1	822.1	788.7	782.8
32.5°	7019.3	6712.5	4287.5	2118.2	1266.6	971.6	835.9	755.2	712.0	702.1	708.0
35°	7617.2	7212.1	4281.6	2073.0	1168.3	859.5	719.8	637.2	603.8	609.7	609.7
37.5°	8305.6	7745.1	4240.3	2002.2	1087.6	757.2	619.5	546.8	517.3	519.2	527.1
40°	9106.1	8360.7	4214.7	1868.4	999.1	662.8	536.9	477.9	456.3	448.4	446.5
42.5°	9959.6	8956.6	4218.7	1717.0	889.0	578.2	479.9	430.7	411.1	405.2	403.2
45°	10817.1	9525.0	4224.6	1559.6	772.9	513.3	438.6	397.3	385.5	377.6	377.6
47.5°	11623.5	10008.8	4114.4	1390.5	658.9	464.2	405.2	377.6	367.8	357.9	357.9
50°	12374.8	10331.3	3848.9	1193.8	568.4	424.8	379.6	359.9	350.1	340.2	340.2
52.5°	12958.9	10382.5	3410.3	991.2	505.5	395.3	363.8	346.1	334.3	324.5	322.5
55°	13218.5	10061.9	2786.9	802.4	456.3	369.7	348.1	330.4	316.6	306.8	304.8
57.5°	13151.7	9387.3	2173.3	645.1	409.1	344.2	328.4	316.6	300.9	285.2	283.2
60°	12823.2	8484.6	1638.3	536.9	365.8	316.6	306.8	297.0	275.3	251.7	247.8
62.5°	12254.8	7349.8	1168.3	444.5	318.6	285.2	281.2	273.4	241.9	198.6	194.7
65°	11385.5	5971.1	786.7	369.7	273.4	249.8	251.7	238.0	196.7	147.5	143.6
67.5°	10115.0	4366.2	503.5	302.9	228.1	208.5	210.4	202.6	167.2	125.9	120.0
70°	8496.4	2891.1	328.4	230.1	182.9	161.3	173.1	175.0	141.6	102.3	98.3
72.5°	6228.7	1707.1	230.1	171.1	133.7	112.1	141.6	145.5	114.1	76.7	72.8
75°	3550.0	810.3	173.1	123.9	82.6	78.7	110.1	110.1	78.7	51.1	47.2
77.5°	1490.8	338.3	121.9	80.6	47.2	45.2	74.7	68.8	39.3	23.6	23.6
80°	430.7	151.4	64.9	39.3	19.7	17.7	29.5	21.6	9.8	3.9	3.9
82.5°	169.1	66.9	25.6	15.7	7.9	7.9	3.9	0.0	0.0	0.0	0.0
85°	100.3	27.5	11.8	5.9	2.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	25.6	5.9	3.9	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)