

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: P884788

Luminaire Tested: **NAV-SB5D-735-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884788
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-SB5D-735-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 900mA 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: 40497 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G5

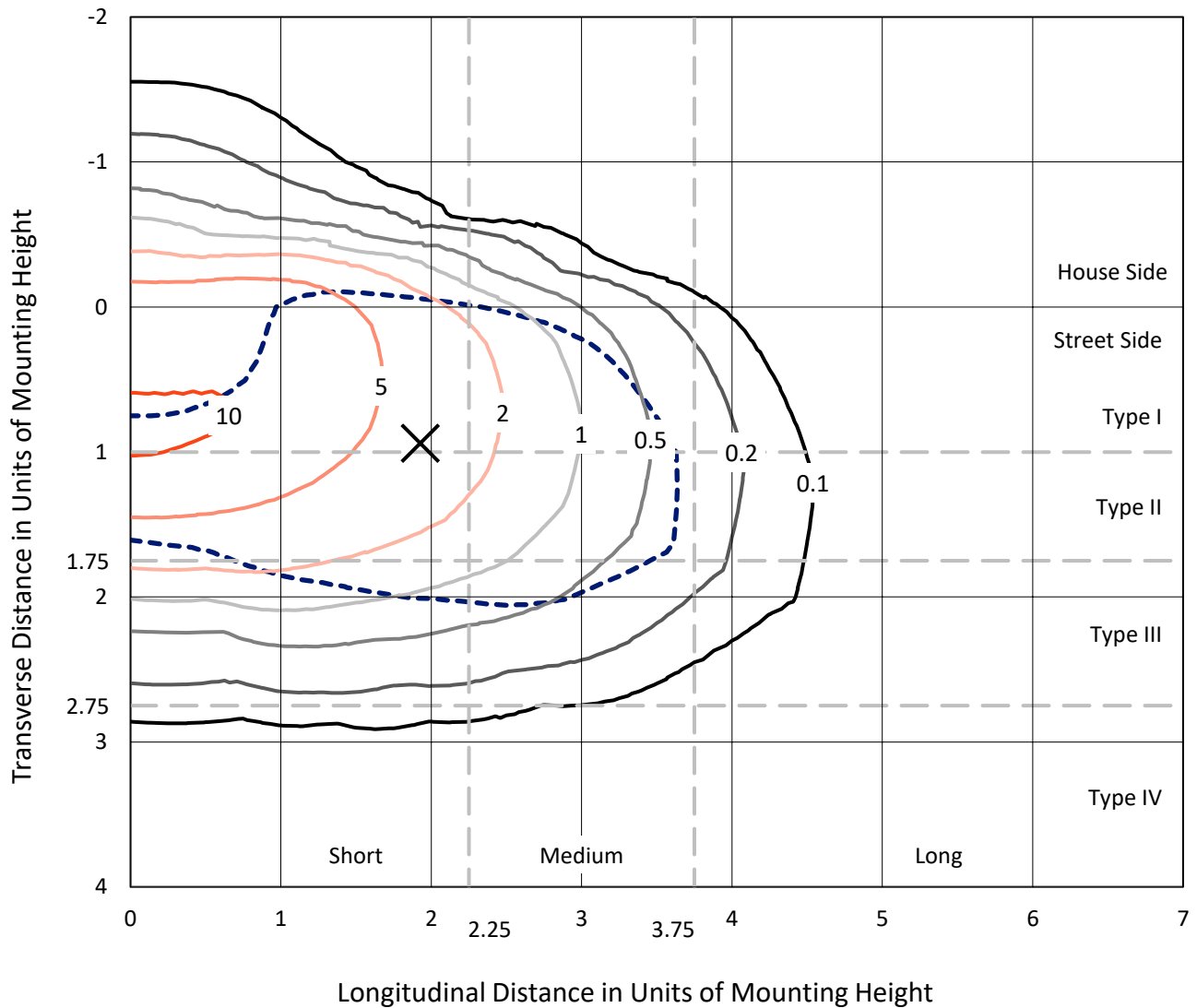
Input Watts (W): 364.9
Input Voltage (V): 120.0
Input Current (Ain): 3.094
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 3.28
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

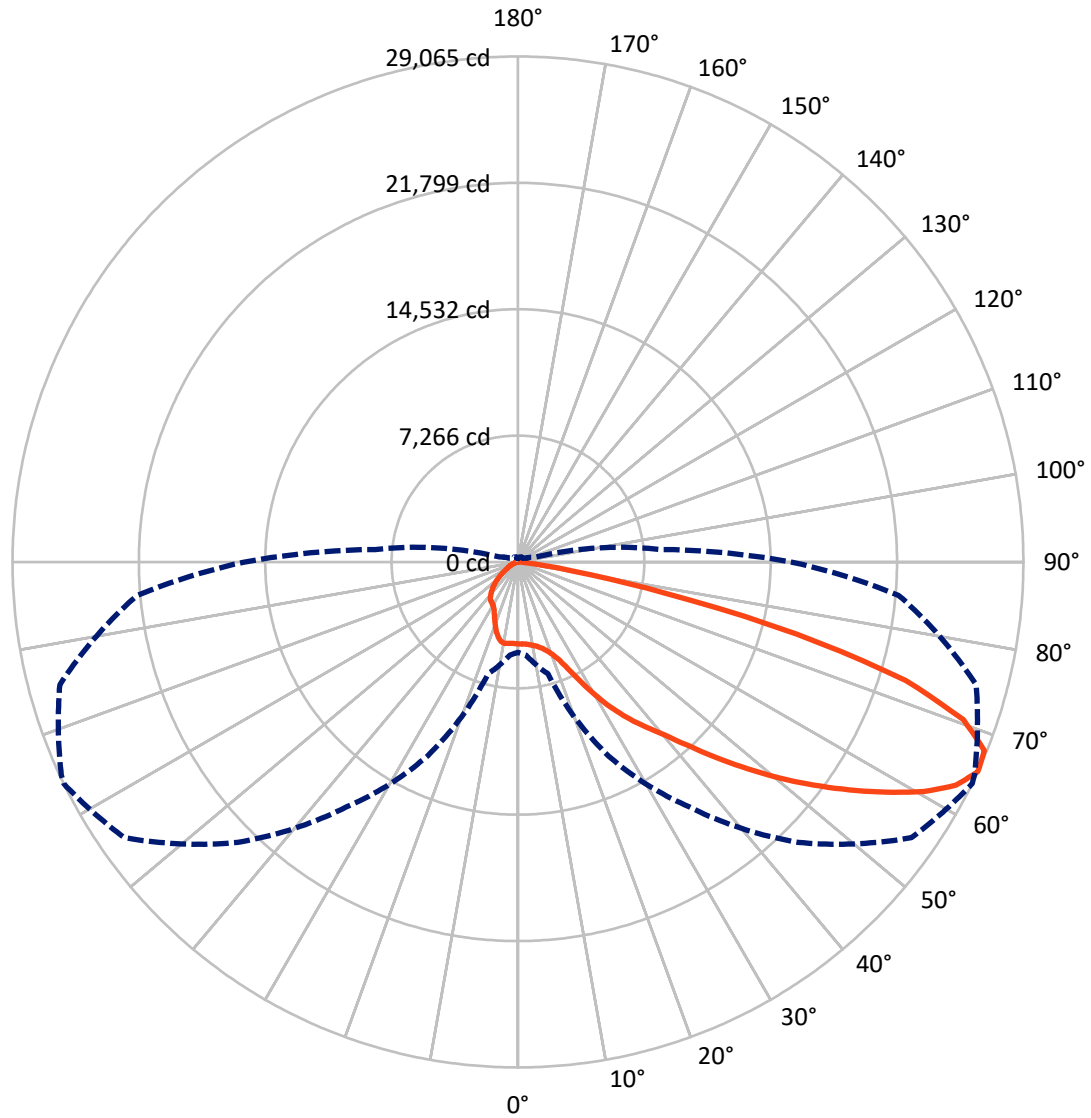
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.8 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
House Side	Lumens	5415.7	0.0	5415.7
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	35081.3	0.0	35081.3
	% Fixture	86.6	0.0	86.6
Total	Lumens	40497.0	0.0	40497.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	434.6	1.1
10°-20°	1178.7	2.9
20°-30°	2233.5	5.5
30°-40°	4519.5	11.2
40°-50°	7699.0	19.0
50°-60°	10470.0	25.9
60°-70°	9831.9	24.3
70°-80°	3939.1	9.7
80°-90°	190.8	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°	40497.0	100.0
0°-180°	40497.0	100.0

Coefficient of Utilization



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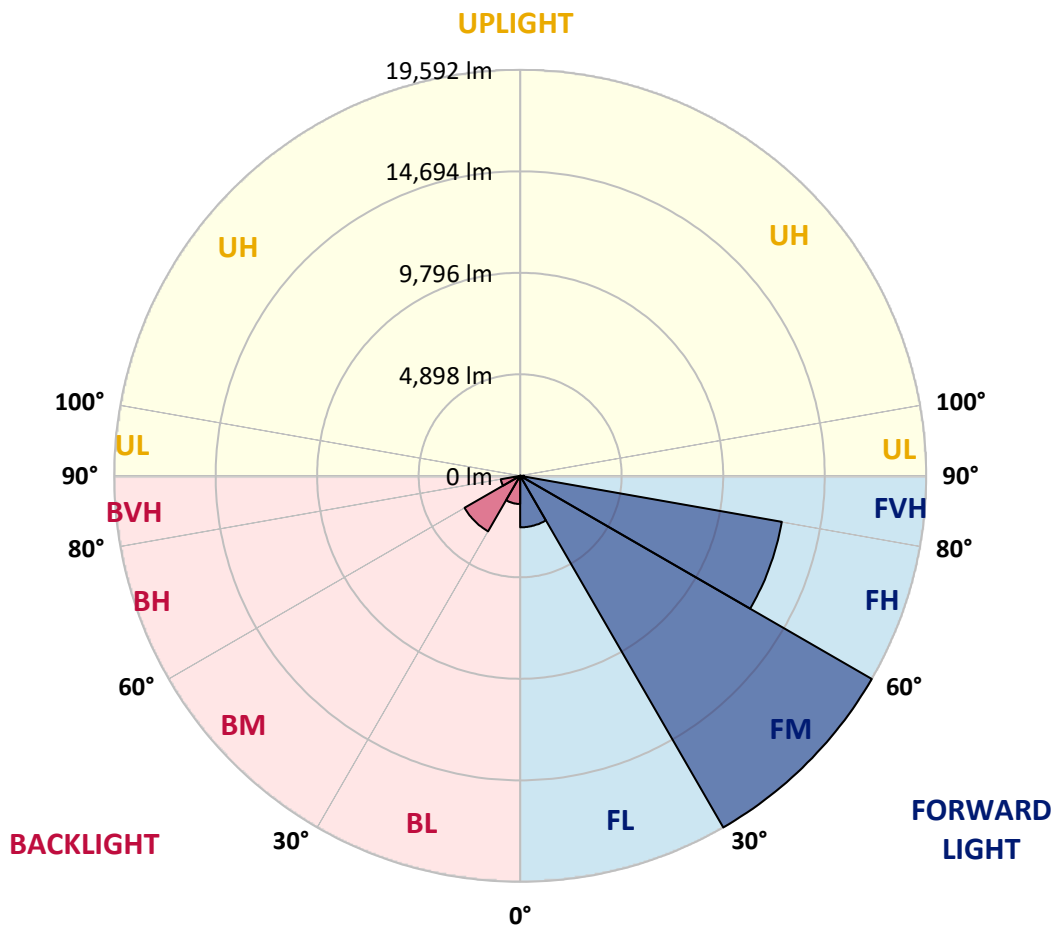
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2487.0	6.1			
FM (30°-60°)	19592.4	48.4			
FH (60°-80°)	12820.4	31.7			G5
FVH (80°-90°)	181.5	0.4			G2/225
BL (0°-30°)	1359.7	3.4	B3/2500		
BM (30°-60°)	3096.1	7.6	B3/5000		
BH (60°-80°)	950.5	2.3	B2/1000		G2/1000
BVH (80°-90°)	9.3	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	4710.2	4710.2	4710.2	4710.2	4710.2	4710.2	4710.2	4710.2	4710.2	4710.2	4710.2
2.5°	4693.9	4726.5	4718.4	4710.2	4707.5	4712.9	4715.7	4712.9	4712.9	4712.9	4715.7
5°	4604.3	4631.5	4631.5	4650.5	4677.6	4710.2	4734.7	4740.1	4745.5	4753.7	4750.9
7.5°	4433.3	4455.0	4471.3	4533.8	4601.6	4688.5	4761.8	4799.8	4805.2	4835.1	4846.0
10°	4316.6	4343.7	4370.9	4436.0	4533.8	4664.1	4789.0	4881.3	4894.8	4965.4	4998.0
12.5°	4311.1	4338.3	4373.6	4444.2	4558.2	4696.6	4848.7	4981.7	5006.1	5109.3	5177.2
15°	4368.2	4400.7	4433.3	4520.2	4642.4	4810.7	4973.6	5139.2	5163.6	5310.2	5383.5
17.5°	4484.9	4528.3	4552.8	4639.6	4769.9	4957.3	5171.7	5361.8	5383.5	5554.5	5646.8
20°	4715.7	4767.2	4775.4	4846.0	4973.6	5174.5	5429.7	5665.8	5693.0	5888.5	5991.6
22.5°	5193.5	5266.8	5201.6	5236.9	5350.9	5551.8	5828.7	6127.4	6165.4	6388.0	6480.3
25°	6035.1	6138.2	5969.9	5910.2	5959.0	6168.1	6515.6	6892.9	6936.4	7115.6	7161.7
27.5°	7688.4	7555.4	7300.2	7050.4	6903.8	7023.3	7414.2	7881.1	7935.4	8109.2	8054.9
30°	9504.6	9387.9	9043.1	8489.3	8141.8	8122.8	8483.8	9005.1	9067.5	9233.1	9067.5
32.5°	11323.5	11212.2	10837.6	10156.2	9553.5	9254.8	9504.6	10082.9	10115.4	10221.3	9977.0
35°	13112.6	12998.6	12623.9	11926.2	11185.1	10506.4	10457.5	11109.1	11119.9	11231.2	10867.4
37.5°	14912.5	14817.5	14418.4	13734.3	13004.0	12067.4	11614.0	12081.0	12094.5	12203.1	11825.8
40°	16196.6	16237.4	15963.2	15433.8	14806.7	13783.2	12911.7	13115.3	13033.9	13215.8	12990.4
42.5°	17298.9	17380.3	17141.4	16875.4	16511.6	15610.2	14518.9	14483.6	14353.3	14451.0	14217.5
45°	18251.8	18319.6	18105.2	18042.7	18034.6	17402.0	16275.4	16063.6	15881.7	15862.7	15583.1
47.5°	18602.0	18732.3	18824.6	19033.6	19440.9	19174.8	18091.6	17763.1	17559.5	17410.2	16967.7
50°	18735.0	18873.5	19188.4	19796.5	20760.3	20874.3	19899.7	19530.5	19280.7	19009.2	18357.6
52.5°	18555.8	18802.9	19226.4	20249.9	21648.0	22237.1	21634.4	21311.4	21026.3	20583.8	19617.3
55°	17499.8	17746.8	18612.8	20244.5	22090.5	23192.8	23274.2	23130.3	22810.0	22112.3	20635.4
57.5°	15273.6	15640.1	17011.1	19554.9	22082.4	24015.3	24881.4	24984.5	24626.2	23627.1	21436.3
60°	12189.6	12686.4	14358.7	18026.4	21401.0	24460.6	26290.4	26806.2	26426.1	25120.3	22085.1
62.5°	8505.5	9081.1	10663.8	15632.0	19842.7	24140.2	27319.3	28272.2	27984.4	26456.0	22334.9
65°	5188.0	5372.6	6648.6	12300.9	17193.0	22799.1	27636.9	29064.9	28969.9	27273.1	21965.7
67.5°	3456.0	3610.7	3977.2	8435.0	13346.1	20119.6	26876.8	28926.5	28953.6	27140.1	20613.7
70°	2082.3	2215.3	2454.2	4905.7	8649.4	15925.2	24523.0	27161.8	27319.3	25361.9	18050.9
72.5°	857.9	947.5	1164.7	2223.4	4479.5	10107.3	19527.7	23320.3	23686.8	21325.0	13853.8
75°	486.0	532.1	684.1	1115.8	1943.8	4710.2	11828.5	16555.0	17095.3	14698.1	8334.5
77.5°	323.1	344.8	442.5	722.1	1094.1	1607.2	5055.0	8625.0	9656.6	8027.7	3608.0
80°	217.2	236.2	304.1	483.2	711.3	689.6	1609.9	3195.3	3931.1	2758.3	879.6
82.5°	146.6	149.3	217.2	317.6	450.7	333.9	475.1	993.6	1248.8	798.2	333.9
85°	84.2	81.4	160.2	184.6	200.9	138.5	143.9	298.6	390.9	336.6	190.0
87.5°	10.9	16.3	62.4	48.9	27.1	29.9	29.9	51.6	76.0	81.4	40.7
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°	4710.2	4710.2	4710.2	4710.2	4710.2	4710.2	4710.2	4710.2	4710.2	4710.2	4710.2
2.5°	4715.7	4712.9	4704.8	4696.6	4677.6	4666.8	4672.2	4666.8	4664.1	4666.8	4677.6
5°	4750.9	4742.8	4721.1	4693.9	4655.9	4609.8	4579.9	4536.5	4495.8	4471.3	4476.7
7.5°	4846.0	4837.8	4808.0	4731.9	4609.8	4417.0	4240.6	4085.8	3969.1	3901.2	3903.9
10°	4998.0	4984.4	4938.3	4769.9	4449.6	4028.8	3678.6	3388.1	3198.1	3108.5	3100.3
12.5°	5177.2	5160.9	5079.4	4734.7	4145.5	3488.6	3005.3	2682.2	2505.8	2427.1	2418.9
15°	5388.9	5367.2	5207.0	4566.3	3703.0	2891.3	2448.8	2207.2	2093.1	2022.5	2025.3
17.5°	5652.3	5614.3	5302.1	4313.9	3222.5	2435.2	2106.7	1924.8	1824.4	1756.5	1751.1
20°	5994.3	5931.9	5378.1	4012.5	2780.0	2147.4	1875.9	1723.9	1647.9	1588.2	1577.3
22.5°	6472.1	6382.6	5470.4	3686.7	2467.8	1949.2	1704.9	1593.6	1531.2	1463.3	1452.4
25°	7064.0	6958.1	5584.4	3385.4	2253.3	1778.2	1580.0	1487.7	1414.4	1335.7	1327.5
27.5°	7892.0	7702.0	5720.1	3138.3	2068.7	1631.6	1466.0	1362.8	1278.7	1213.5	1200.0
30°	8815.0	8502.8	5839.6	2989.0	1900.4	1495.9	1316.7	1213.5	1134.8	1088.6	1080.5
32.5°	9689.2	9265.7	5918.3	2923.9	1748.3	1341.1	1153.8	1042.5	982.8	969.2	977.3
35°	10514.5	9955.3	5910.2	2861.4	1612.6	1186.4	993.6	879.6	833.5	841.6	841.6
37.5°	11464.7	10691.0	5853.2	2763.7	1501.3	1045.2	855.2	754.7	714.0	716.7	727.6
40°	12569.6	11540.7	5817.9	2579.1	1379.1	914.9	741.1	659.7	629.8	619.0	616.3
42.5°	13747.9	12363.3	5823.3	2370.0	1227.1	798.2	662.4	594.5	567.4	559.3	556.5
45°	14931.5	13147.9	5831.4	2152.9	1066.9	708.6	605.4	548.4	532.1	521.2	521.2
47.5°	16044.6	13815.7	5679.4	1919.4	909.5	640.7	559.3	521.2	507.7	494.1	494.1
50°	17081.7	14261.0	5312.9	1647.9	784.6	586.4	524.0	496.8	483.2	469.7	469.7
52.5°	17888.0	14331.6	4707.5	1368.3	697.7	545.7	502.2	477.8	461.5	447.9	445.2
55°	18246.3	13889.0	3846.9	1107.6	629.8	510.4	480.5	456.1	437.1	423.5	420.8
57.5°	18154.0	12957.9	2999.9	890.5	564.7	475.1	453.4	437.1	415.4	393.6	390.9
60°	17700.7	11711.8	2261.4	741.1	505.0	437.1	423.5	409.9	380.1	347.5	342.1
62.5°	16916.1	10145.3	1612.6	613.6	439.8	393.6	388.2	377.4	333.9	274.2	268.8
65°	15716.1	8242.2	1085.9	510.4	377.4	344.8	347.5	328.5	271.5	203.6	198.2
67.5°	13962.3	6026.9	695.0	418.1	314.9	287.8	290.5	279.6	230.8	173.7	165.6
70°	11728.0	3990.8	453.4	317.6	252.5	222.6	238.9	241.6	195.5	141.2	135.7
72.5°	8597.9	2356.5	317.6	236.2	184.6	154.7	195.5	200.9	157.5	105.9	100.4
75°	4900.3	1118.5	238.9	171.0	114.0	108.6	152.0	152.0	108.6	70.6	65.2
77.5°	2057.8	466.9	168.3	111.3	65.2	62.4	103.2	95.0	54.3	32.6	32.6
80°	594.5	209.0	89.6	54.3	27.1	24.4	40.7	29.9	13.6	5.4	5.4
82.5°	233.5	92.3	35.3	21.7	10.9	10.9	5.4	0.0	0.0	0.0	0.0
85°	138.5	38.0	16.3	8.1	2.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	35.3	8.1	5.4	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)