

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: P884778

Luminaire Tested: **NAV-SB5D-730-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884778
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-730-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3000K, 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: 39865 lumens
Efficiency: N/A
Efficacy: 109.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G5

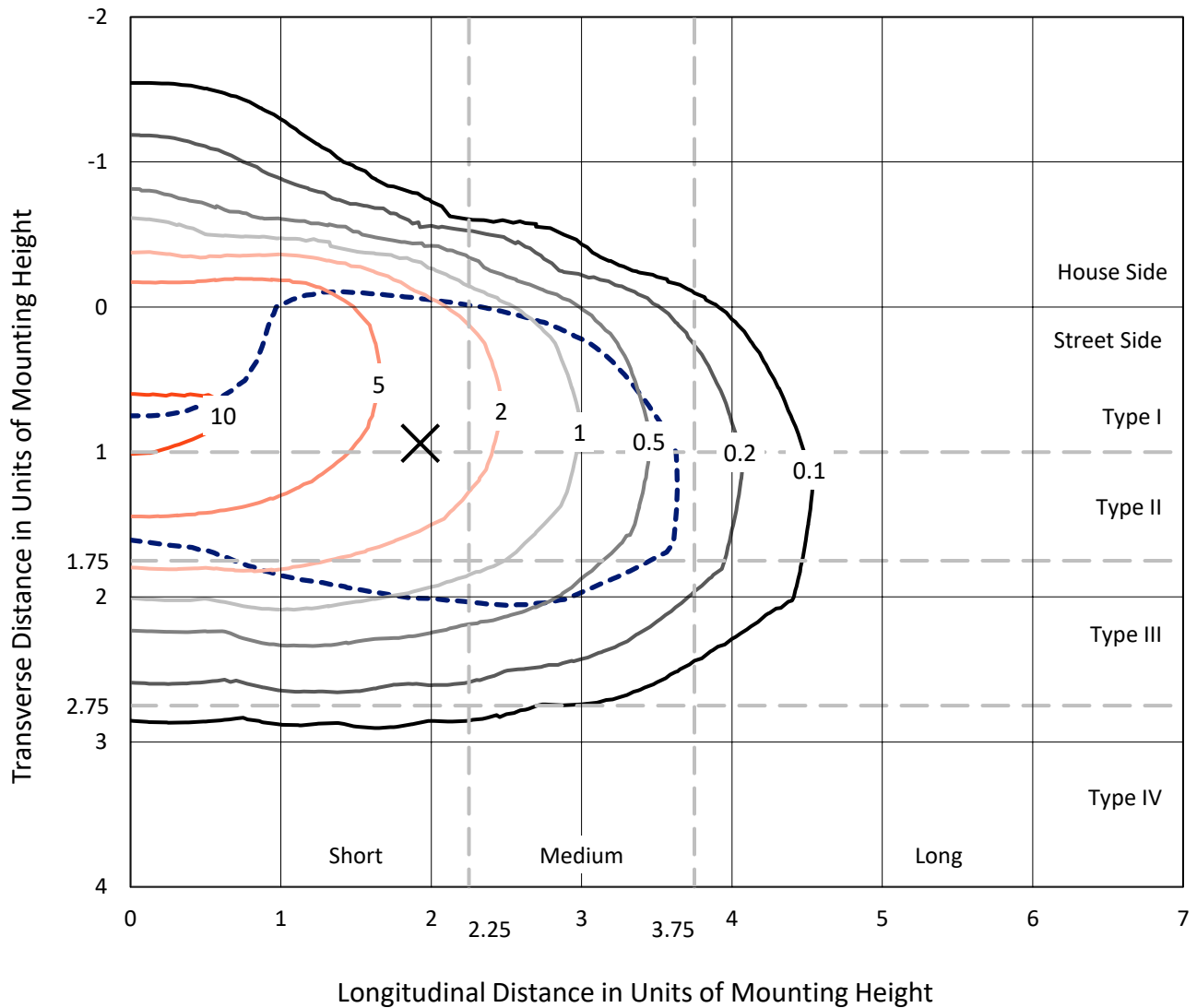
Input Watts (W): 364.9
Input Voltage (V): 120.0
Input Current (Ain): 3.094
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 3.28
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

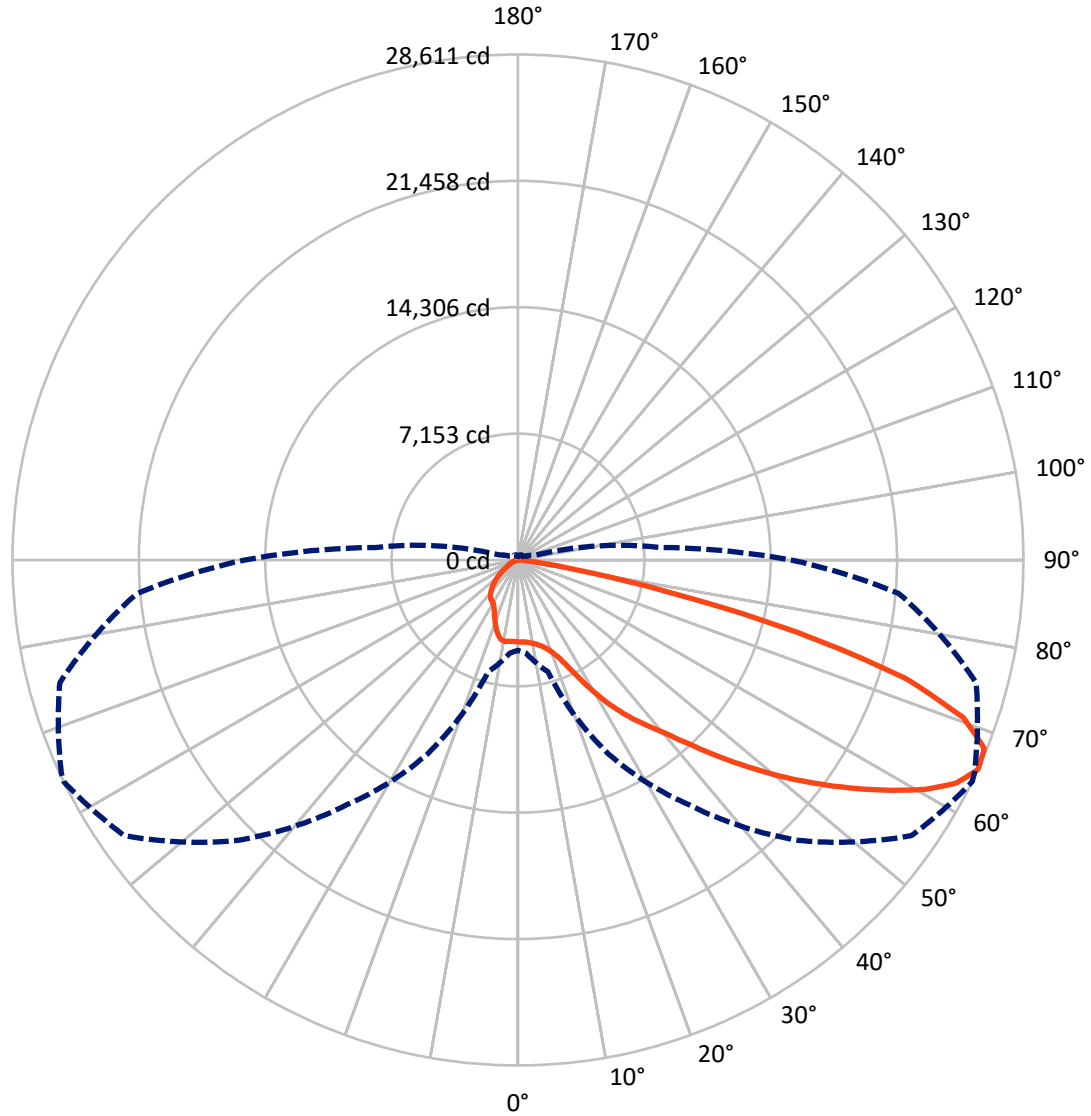
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.7 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	5331.2	0.0	5331.2
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	34533.8	0.0	34533.8
	% Fixture	86.6	0.0	86.6
Total	Lumens	39865.0	0.0	39865.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	427.8	1.1
10°-20°	1160.3	2.9
20°-30°	2198.6	5.5
30°-40°	4449.0	11.2
40°-50°	7578.8	19.0
50°-60°	10306.6	25.9
60°-70°	9678.4	24.3
70°-80°	3877.6	9.7
80°-90°	187.9	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°	39865.0	100.0
0°-180°	39865.0	100.0

Coefficient of Utilization



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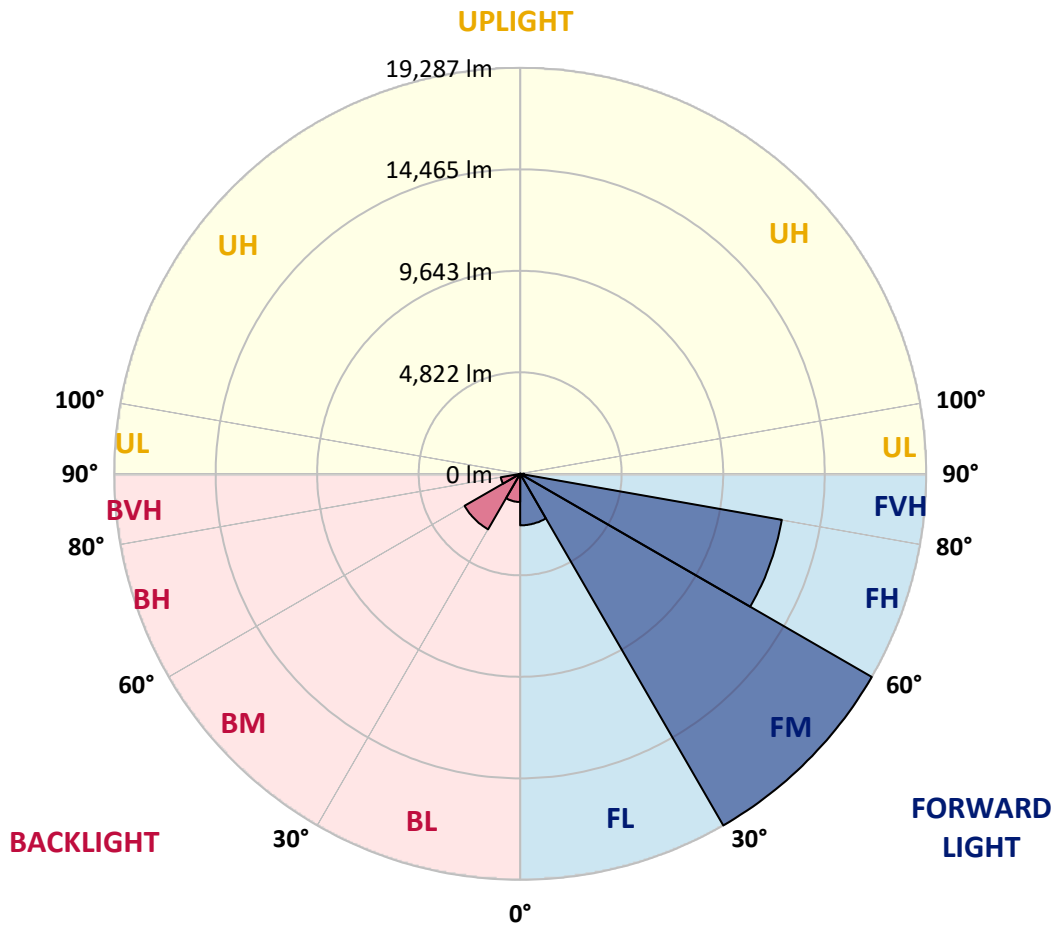
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2448.2	6.1			
FM (30°-60°)	19286.6	48.4			
FH (60°-80°)	12620.3	31.7			G5
FVH (80°-90°)	178.7	0.4			G2/225
BL (0°-30°)	1338.5	3.4	B3/2500		
BM (30°-60°)	3047.8	7.6	B3/5000		
BH (60°-80°)	935.7	2.3	B2/1000		G2/1000
BVH (80°-90°)	9.2	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°	4636.7	4636.7	4636.7	4636.7	4636.7	4636.7	4636.7	4636.7	4636.7	4636.7	4636.7
2.5°	4620.7	4652.7	4644.7	4636.7	4634.0	4639.4	4642.1	4639.4	4639.4	4639.4	4642.1
5°	4532.5	4559.2	4559.2	4577.9	4604.6	4636.7	4660.8	4666.1	4671.5	4679.5	4676.8
7.5°	4364.1	4385.5	4401.5	4463.0	4529.8	4615.3	4687.5	4724.9	4730.2	4759.6	4770.3
10°	4249.2	4275.9	4302.7	4366.8	4463.0	4591.3	4714.2	4805.1	4818.4	4887.9	4920.0
12.5°	4243.9	4270.6	4305.3	4374.8	4487.1	4623.4	4773.0	4904.0	4928.0	5029.6	5096.4
15°	4300.0	4332.1	4364.1	4449.6	4569.9	4735.6	4895.9	5059.0	5083.0	5227.3	5299.5
17.5°	4414.9	4457.7	4481.7	4567.2	4695.5	4879.9	5091.0	5278.1	5299.5	5467.8	5558.7
20°	4642.1	4692.8	4700.9	4770.3	4895.9	5093.7	5344.9	5577.4	5604.1	5796.6	5898.1
22.5°	5112.4	5184.6	5120.4	5155.2	5267.4	5465.2	5737.8	6031.7	6069.2	6288.3	6379.2
25°	5940.9	6042.4	5876.7	5817.9	5866.0	6071.8	6413.9	6785.4	6828.1	7004.5	7049.9
27.5°	7568.4	7437.4	7186.2	6940.4	6796.1	6913.6	7298.5	7758.1	7811.6	7982.6	7929.2
30°	9356.3	9241.4	8902.0	8356.8	8014.7	7996.0	8351.4	8864.5	8926.0	9089.0	8926.0
32.5°	11146.8	11037.2	10668.4	9997.7	9404.4	9110.4	9356.3	9925.5	9957.6	10061.8	9821.3
35°	12908.0	12795.7	12426.9	11740.1	11010.5	10342.4	10294.3	10935.7	10946.4	11056.0	10697.8
37.5°	14679.8	14586.3	14193.4	13520.0	12801.1	11879.1	11432.8	11892.4	11905.8	12012.7	11641.2
40°	15943.9	15984.0	15714.0	15192.9	14575.6	13568.1	12710.2	12910.6	12830.5	13009.5	12787.7
42.5°	17028.9	17109.1	16873.9	16612.0	16253.9	15366.6	14292.3	14257.6	14129.3	14225.5	13995.7
45°	17966.9	18033.7	17822.6	17761.2	17753.1	17130.5	16021.4	15812.9	15633.9	15615.2	15339.9
47.5°	18311.7	18440.0	18530.8	18736.6	19137.5	18875.6	17809.3	17485.9	17285.5	17138.5	16702.9
50°	18442.6	18578.9	18888.9	19487.6	20436.3	20548.5	19589.1	19225.7	18979.8	18712.5	18071.2
52.5°	18266.2	18509.4	18926.3	19933.9	21310.2	21890.1	21296.8	20978.8	20698.2	20262.6	19311.2
55°	17226.7	17469.9	18322.4	19928.5	21745.8	22830.8	22911.0	22769.3	22454.0	21767.2	20313.3
57.5°	15035.2	15396.0	16745.6	19249.7	21737.8	23640.6	24493.1	24594.6	24241.9	23258.4	21101.7
60°	11999.3	12488.4	14134.6	17745.1	21067.0	24078.8	25880.1	26387.8	26013.7	24728.2	21740.4
62.5°	8372.8	8939.4	10497.4	15388.0	19533.0	23763.5	26892.9	27831.0	27547.7	26043.1	21986.3
65°	5107.1	5288.8	6544.8	12108.9	16924.7	22443.3	27205.6	28611.3	28517.8	26847.5	21622.9
67.5°	3402.0	3554.4	3915.1	8303.3	13137.8	19805.6	26457.3	28475.0	28501.8	26716.6	20292.0
70°	2049.8	2180.7	2415.9	4829.1	8514.4	15676.6	24140.3	26737.9	26892.9	24966.1	17769.2
72.5°	844.5	932.7	1146.5	2188.7	4409.6	9949.6	19223.0	22956.4	23317.2	20992.2	13637.5
75°	478.4	523.8	673.5	1098.4	1913.5	4636.7	11643.9	16296.6	16828.5	14468.7	8204.4
77.5°	318.0	339.4	435.6	710.9	1077.0	1582.1	4976.1	8490.4	9505.9	7902.5	3551.7
80°	213.8	232.5	299.3	475.7	700.2	678.8	1584.8	3145.5	3869.7	2715.2	865.9
82.5°	144.3	147.0	213.8	312.7	443.6	328.7	467.7	978.1	1229.3	785.7	328.7
85°	82.8	80.2	157.7	181.7	197.8	136.3	141.6	294.0	384.8	331.4	187.1
87.5°	10.7	16.0	61.5	48.1	26.7	29.4	29.4	50.8	74.8	80.2	40.1
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°	4636.7	4636.7	4636.7	4636.7	4636.7	4636.7	4636.7	4636.7	4636.7	4636.7	4636.7
2.5°	4642.1	4639.4	4631.4	4623.4	4604.6	4594.0	4599.3	4594.0	4591.3	4594.0	4604.6
5°	4676.8	4668.8	4647.4	4620.7	4583.3	4537.8	4508.4	4465.7	4425.6	4401.5	4406.9
7.5°	4770.3	4762.3	4732.9	4658.1	4537.8	4348.1	4174.4	4022.0	3907.1	3840.3	3843.0
10°	4920.0	4906.6	4861.2	4695.5	4380.2	3965.9	3621.2	3335.2	3148.2	3060.0	3051.9
12.5°	5096.4	5080.3	5000.2	4660.8	4080.8	3434.1	2958.4	2640.4	2466.7	2389.2	2381.2
15°	5304.8	5283.4	5125.8	4495.1	3645.2	2846.2	2410.6	2172.7	2060.5	1991.0	1993.7
17.5°	5564.1	5526.6	5219.3	4246.5	3172.2	2397.2	2073.8	1894.8	1795.9	1729.1	1723.7
20°	5900.8	5839.3	5294.1	3949.9	2736.6	2113.9	1846.7	1697.0	1622.2	1563.4	1552.7
22.5°	6371.1	6282.9	5385.0	3629.2	2429.3	1918.8	1678.3	1568.7	1507.3	1440.5	1429.8
25°	6953.7	6849.5	5497.2	3332.6	2218.1	1750.5	1555.4	1464.5	1392.4	1314.8	1306.8
27.5°	7768.8	7581.8	5630.9	3089.4	2036.4	1606.1	1443.1	1341.6	1258.7	1194.6	1181.2
30°	8677.5	8370.1	5748.5	2942.4	1870.7	1472.5	1296.1	1194.6	1117.1	1071.7	1063.6
32.5°	9538.0	9121.1	5826.0	2878.2	1721.1	1320.2	1135.8	1026.2	967.4	954.1	962.1
35°	10350.4	9799.9	5817.9	2816.8	1587.4	1167.9	978.1	865.9	820.4	828.5	828.5
37.5°	11285.8	10524.1	5761.8	2720.6	1477.9	1028.9	841.8	742.9	702.9	705.5	716.2
40°	12373.5	11360.6	5727.1	2538.8	1357.6	900.6	729.6	649.4	620.0	609.3	606.6
42.5°	13533.3	12170.4	5732.4	2333.1	1208.0	785.7	652.1	585.3	558.5	550.5	547.9
45°	14698.5	12942.7	5740.4	2119.3	1050.3	697.5	596.0	539.8	523.8	513.1	513.1
47.5°	15794.2	13600.1	5590.8	1889.4	895.3	630.7	550.5	513.1	499.7	486.4	486.4
50°	16815.1	14038.4	5230.0	1622.2	772.3	577.3	515.8	489.1	475.7	462.3	462.3
52.5°	17608.8	14107.9	4634.0	1346.9	686.8	537.2	494.4	470.4	454.3	441.0	438.3
55°	17961.6	13672.3	3786.9	1090.4	620.0	502.4	473.0	449.0	430.3	416.9	414.2
57.5°	17870.7	12755.6	2953.1	876.6	555.9	467.7	446.3	430.3	408.9	387.5	384.8
60°	17424.4	11529.0	2226.2	729.6	497.1	430.3	416.9	403.5	374.1	342.1	336.7
62.5°	16652.1	9987.0	1587.4	604.0	432.9	387.5	382.2	371.5	328.7	269.9	264.6
65°	15470.9	8113.6	1069.0	502.4	371.5	339.4	342.1	323.4	267.2	200.4	195.1
67.5°	13744.4	5932.9	684.1	411.6	310.0	283.3	286.0	275.3	227.2	171.0	163.0
70°	11545.0	3928.5	446.3	312.7	248.5	219.1	235.2	237.8	192.4	139.0	133.6
72.5°	8463.7	2319.7	312.7	232.5	181.7	152.3	192.4	197.8	155.0	104.2	98.9
75°	4823.8	1101.1	235.2	168.4	112.2	106.9	149.7	149.7	106.9	69.5	64.1
77.5°	2025.7	459.7	165.7	109.6	64.1	61.5	101.6	93.5	53.4	32.1	32.1
80°	585.3	205.8	88.2	53.4	26.7	24.1	40.1	29.4	13.4	5.3	5.3
82.5°	229.8	90.9	34.7	21.4	10.7	10.7	5.3	0.0	0.0	0.0	0.0
85°	136.3	37.4	16.0	8.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	34.7	8.0	5.3	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)