

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: P885508

Luminaire Tested: **NAV-SB6D-827-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885508
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-SB6D-827-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 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: 39358 lumens
Efficiency: N/A
Efficacy: 89.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G5

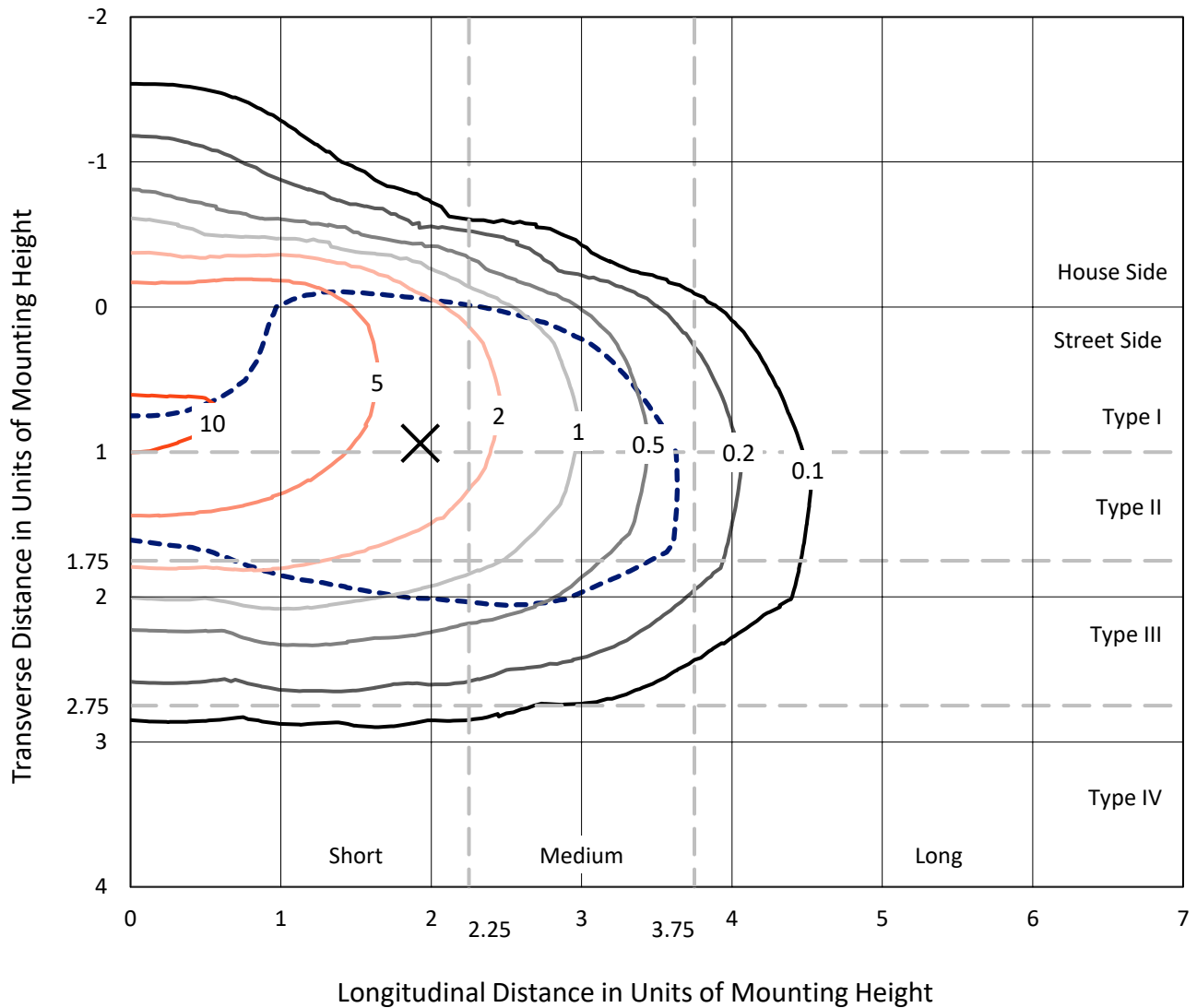
Input Watts (W): 440.1
Input Voltage (V): 120.0
Input Current (Ain): 3.68
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

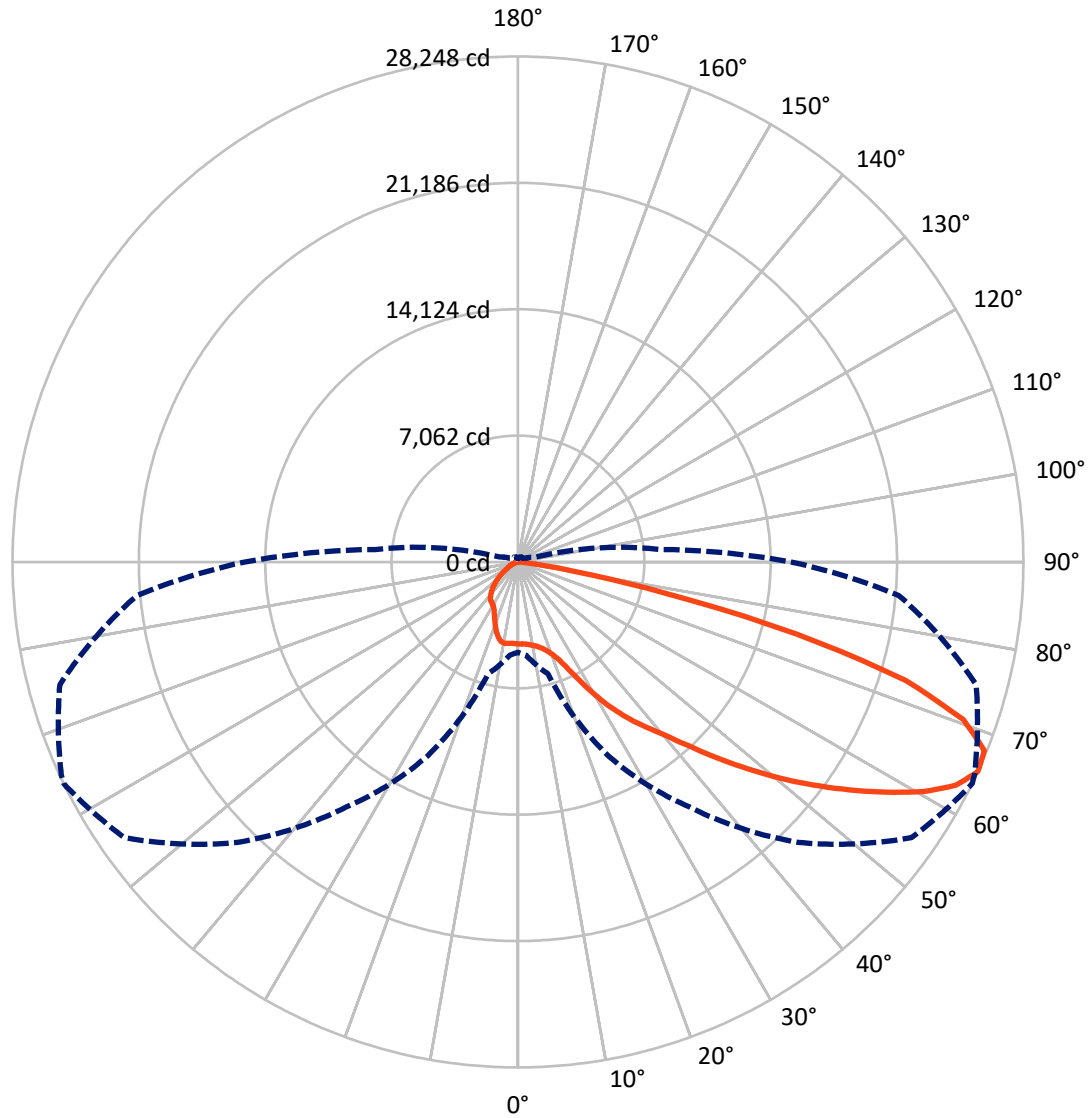
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.5 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	5263.4	0.0	5263.4
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	34094.6	0.0	34094.6
	% Fixture	86.6	0.0	86.6
Total	Lumens	39358.0	0.0	39358.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	422.3	1.1
10°-20°	1145.5	2.9
20°-30°	2170.6	5.5
30°-40°	4392.4	11.2
40°-50°	7482.4	19.0
50°-60°	10175.6	25.9
60°-70°	9555.4	24.3
70°-80°	3828.3	9.7
80°-90°	185.5	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°	39358.0	100.0
0°-180°	39358.0	100.0

Coefficient of Utilization



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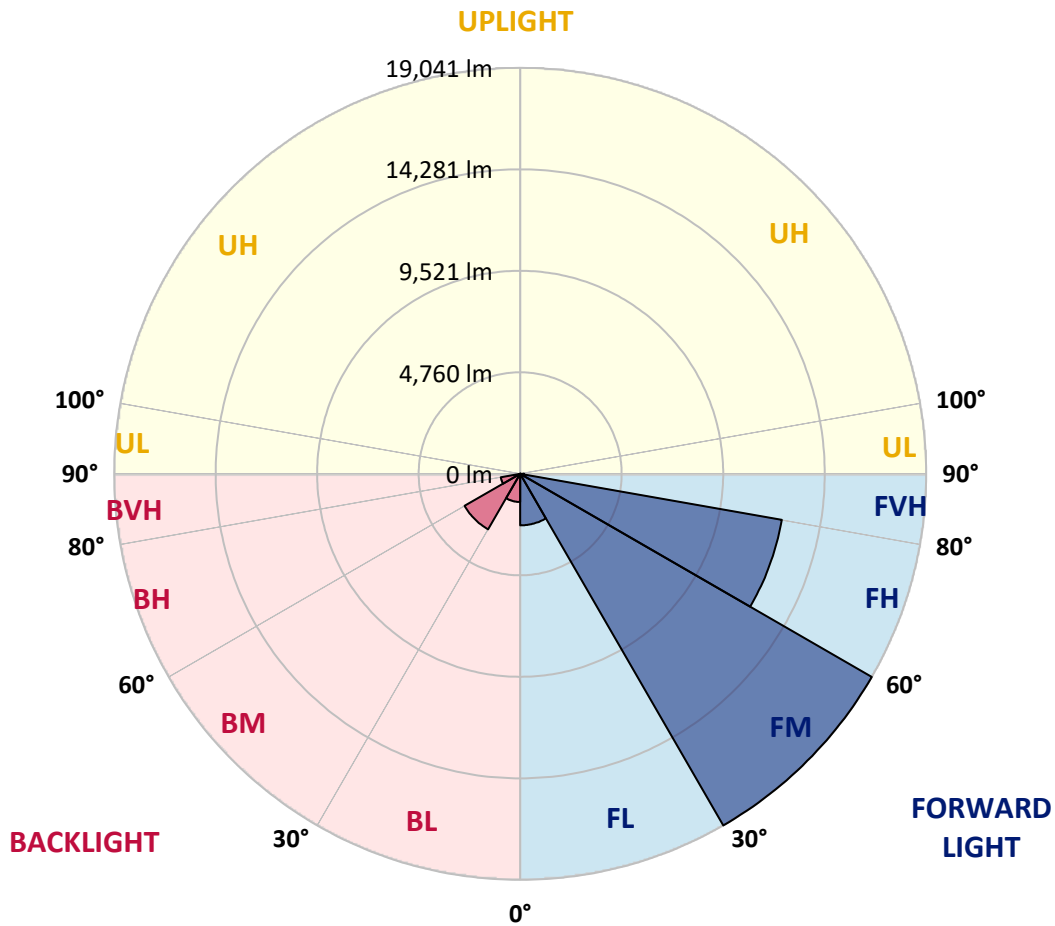
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2417.0	6.1			
FM (30°-60°)	19041.4	48.4			
FH (60°-80°)	12459.8	31.7			G5
FVH (80°-90°)	176.4	0.4			G2/225
BL (0°-30°)	1321.5	3.4	B3/2500		
BM (30°-60°)	3009.0	7.6	B3/5000		
BH (60°-80°)	923.8	2.3	B2/1000		G2/1000
BVH (80°-90°)	9.1	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°	4577.7	4577.7	4577.7	4577.7	4577.7	4577.7	4577.7	4577.7	4577.7	4577.7	4577.7
2.5°	4561.9	4593.6	4585.7	4577.7	4575.1	4580.4	4583.0	4580.4	4580.4	4580.4	4583.0
5°	4474.8	4501.2	4501.2	4519.7	4546.1	4577.7	4601.5	4606.8	4612.0	4620.0	4617.3
7.5°	4308.6	4329.7	4345.6	4406.2	4472.2	4556.6	4627.9	4664.8	4670.1	4699.1	4709.7
10°	4195.2	4221.6	4247.9	4311.3	4406.2	4532.9	4654.3	4744.0	4757.2	4825.8	4857.4
12.5°	4189.9	4216.3	4250.6	4319.2	4430.0	4564.6	4712.3	4841.6	4865.3	4965.6	5031.6
15°	4245.3	4277.0	4308.6	4393.1	4511.8	4675.4	4833.7	4994.6	5018.4	5160.8	5232.1
17.5°	4358.8	4401.0	4424.7	4509.1	4635.8	4817.8	5026.3	5211.0	5232.1	5398.3	5488.0
20°	4583.0	4633.2	4641.1	4709.7	4833.7	5028.9	5276.9	5506.5	5532.9	5722.8	5823.1
22.5°	5047.4	5118.6	5055.3	5089.6	5200.4	5395.7	5664.8	5955.0	5992.0	6208.3	6298.0
25°	5865.3	5965.6	5802.0	5743.9	5791.4	5994.6	6332.3	6699.1	6741.3	6915.4	6960.3
27.5°	7472.1	7342.9	7094.8	6852.1	6709.6	6825.7	7205.7	7659.5	7712.2	7881.1	7828.3
30°	9237.3	9123.8	8788.7	8250.5	7912.8	7894.3	8245.2	8751.8	8812.5	8973.4	8812.5
32.5°	11005.1	10896.9	10532.8	9870.5	9284.8	8994.5	9237.3	9799.3	9830.9	9933.8	9696.4
35°	12743.8	12633.0	12268.9	11590.8	10870.5	10210.9	10163.4	10796.6	10807.2	10915.3	10561.8
37.5°	14493.1	14400.8	14012.9	13348.0	12638.3	11728.0	11287.4	11741.2	11754.4	11859.9	11493.2
40°	15741.1	15780.7	15514.2	14999.7	14390.2	13395.5	12548.6	12746.4	12667.3	12844.1	12625.1
42.5°	16812.3	16891.5	16659.3	16400.7	16047.2	15171.2	14110.5	14076.2	13949.6	14044.6	13817.7
45°	17738.4	17804.4	17596.0	17535.3	17527.4	16912.6	15817.6	15611.8	15435.0	15416.6	15144.8
47.5°	18078.8	18205.4	18295.1	18498.3	18894.1	18635.5	17582.8	17263.5	17065.6	16920.5	16490.4
50°	18208.1	18342.6	18648.7	19239.7	20176.4	20287.2	19340.0	18981.1	18738.4	18474.6	17841.3
52.5°	18033.9	18274.0	18685.6	19680.3	21039.2	21611.7	21026.0	20712.0	20434.9	20004.9	19065.6
55°	17007.6	17247.7	18089.3	19675.1	21469.2	22540.4	22619.6	22479.8	22168.4	21490.3	20055.0
57.5°	14844.0	15200.2	16532.6	19004.9	21461.3	23339.9	24181.6	24281.8	23933.6	22962.6	20833.4
60°	11846.7	12329.6	13954.9	17519.4	20799.1	23772.6	25550.9	26052.2	25682.9	24413.8	21463.9
62.5°	8266.3	8825.7	10363.9	15192.3	19284.6	23461.3	26550.9	27477.0	27197.3	25711.9	21706.7
65°	5042.1	5221.5	6461.6	11954.9	16709.4	22157.9	26859.6	28247.5	28155.1	26506.1	21347.9
67.5°	3358.8	3509.2	3865.4	8197.7	12970.7	19553.7	26120.8	28112.9	28139.3	26376.8	20033.9
70°	2023.7	2153.0	2385.2	4767.7	8406.2	15477.3	23833.3	26397.9	26550.9	24648.6	17543.2
72.5°	833.8	920.8	1131.9	2160.9	4353.5	9823.0	18978.5	22664.5	23020.6	20725.2	13464.1
75°	472.3	517.1	664.9	1084.4	1889.1	4577.7	11495.8	16089.4	16614.4	14284.7	8100.1
77.5°	314.0	335.1	430.1	701.8	1063.3	1562.0	4912.8	8382.4	9385.0	7802.0	3506.5
80°	211.1	229.5	295.5	469.6	691.3	670.2	1564.6	3105.5	3820.5	2680.7	854.9
82.5°	142.5	145.1	211.1	308.7	438.0	324.5	461.7	965.7	1213.7	775.7	324.5
85°	81.8	79.2	155.7	179.4	195.2	134.6	139.8	290.2	379.9	327.2	184.7
87.5°	10.6	15.8	60.7	47.5	26.4	29.0	29.0	50.1	73.9	79.2	39.6
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°	4577.7	4577.7	4577.7	4577.7	4577.7	4577.7	4577.7	4577.7	4577.7	4577.7	4577.7
2.5°	4583.0	4580.4	4572.5	4564.6	4546.1	4535.5	4540.8	4535.5	4532.9	4535.5	4546.1
5°	4617.3	4609.4	4588.3	4561.9	4525.0	4480.1	4451.1	4408.9	4369.3	4345.6	4350.8
7.5°	4709.7	4701.8	4672.7	4598.9	4480.1	4292.8	4121.3	3970.9	3857.4	3791.5	3794.1
10°	4857.4	4844.2	4799.4	4635.8	4324.5	3915.5	3575.1	3292.8	3108.1	3021.0	3013.1
12.5°	5031.6	5015.7	4936.6	4601.5	4028.9	3390.4	2920.8	2606.8	2435.3	2358.8	2350.9
15°	5237.4	5216.3	5060.6	4437.9	3598.9	2810.0	2379.9	2145.1	2034.3	1965.7	1968.3
17.5°	5493.3	5456.4	5152.9	4192.5	3131.9	2366.7	2047.5	1870.7	1773.1	1707.1	1701.8
20°	5825.7	5765.1	5226.8	3899.7	2701.8	2087.0	1823.2	1675.4	1601.6	1543.5	1533.0
22.5°	6290.1	6203.0	5316.5	3583.0	2398.4	1894.4	1657.0	1548.8	1488.1	1422.1	1411.6
25°	6865.3	6762.4	5427.3	3290.2	2189.9	1728.2	1535.6	1445.9	1374.6	1298.1	1290.2
27.5°	7670.0	7485.3	5559.3	3050.1	2010.5	1585.7	1424.8	1324.5	1242.7	1179.4	1166.2
30°	8567.1	8263.7	5675.3	2905.0	1846.9	1453.8	1279.7	1179.4	1102.9	1058.0	1050.1
32.5°	9416.7	9005.1	5751.9	2841.6	1699.2	1303.4	1121.3	1013.2	955.1	941.9	949.8
35°	10218.8	9675.3	5743.9	2780.9	1567.3	1153.0	965.7	854.9	810.0	817.9	817.9
37.5°	11142.3	10390.3	5688.5	2686.0	1459.1	1015.8	831.1	733.5	693.9	696.6	707.1
40°	12216.1	11216.1	5654.2	2506.5	1340.3	889.2	720.3	641.1	612.1	601.6	598.9
42.5°	13361.2	12015.6	5659.5	2303.4	1192.6	775.7	643.8	577.8	551.4	543.5	540.9
45°	14511.6	12778.1	5667.4	2092.3	1036.9	688.6	588.4	533.0	517.1	506.6	506.6
47.5°	15593.4	13427.2	5519.7	1865.4	883.9	622.7	543.5	506.6	493.4	480.2	480.2
50°	16601.2	13859.9	5163.5	1601.6	762.5	569.9	509.2	482.8	469.6	456.5	456.5
52.5°	17384.9	13928.5	4575.1	1329.8	678.1	530.3	488.1	464.4	448.5	435.3	432.7
55°	17733.2	13498.4	3738.7	1076.5	612.1	496.0	467.0	443.3	424.8	411.6	409.0
57.5°	17643.4	12593.4	2915.5	865.4	548.8	461.7	440.6	424.8	403.7	382.6	379.9
60°	17202.8	11382.4	2197.8	720.3	490.8	424.8	411.6	398.4	369.4	337.7	332.4
62.5°	16440.3	9860.0	1567.3	596.3	427.4	382.6	377.3	366.7	324.5	266.5	261.2
65°	15274.1	8010.4	1055.4	496.0	366.7	335.1	337.7	319.3	263.8	197.9	192.6
67.5°	13569.6	5857.4	675.4	406.3	306.1	279.7	282.3	271.8	224.3	168.9	160.9
70°	11398.2	3878.5	440.6	308.7	245.4	216.4	232.2	234.8	190.0	137.2	131.9
72.5°	8356.0	2290.2	308.7	229.5	179.4	150.4	190.0	195.2	153.0	102.9	97.6
75°	4762.4	1087.0	232.2	166.2	110.8	105.5	147.8	147.8	105.5	68.6	63.3
77.5°	2000.0	453.8	163.6	108.2	63.3	60.7	100.3	92.3	52.8	31.7	31.7
80°	577.8	203.2	87.1	52.8	26.4	23.7	39.6	29.0	13.2	5.3	5.3
82.5°	226.9	89.7	34.3	21.1	10.6	10.6	5.3	0.0	0.0	0.0	0.0
85°	134.6	36.9	15.8	7.9	2.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	34.3	7.9	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)