

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: P885518

Luminaire Tested: **NAV-SB6D-830-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885518
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-830-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 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: 42386 lumens
Efficiency: N/A
Efficacy: 96.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G5

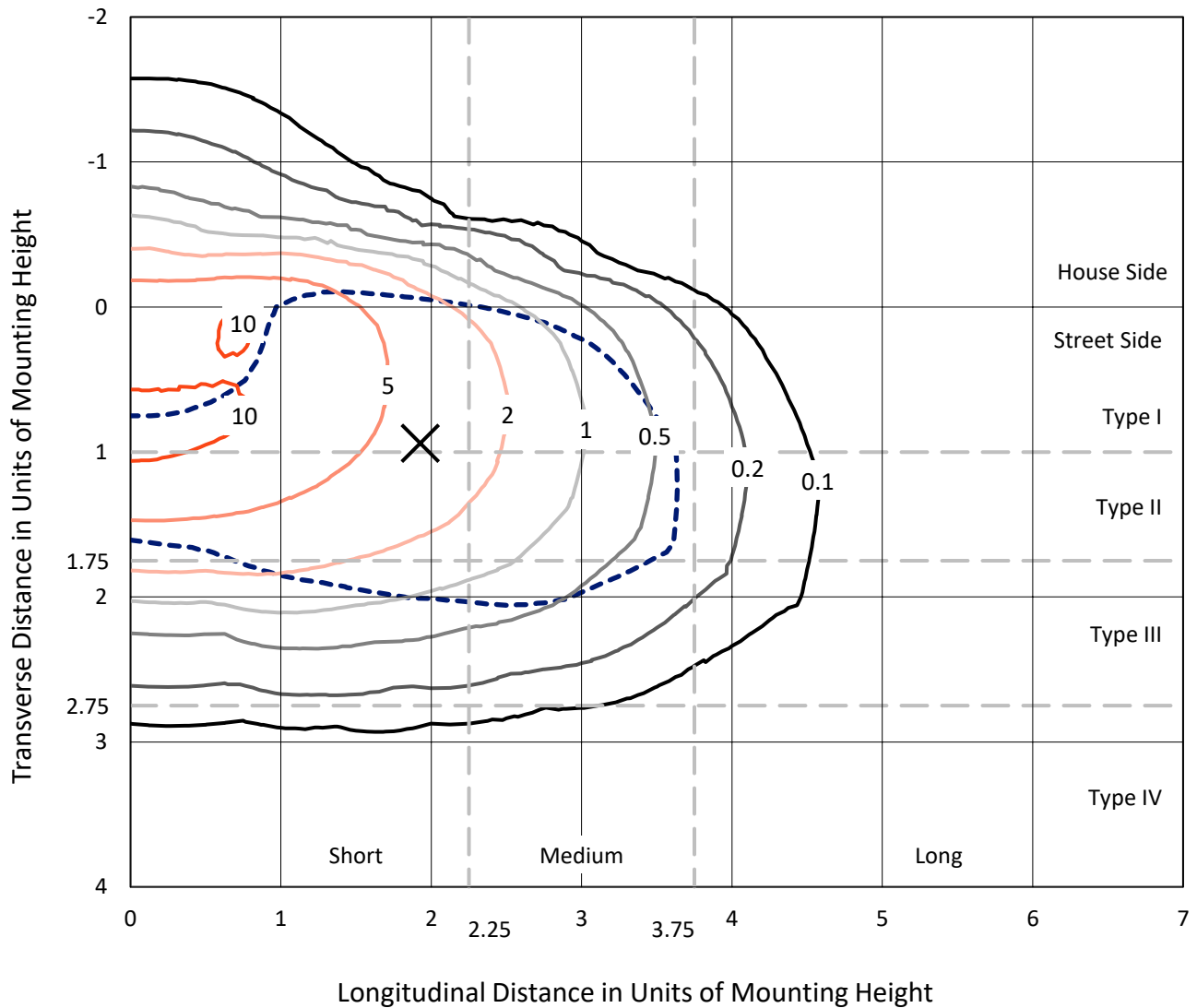
Input Watts (W): 440.1
Input Voltage (V): 120.0
Input Current (Ain): 3.68
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

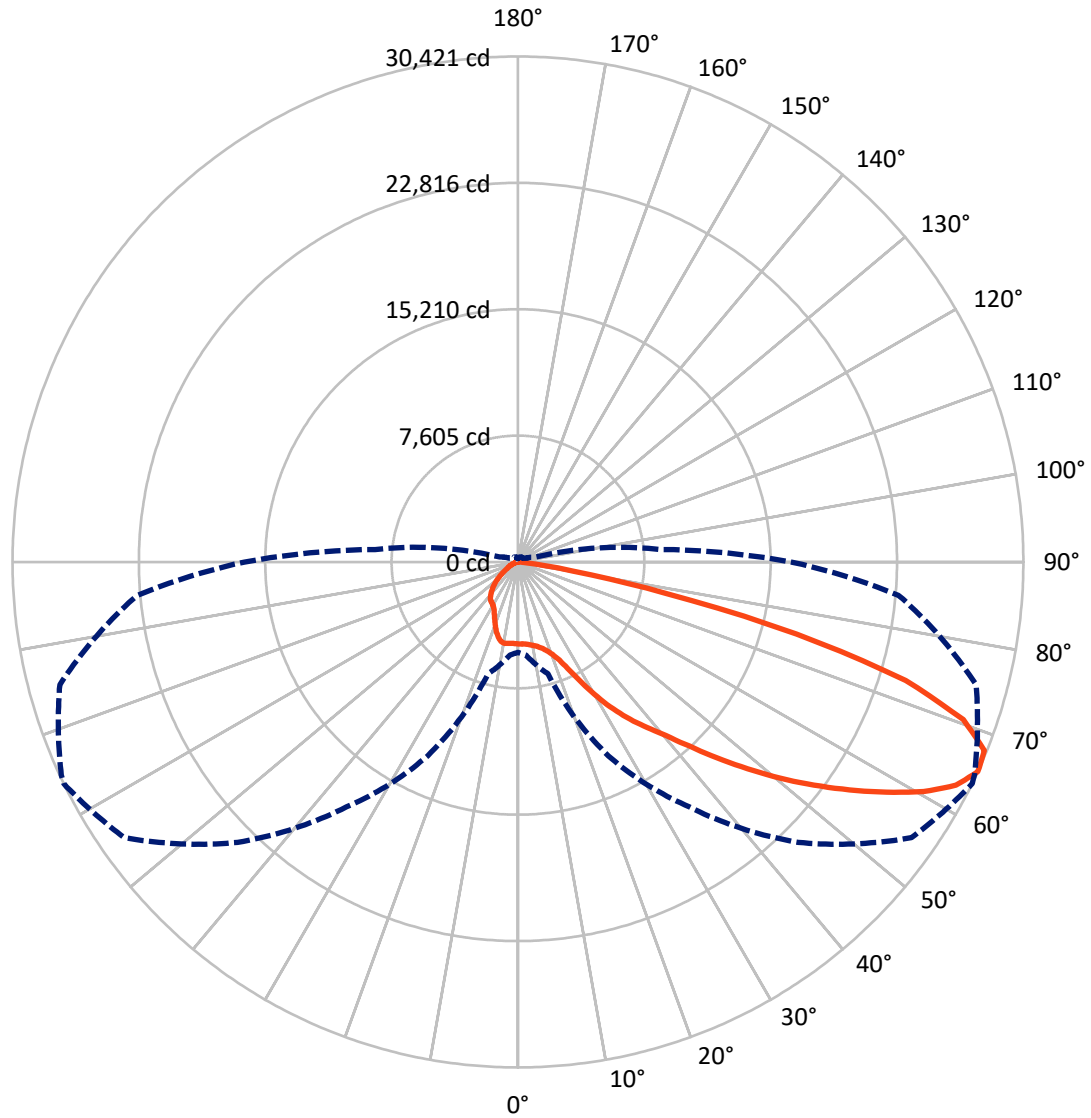
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.4 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	5668.3	0.0	5668.3
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	36717.7	0.0	36717.7
	% Fixture	86.6	0.0	86.6
Total	Lumens	42386.0	0.0	42386.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	454.8	1.1
10°-20°	1233.6	2.9
20°-30°	2337.6	5.5
30°-40°	4730.3	11.2
40°-50°	8058.1	19.0
50°-60°	10958.4	25.9
60°-70°	10290.5	24.3
70°-80°	4122.8	9.7
80°-90°	199.7	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°	42386.0	100.0
0°-180°	42386.0	100.0

Coefficient of Utilization



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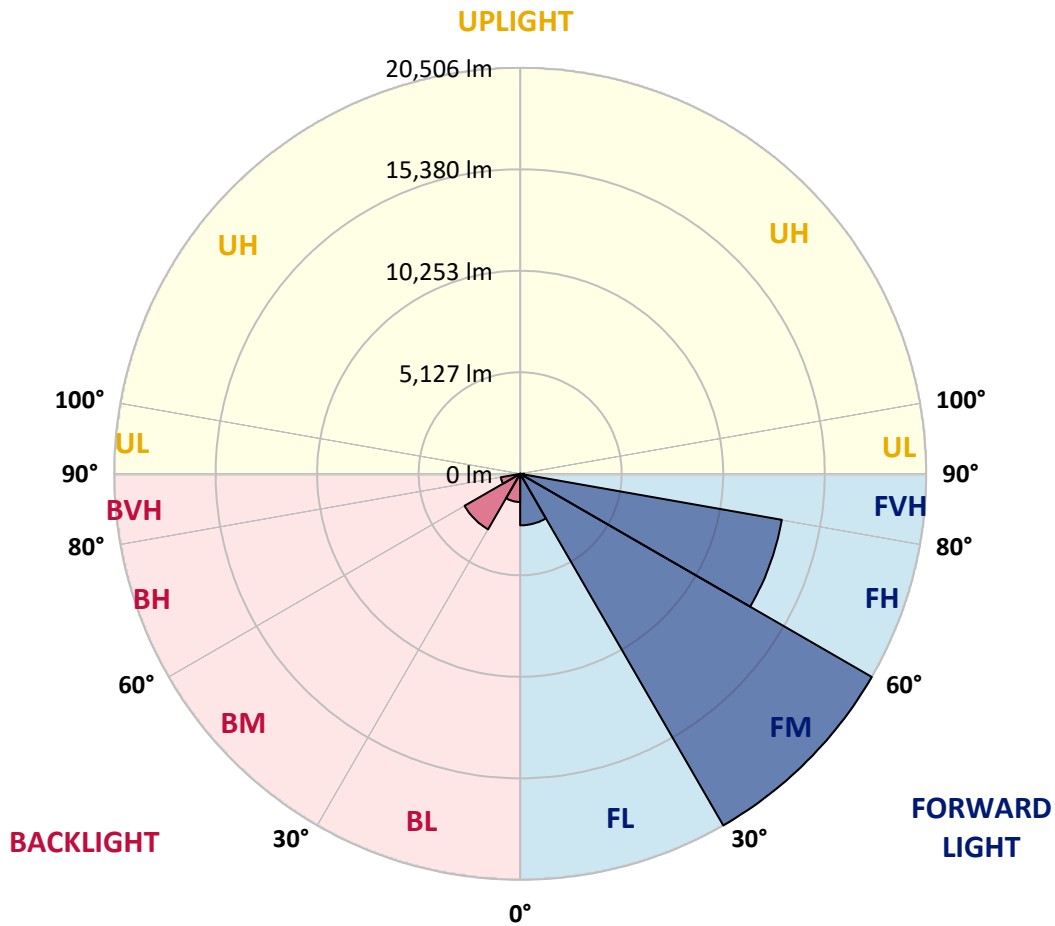
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2603.0	6.1			
FM (30°-60°)	20506.3	48.4			
FH (60°-80°)	13418.4	31.7			G5
FVH (80°-90°)	190.0	0.4			G2/225
BL (0°-30°)	1423.1	3.4	B3/2500		
BM (30°-60°)	3240.5	7.6	B3/5000		
BH (60°-80°)	994.9	2.3	B2/1000		G2/1000
BVH (80°-90°)	9.8	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	4929.9	4929.9	4929.9	4929.9	4929.9	4929.9	4929.9	4929.9	4929.9	4929.9	4929.9
2.5°	4912.9	4947.0	4938.5	4929.9	4927.1	4932.8	4935.6	4932.8	4932.8	4932.8	4935.6
5°	4819.1	4847.5	4847.5	4867.4	4895.8	4929.9	4955.5	4961.2	4966.9	4975.4	4972.6
7.5°	4640.1	4662.8	4679.9	4745.2	4816.3	4907.2	4983.9	5023.7	5029.4	5060.6	5072.0
10°	4517.9	4546.3	4574.7	4642.9	4745.2	4881.6	5012.3	5108.9	5123.2	5197.0	5231.1
12.5°	4512.2	4540.7	4577.6	4651.5	4770.8	4915.7	5074.8	5214.1	5239.7	5347.6	5418.7
15°	4571.9	4606.0	4640.1	4731.0	4858.9	5035.1	5205.6	5378.9	5404.5	5557.9	5634.6
17.5°	4694.1	4739.6	4765.1	4856.1	4992.4	5188.5	5413.0	5611.9	5634.6	5813.6	5910.2
20°	4935.6	4989.6	4998.1	5072.0	5205.6	5415.8	5682.9	5930.1	5958.5	6163.1	6271.1
22.5°	5435.7	5512.4	5444.2	5481.2	5600.5	5810.8	6100.6	6413.2	6453.0	6686.0	6782.6
25°	6316.6	6424.5	6248.4	6185.9	6237.0	6455.8	6819.5	7214.5	7259.9	7447.5	7495.8
27.5°	8047.0	7907.8	7640.7	7379.3	7225.8	7350.9	7760.0	8248.8	8305.6	8487.4	8430.6
30°	9947.9	9825.8	9464.9	8885.2	8521.5	8501.6	8879.6	9425.1	9490.5	9663.8	9490.5
32.5°	11851.7	11735.2	11343.1	10629.9	9999.1	9686.5	9947.9	10553.2	10587.3	10698.1	10442.4
35°	13724.2	13604.9	13212.8	12482.5	11706.8	10996.4	10945.3	11627.3	11638.6	11755.1	11374.4
37.5°	15608.1	15508.7	15091.0	14374.9	13610.6	12630.3	12155.8	12644.5	12658.7	12772.4	12377.4
40°	16952.1	16994.8	16707.8	16153.7	15497.3	14426.1	13514.0	13727.1	13641.8	13832.2	13596.4
42.5°	18105.8	18191.0	17941.0	17662.5	17281.8	16338.4	15196.1	15159.2	15022.8	15125.1	14880.7
45°	19103.1	19174.2	18949.7	18884.3	18875.8	18213.8	17034.5	16812.9	16622.5	16602.6	16310.0
47.5°	19469.7	19606.1	19702.7	19921.5	20347.7	20069.2	18935.5	18591.7	18378.6	18222.3	17759.1
50°	19608.9	19753.8	20083.4	20719.9	21728.6	21848.0	20827.9	20441.5	20180.0	19895.9	19213.9
52.5°	19421.4	19679.9	20123.2	21194.4	22657.8	23274.4	22643.6	22305.5	22007.1	21543.9	20532.4
55°	18316.0	18574.6	19481.0	21188.8	23121.0	24274.6	24359.8	24209.2	23873.9	23143.7	21597.9
57.5°	15986.1	16369.6	17804.6	20467.0	23112.4	25135.5	26042.0	26150.0	25774.9	24729.2	22436.2
60°	12758.2	13278.1	15028.5	18867.3	22399.2	25601.5	27516.7	28056.6	27658.8	26292.0	23115.3
62.5°	8902.3	9504.7	11161.3	16361.1	20768.2	25266.3	28593.6	29591.0	29289.8	27690.0	23376.7
65°	5430.0	5623.2	6958.7	12874.7	17995.0	23862.6	28926.1	30420.7	30321.2	28545.3	22990.2
67.5°	3617.2	3779.1	4162.7	8828.4	13968.6	21058.1	28130.4	30275.7	30304.2	28406.1	21575.2
70°	2179.4	2318.6	2568.7	5134.5	9052.9	16668.0	25666.9	28428.8	28593.6	26544.9	18892.9
72.5°	897.9	991.7	1219.0	2327.2	4688.4	10578.8	20438.6	24408.1	24791.7	22319.7	14500.0
75°	508.6	556.9	716.0	1167.8	2034.5	4929.9	12380.2	17327.2	17892.7	15383.7	8723.3
77.5°	338.1	360.9	463.2	755.8	1145.1	1682.1	5290.8	9027.3	10107.1	8402.2	3776.3
80°	227.3	247.2	318.2	505.8	744.5	721.7	1685.0	3344.4	4114.4	2886.9	920.6
82.5°	153.4	156.3	227.3	332.5	471.7	349.5	497.3	1040.0	1307.1	835.4	349.5
85°	88.1	85.2	167.6	193.2	210.3	144.9	150.6	312.6	409.2	352.3	198.9
87.5°	11.4	17.0	65.4	51.1	28.4	31.3	31.3	54.0	79.6	85.2	42.6
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°	4929.9	4929.9	4929.9	4929.9	4929.9	4929.9	4929.9	4929.9	4929.9	4929.9	4929.9
2.5°	4935.6	4932.8	4924.2	4915.7	4895.8	4884.5	4890.2	4884.5	4881.6	4884.5	4895.8
5°	4972.6	4964.0	4941.3	4912.9	4873.1	4824.8	4793.5	4748.1	4705.5	4679.9	4685.6
7.5°	5072.0	5063.5	5032.2	4952.7	4824.8	4623.1	4438.4	4276.4	4154.2	4083.2	4086.0
10°	5231.1	5216.9	5168.6	4992.4	4657.2	4216.7	3850.2	3546.1	3347.2	3253.5	3244.9
12.5°	5418.7	5401.6	5316.4	4955.5	4338.9	3651.3	3145.5	2807.4	2622.7	2540.3	2531.7
15°	5640.3	5617.6	5449.9	4779.3	3875.8	3026.2	2563.0	2310.1	2190.8	2116.9	2119.7
17.5°	5915.9	5876.1	5549.4	4515.1	3372.8	2548.8	2205.0	2014.6	1909.5	1838.4	1832.7
20°	6273.9	6208.6	5628.9	4199.7	2909.7	2247.6	1963.4	1804.3	1724.8	1662.3	1650.9
22.5°	6774.0	6680.3	5725.5	3858.7	2582.9	2040.2	1784.4	1667.9	1602.6	1531.5	1520.2
25°	7393.5	7282.7	5844.9	3543.3	2358.4	1861.2	1653.7	1557.1	1480.4	1398.0	1389.5
27.5°	8260.1	8061.2	5987.0	3284.7	2165.2	1707.7	1534.4	1426.4	1338.3	1270.1	1255.9
30°	9226.2	8899.5	6112.0	3128.4	1989.0	1565.6	1378.1	1270.1	1187.7	1139.4	1130.9
32.5°	10141.2	9697.9	6194.4	3060.3	1829.9	1403.7	1207.6	1091.1	1028.6	1014.4	1022.9
35°	11005.0	10419.6	6185.9	2994.9	1687.8	1241.7	1040.0	920.6	872.3	880.9	880.9
37.5°	11999.5	11189.7	6126.2	2892.6	1571.3	1094.0	895.1	789.9	747.3	750.1	761.5
40°	13156.0	12079.0	6089.2	2699.4	1443.5	957.6	775.7	690.5	659.2	647.9	645.0
42.5°	14389.2	12940.0	6094.9	2480.6	1284.3	835.4	693.3	622.3	593.9	585.3	582.5
45°	15628.0	13761.2	6103.5	2253.3	1116.7	741.6	633.6	574.0	556.9	545.6	545.6
47.5°	16793.0	14460.2	5944.3	2008.9	951.9	670.6	585.3	545.6	531.4	517.1	517.1
50°	17878.5	14926.2	5560.7	1724.8	821.2	613.8	548.4	520.0	505.8	491.6	491.6
52.5°	18722.4	15000.1	4927.1	1432.1	730.3	571.1	525.7	500.1	483.0	468.8	466.0
55°	19097.4	14536.9	4026.3	1159.3	659.2	534.2	502.9	477.4	457.5	443.3	440.4
57.5°	19000.8	13562.3	3139.8	932.0	591.0	497.3	474.5	457.5	434.7	412.0	409.2
60°	18526.3	12258.1	2366.9	775.7	528.5	457.5	443.3	429.1	397.8	363.7	358.0
62.5°	17705.1	10618.5	1687.8	642.2	460.3	412.0	406.3	395.0	349.5	287.0	281.3
65°	16449.2	8626.7	1136.6	534.2	395.0	360.9	363.7	343.8	284.1	213.1	207.4
67.5°	14613.6	6308.0	727.4	437.6	329.6	301.2	304.0	292.7	241.5	181.9	173.3
70°	12275.1	4176.9	474.5	332.5	264.3	233.0	250.0	252.9	204.6	147.8	142.1
72.5°	8998.9	2466.4	332.5	247.2	193.2	162.0	204.6	210.3	164.8	110.8	105.1
75°	5128.8	1170.7	250.0	179.0	119.3	113.7	159.1	159.1	113.7	73.9	68.2
77.5°	2153.8	488.7	176.2	116.5	68.2	65.4	108.0	99.5	56.8	34.1	34.1
80°	622.3	218.8	93.8	56.8	28.4	25.6	42.6	31.3	14.2	5.7	5.7
82.5°	244.4	96.6	36.9	22.7	11.4	11.4	5.7	0.0	0.0	0.0	0.0
85°	144.9	39.8	17.0	8.5	2.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	36.9	8.5	5.7	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)