

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: P195474

Luminaire Tested: **NAV-AF-06-D-UNV-5NQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P195474
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24130)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-AF-06-D-UNV-5NQ-7050
Description: NAVION ROADWAY AND AREA LUMINAIRE
(6) 70 CRI, 5000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V
NARROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37031 lumens
Efficiency: N/A
Efficacy: 111.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

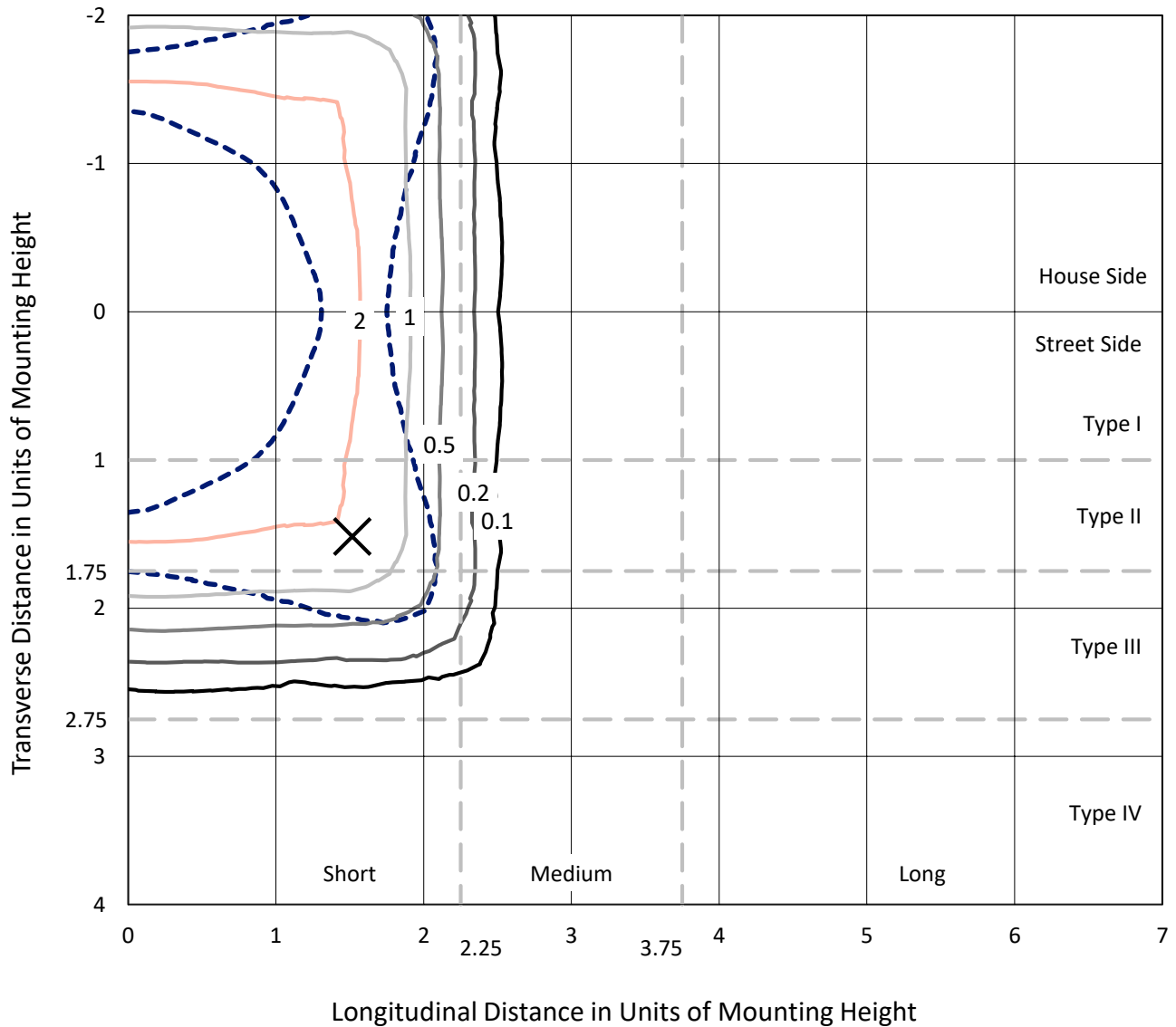
Input Watts (W): 333
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P195474
 CATALOG NUMBER: NAV-AF-06-D-UNV-5NQ-7050

Iso-Footcandle Lines of Horizontal Illumination

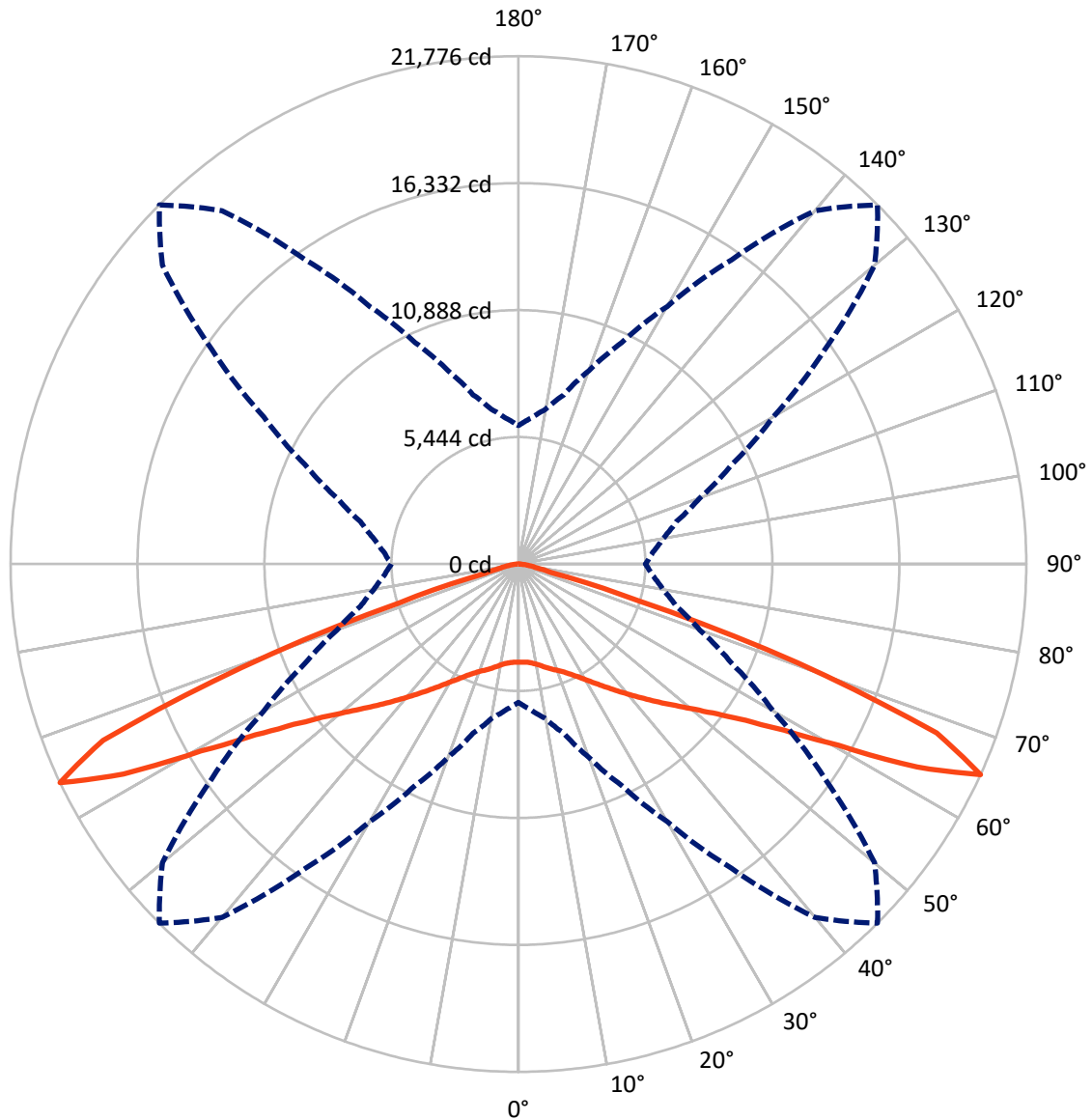
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.7 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P195474
CATALOG NUMBER: NAV-AF-06-D-UNV-5NQ-7050

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P195474

CATALOG NUMBER: NAV-AF-06-D-UNV-5NQ-7050

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	18515.5	0.0	18515.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	18515.5	0.0	18515.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	37031.0	0.0	37031.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	410.2	1.1
10°-20°	1314.7	3.6
20°-30°	2452.5	6.6
30°-40°	4135.3	11.2
40°-50°	6716.9	18.1
50°-60°	10524.2	28.4
60°-70°	9934.4	26.8
70°-80°	1338.8	3.6
80°-90°	203.9	0.6
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°	37031.0	100.0
0°-180°	37031.0	100.0



REPORT NUMBER: P195474

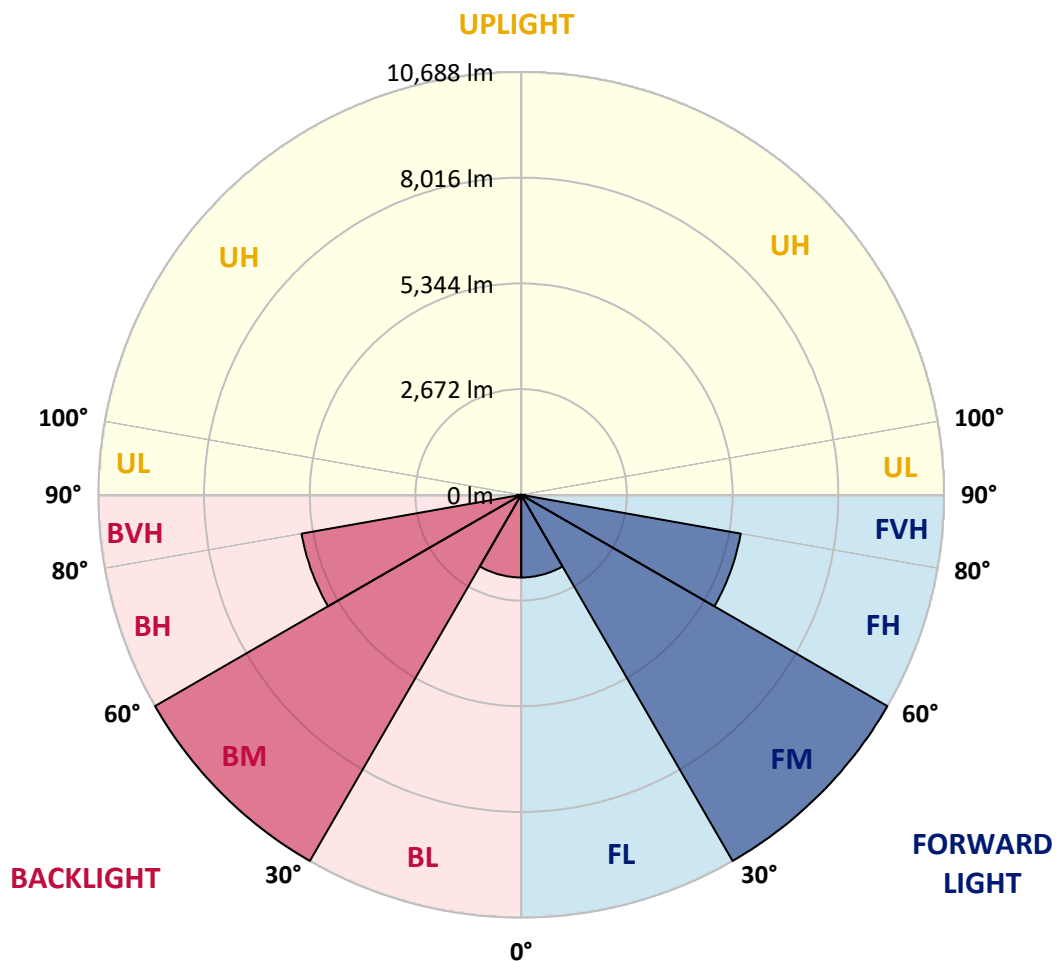
CATALOG NUMBER: NAV-AF-06-D-UNV-5NQ-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2088.7	5.6			
FM	(30°-60°)	10688.2	28.9			
FH	(60°-80°)	5636.6	15.2			G3/7500
FVH	(80°-90°)	102.0	0.3			G2/225
BL	(0°-30°)	2088.7	5.6	B3/2500		
BM	(30°-60°)	10688.2	28.9	B5		
BH	(60°-80°)	5636.6	15.2	B5		G3/7500
BVH	(80°-90°)	102.0	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G3

Type V Short





REPORT NUMBER: P195474

CATALOG NUMBER: NAV-AF-06-D-UNV-5NQ-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4212.2	4212.2	4212.2	4212.2	4212.2	4212.2	4212.2	4212.2	4212.2	4212.2	4212.2
2.5°	4246.8	4246.8	4253.8	4251.4	4242.2	4235.3	4228.4	4219.2	4214.5	4209.9	4207.6
5°	4269.9	4269.9	4276.8	4274.5	4267.6	4258.4	4253.8	4246.8	4239.9	4235.3	4237.6
7.5°	4327.6	4329.9	4332.2	4329.9	4323.0	4316.0	4306.8	4304.5	4295.3	4288.4	4293.0
10°	4415.2	4415.2	4417.5	4419.8	4415.2	4399.1	4399.1	4394.5	4385.2	4376.0	4378.3
12.5°	4512.1	4512.1	4514.4	4514.4	4514.4	4505.2	4507.5	4505.2	4493.7	4489.0	4493.7
15°	4606.7	4609.0	4609.0	4613.6	4613.6	4615.9	4625.2	4625.2	4620.5	4618.2	4618.2
17.5°	4717.4	4722.0	4724.3	4731.3	4733.6	4738.2	4747.4	4749.7	4752.0	4745.1	4747.4
20°	4865.1	4867.4	4874.3	4876.6	4885.8	4885.8	4890.4	4888.1	4883.5	4874.3	4874.3
22.5°	5031.1	5035.8	5049.6	5049.6	5061.1	5054.2	5056.5	5049.6	5038.1	5033.5	5028.8
25°	5248.0	5254.9	5266.4	5261.8	5266.4	5254.9	5254.9	5254.9	5248.0	5241.1	5238.8
27.5°	5522.5	5511.0	5522.5	5513.3	5511.0	5501.7	5504.0	5499.4	5492.5	5490.2	5481.0
30°	5808.5	5794.7	5801.6	5803.9	5799.3	5797.0	5787.8	5780.9	5769.3	5771.6	5764.7
32.5°	6136.1	6122.3	6129.2	6131.5	6126.9	6131.5	6129.2	6113.0	6099.2	6108.4	6108.4
35°	6526.0	6516.7	6535.2	6542.1	6528.3	6521.3	6512.1	6493.7	6472.9	6486.7	6489.1
37.5°	6994.2	6982.7	6996.5	7015.0	6989.6	6975.8	6938.9	6911.2	6897.4	6904.3	6913.5
40°	7481.0	7483.3	7522.5	7527.1	7499.4	7483.3	7446.4	7404.9	7365.6	7365.6	7377.2
42.5°	7993.1	8000.0	8046.1	8062.3	8053.1	8023.1	7972.3	7921.6	7870.8	7880.1	7893.9
45°	8572.1	8562.9	8611.3	8650.5	8643.6	8634.4	8585.9	8493.7	8447.5	8445.2	8468.3
47.5°	9181.1	9199.6	9250.3	9317.2	9314.9	9291.8	9229.5	9144.2	9058.8	9065.8	9093.4
50°	9891.6	9917.0	10002.3	10069.2	10078.4	10071.5	9997.7	9898.5	9778.6	9785.5	9822.4
52.5°	10528.3	10565.2	10664.4	10802.8	10888.1	10927.4	10878.9	10786.6	10664.4	10671.3	10710.5
55°	11105.0	11162.6	11310.3	11499.4	11670.1	11829.3	11900.8	11898.5	11808.6	11829.3	11880.1
57.5°	11467.1	11547.9	11771.6	12076.1	12415.2	12735.9	13012.7	13273.4	13331.0	13439.5	13439.5
60°	10980.4	11169.6	11467.1	11988.5	12655.2	13374.9	14154.6	14913.5	15402.6	15787.8	15580.2
62.5°	9169.6	9448.7	9866.2	10553.6	11591.7	12876.6	14442.9	16207.6	18048.5	19174.2	18348.4
65°	5933.1	6283.7	6738.2	7511.0	8818.9	10472.9	12754.3	15926.2	19778.6	21776.3	19930.8
67.5°	2350.6	2588.2	2865.1	3414.1	4549.0	6173.0	8733.6	12645.9	17464.8	19349.5	17280.3
70°	1123.4	1162.6	1215.7	1333.3	1617.1	2182.2	3508.7	6230.7	10710.5	12696.7	10454.5
72.5°	812.0	818.9	844.3	883.5	966.6	1081.9	1314.9	1905.4	3693.2	5370.2	3697.8
75°	615.9	625.1	639.0	659.7	703.6	758.9	846.6	1015.0	1264.1	1457.9	1261.8
77.5°	468.3	477.5	489.0	509.8	532.9	572.1	604.4	671.3	777.4	818.9	814.3
80°	341.4	357.6	376.0	394.5	410.6	429.1	431.4	463.7	523.6	562.9	551.3
82.5°	216.8	230.7	279.1	299.9	302.2	306.8	304.5	306.8	339.1	366.8	357.6
85°	138.4	147.6	173.0	196.1	191.5	200.7	200.7	196.1	182.2	156.9	186.9
87.5°	69.2	71.5	83.0	103.8	99.2	87.7	85.4	85.4	62.3	53.1	57.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P195474

CATALOG NUMBER: NAV-AF-06-D-UNV-5NQ-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	4212.2	4212.2	4212.2	4212.2	4212.2	4212.2	4212.2	4212.2
2.5°	4200.7	4205.3	4198.4	4198.4	4196.1	4200.7	4193.8	4193.8
5°	4233.0	4239.9	4237.6	4237.6	4242.2	4246.8	4244.5	4242.2
7.5°	4290.7	4295.3	4299.9	4302.2	4306.8	4304.5	4309.1	4306.8
10°	4378.3	4373.7	4380.6	4373.7	4376.0	4371.4	4373.7	4373.7
12.5°	4489.0	4482.1	4477.5	4472.9	4472.9	4463.7	4463.7	4466.0
15°	4615.9	4604.4	4595.2	4590.5	4585.9	4585.9	4579.0	4583.6
17.5°	4740.5	4729.0	4712.8	4712.8	4705.9	4701.3	4696.7	4708.2
20°	4872.0	4860.4	4851.2	4848.9	4835.1	4830.5	4832.8	4846.6
22.5°	5024.2	5017.3	5017.3	5012.7	5003.5	4996.5	4996.5	5012.7
25°	5229.5	5215.7	5218.0	5220.3	5215.7	5215.7	5211.1	5222.6
27.5°	5481.0	5469.4	5476.4	5481.0	5476.4	5483.3	5476.4	5485.6
30°	5776.2	5769.3	5776.2	5783.2	5771.6	5771.6	5767.0	5773.9
32.5°	6129.2	6120.0	6124.6	6124.6	6108.4	6094.6	6076.1	6090.0
35°	6516.7	6505.2	6514.4	6521.3	6502.9	6489.1	6461.4	6472.9
37.5°	6943.5	6948.1	6959.6	6989.6	6985.0	6961.9	6941.2	6950.4
40°	7421.0	7444.1	7494.8	7515.6	7511.0	7487.9	7460.2	7464.8
42.5°	7960.8	7990.8	8043.8	8078.4	8062.3	8030.0	7995.4	8009.2
45°	8549.0	8595.2	8664.4	8699.0	8678.2	8643.6	8595.2	8620.5
47.5°	9171.9	9264.1	9356.4	9402.6	9395.6	9347.2	9284.9	9291.8
50°	9917.0	10039.2	10156.9	10203.0	10168.4	10094.6	10006.9	10004.6
52.5°	10844.3	10975.8	11072.7	11061.1	10975.8	10860.5	10761.3	10756.6
55°	12002.3	12046.2	12032.3	11933.1	11783.2	11603.2	11476.4	11455.6
57.5°	13402.6	13254.9	13038.1	12738.2	12401.4	12060.0	11829.3	11744.0
60°	15114.2	14447.5	13672.5	12855.8	12110.7	11552.5	11199.6	10985.0
62.5°	16528.3	14597.5	12865.1	11446.4	10286.1	9596.3	9114.2	8816.6
65°	16043.9	12611.3	10101.5	8272.2	7005.8	6293.0	5783.2	5444.1
67.5°	12394.5	8426.8	5863.9	4064.6	3081.9	2609.0	2279.1	2064.6
70°	6249.1	3231.8	1958.5	1381.8	1181.1	1098.0	1042.7	1010.4
72.5°	1833.9	1224.9	1017.3	899.7	828.1	777.4	745.1	729.0
75°	1015.0	828.1	731.3	664.4	618.2	583.6	562.9	549.0
77.5°	699.0	602.1	553.6	509.8	472.9	447.5	431.4	417.5
80°	489.0	440.6	419.8	396.8	369.1	348.3	325.3	316.0
82.5°	325.3	304.5	299.9	281.4	265.3	242.2	200.7	186.9
85°	191.5	189.2	189.2	182.2	170.7	149.9	120.0	120.0
87.5°	66.9	69.2	71.5	76.1	73.8	62.3	50.7	48.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)