

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: P885510

Luminaire Tested: **NAV-SB6D-827-U-T4FT-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885510
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6D-827-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37997 lumens
Efficiency: N/A
Efficacy: 86.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

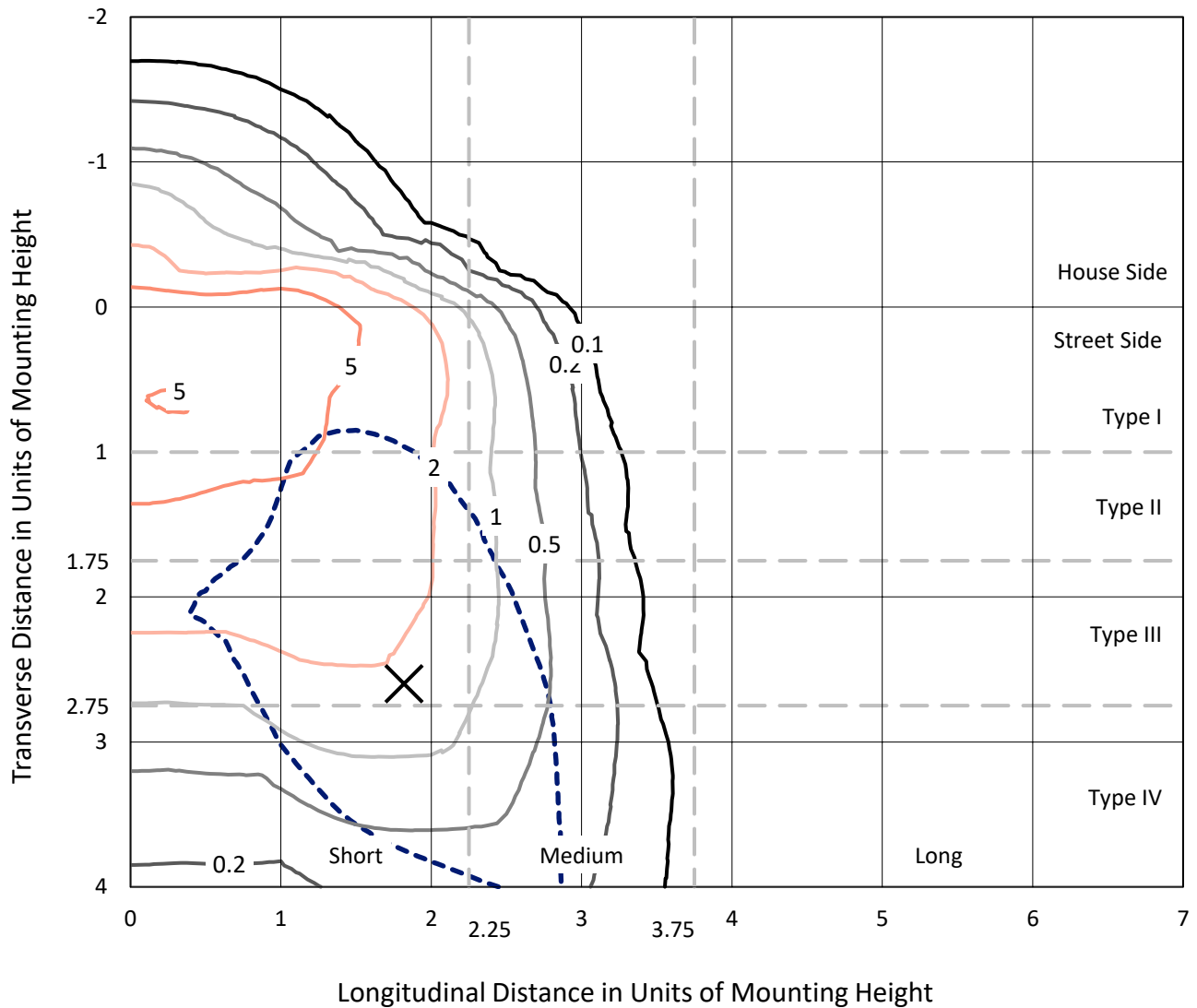
Input Watts (W): 440.1
Input Voltage (V): 120.0
Input Current (Ain): 3.68
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

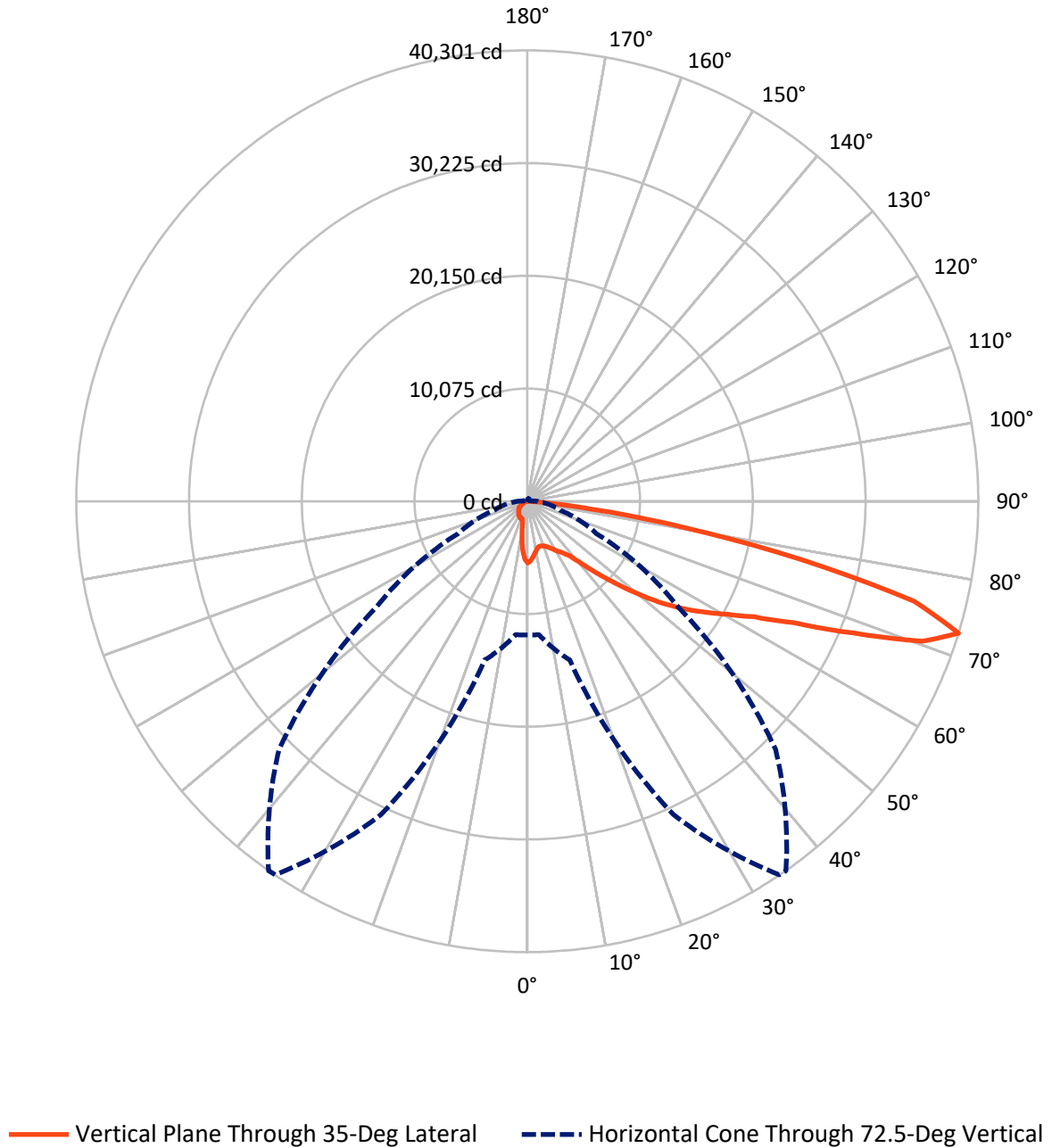
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.8 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4276.4	0.0	4276.4
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	33720.6	0.0	33720.6
	% Fixture	88.7	0.0	88.7
Total	Lumens	37997.0	0.0	37997.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	452.5	1.2
10°-20°	1058.6	2.8
20°-30°	1719.7	4.5
30°-40°	2869.4	7.6
40°-50°	5428.9	14.3
50°-60°	8626.5	22.7
60°-70°	10671.6	28.1
70°-80°	6633.5	17.5
80°-90°	536.1	1.4
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°	37997.0	100.0
0°-180°	37997.0	100.0

Coefficient of Utilization



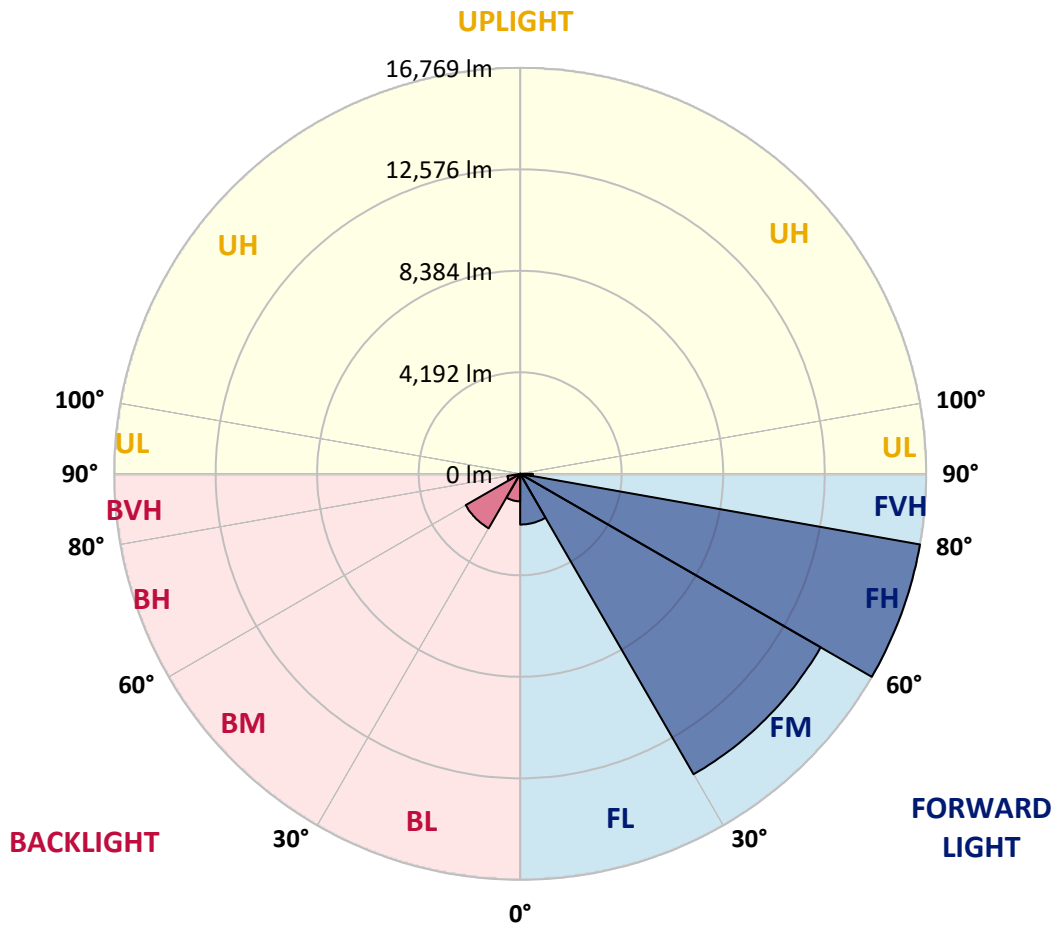
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2094.6	5.5			
FM (30°-60°)	14328.7	37.7			
FH (60°-80°)	16768.5	44.1			G5
FVH (80°-90°)	528.8	1.4			G4/750
BL (0°-30°)	1136.3	3.0	B3/2500		
BM (30°-60°)	2596.2	6.8	B3/5000		
BH (60°-80°)	536.6	1.4	B2/1000		G2/1000
BVH (80°-90°)	7.3	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	5507.0	5507.0	5507.0	5507.0	5507.0	5507.0	5507.0	5507.0	5507.0	5507.0	5507.0
2.5°	5262.0	5306.6	5314.9	5328.9	5328.9	5345.6	5373.4	5412.4	5476.4	5509.8	5532.1
5°	4850.0	4883.4	4925.2	4958.6	5022.6	5031.0	5139.5	5245.3	5392.9	5504.3	5582.2
7.5°	4435.1	4474.1	4529.8	4610.5	4694.1	4719.1	4883.4	5061.6	5295.4	5504.3	5635.1
10°	4142.8	4145.6	4195.7	4276.4	4410.1	4440.7	4641.2	4894.5	5186.9	5470.8	5685.2
12.5°	3978.5	3998.0	4020.3	4081.6	4209.6	4229.1	4443.5	4741.4	5078.3	5451.4	5743.7
15°	3978.5	3992.5	4006.4	4037.0	4140.0	4156.7	4346.1	4644.0	5022.6	5459.7	5838.4
17.5°	4020.3	4042.6	4031.4	4067.6	4176.2	4187.4	4354.4	4616.1	5019.8	5512.6	5983.1
20°	4120.5	4137.2	4115.0	4137.2	4245.8	4268.1	4440.7	4669.0	5067.1	5604.5	6164.1
22.5°	4279.2	4287.6	4234.7	4251.4	4362.8	4390.6	4591.1	4819.4	5181.3	5752.0	6406.3
25°	4479.7	4496.4	4415.7	4435.1	4540.9	4574.4	4805.4	5044.9	5362.3	5955.3	6715.4
27.5°	4710.8	4719.1	4649.5	4646.7	4783.2	4830.5	5064.4	5323.3	5604.5	6211.4	7105.1
30°	4975.3	5000.3	4933.5	4922.4	5095.0	5134.0	5365.0	5665.7	5960.9	6595.6	7659.2
32.5°	5184.1	5203.6	5164.6	5192.4	5367.8	5398.5	5729.8	6150.2	6520.5	7141.3	8413.7
35°	5484.8	5495.9	5406.8	5456.9	5657.4	5735.3	6228.1	6829.5	7224.9	7826.2	9399.3
37.5°	6573.4	6573.4	6194.7	5946.9	6139.0	6208.6	6910.2	7684.2	8093.5	8745.0	10641.0
40°	8079.6	8054.5	7500.5	6993.8	6968.7	7105.1	7881.9	8761.7	9215.5	9847.5	12038.6
42.5°	9686.0	9647.1	8892.6	8391.4	8307.9	8355.2	9003.9	10089.7	10551.9	11192.3	13542.1
45°	11111.5	11100.4	10409.9	9736.2	9585.8	9736.2	10404.4	11643.3	11974.6	12648.4	15042.7
47.5°	12305.9	12305.9	11802.0	11362.1	11284.1	11373.2	12300.4	13366.7	13336.1	14199.1	16504.4
50°	13681.3	13670.2	13191.3	13002.0	13082.7	13208.0	14483.1	15181.9	14744.8	15722.1	17810.2
52.5°	14644.6	14711.4	14547.2	14516.5	14928.6	15145.8	16699.3	16958.2	16006.1	17167.0	18787.4
55°	15407.5	15485.4	15674.7	15889.1	16682.6	16966.6	18845.9	18642.6	17061.2	18419.9	19349.8
57.5°	16487.7	16376.3	16668.7	17091.9	18375.4	18717.8	20925.6	20232.4	17910.4	19436.1	19411.1
60°	17799.0	17815.7	17865.9	18400.4	20065.3	20505.2	22974.8	21735.8	18456.1	20059.8	18731.7
62.5°	19374.9	19399.9	19502.9	20324.3	22334.4	22749.3	25157.5	22966.4	18706.7	19884.4	16977.7
65°	19266.3	19372.1	20521.9	23331.1	25784.0	26193.2	27705.0	23829.5	18328.0	18280.7	13823.3
67.5°	17551.3	17723.9	19647.7	26922.7	30984.8	31441.4	30784.3	23999.3	16693.7	14215.8	9017.8
70°	15301.7	15362.9	17676.5	30152.3	37006.9	37469.0	33540.6	22131.2	12667.9	7929.2	4039.8
72.5°	11949.6	11963.5	14678.0	30901.2	40275.4	40300.5	31377.3	16429.2	6812.8	3045.9	1403.2
75°	8536.2	8452.7	9830.8	25060.1	35433.8	35717.8	23523.2	7706.5	2603.2	1439.4	698.8
77.5°	4577.1	4669.0	5562.7	14861.8	24478.2	24962.6	12834.9	2221.7	1325.3	980.0	462.2
80°	1414.3	1492.3	2280.2	6804.5	13865.0	14157.4	4758.1	988.4	924.3	698.8	303.5
82.5°	445.5	462.2	1063.5	2859.3	5754.8	5888.5	1378.2	559.6	632.0	462.2	178.2
85°	128.1	130.9	473.3	1066.3	1422.7	1450.5	387.0	217.2	361.9	286.8	91.9
87.5°	13.9	44.5	178.2	178.2	125.3	122.5	41.8	47.3	103.0	36.2	16.7
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°	5507.0	5507.0	5507.0	5507.0	5507.0	5507.0	5507.0	5507.0	5507.0	5507.0	5507.0
2.5°	5518.2	5521.0	5484.8	5423.5	5356.7	5301.0	5231.4	5175.7	5136.7	5125.6	5145.1
5°	5557.2	5537.7	5434.7	5248.1	5025.4	4833.3	4618.9	4449.1	4337.7	4290.4	4307.1
7.5°	5615.6	5559.9	5334.4	4966.9	4540.9	4162.3	3778.1	3480.2	3290.9	3196.2	3210.1
10°	5665.7	5554.4	5167.4	4560.4	3908.9	3335.4	2817.6	2458.4	2257.9	2163.3	2166.1
12.5°	5713.1	5551.6	4950.2	4078.8	3196.2	2494.6	2012.9	1834.8	1779.1	1759.6	1754.0
15°	5802.2	5559.9	4677.4	3527.5	2486.2	1884.9	1709.5	1706.7	1717.8	1712.2	1709.5
17.5°	5924.7	5568.3	4368.3	2942.8	1918.3	1662.1	1653.8	1678.8	1695.5	1687.2	1684.4
20°	6083.4	5601.7	4039.8	2363.7	1648.2	1606.5	1625.9	1648.2	1662.1	1648.2	1645.4
22.5°	6306.1	5660.2	3680.6	1898.8	1561.9	1573.0	1589.7	1614.8	1628.7	1609.2	1606.5
25°	6578.9	5752.0	3327.1	1651.0	1520.1	1534.1	1559.1	1587.0	1603.7	1584.2	1581.4
27.5°	6932.5	5899.6	3001.3	1595.3	1478.4	1486.7	1522.9	1564.7	1587.0	1561.9	1561.9
30°	7444.8	6141.8	2720.1	1620.4	1453.3	1433.8	1483.9	1542.4	1567.5	1545.2	1542.4
32.5°	8124.1	6484.3	2547.5	1659.4	1442.2	1372.6	1419.9	1495.1	1536.8	1522.9	1522.9
35°	9015.1	7004.9	2480.7	1703.9	1433.8	1308.5	1342.0	1422.7	1495.1	1509.0	1509.0
37.5°	10095.3	7728.8	2500.2	1723.4	1408.8	1255.6	1272.4	1342.0	1436.6	1481.2	1492.3
40°	11323.1	8572.4	2611.5	1703.9	1380.9	1211.1	1213.9	1266.8	1350.3	1417.1	1439.4
42.5°	12589.9	9558.0	2817.6	1631.5	1355.9	1172.1	1163.8	1200.0	1255.6	1303.0	1322.5
45°	13795.4	10571.4	3020.8	1531.3	1325.3	1133.1	1113.7	1127.6	1138.7	1158.2	1169.3
47.5°	14847.8	11284.1	2962.3	1439.4	1283.5	1088.6	1055.2	1049.6	1016.2	1013.4	1010.6
50°	15574.5	11440.1	2631.0	1347.5	1222.2	1038.5	985.6	952.2	893.7	865.9	868.7
52.5°	15805.6	10824.8	2149.4	1255.6	1122.0	971.7	896.5	843.6	771.2	746.2	743.4
55°	15499.3	9619.2	1717.8	1144.3	982.8	882.6	799.0	729.4	671.0	640.4	640.4
57.5°	14750.4	8085.2	1358.7	1013.4	835.2	782.3	698.8	629.2	579.1	548.5	542.9
60°	13508.7	6420.2	1074.7	857.5	712.7	673.8	587.5	542.9	498.4	462.2	453.8
62.5°	11623.8	4582.7	843.6	679.3	595.8	551.3	501.1	467.7	414.8	364.7	356.4
65°	9070.7	2803.6	651.5	498.4	478.9	456.6	426.0	395.3	331.3	281.2	272.8
67.5°	5721.4	1328.0	465.0	375.9	378.6	367.5	353.6	328.5	281.2	236.7	231.1
70°	2519.7	643.1	306.3	286.8	281.2	281.2	292.3	284.0	239.4	197.7	189.3
72.5°	857.5	345.2	228.3	217.2	203.2	200.5	245.0	236.7	192.1	153.1	144.8
75°	448.2	231.1	167.0	155.9	122.5	147.6	194.9	183.8	136.4	100.2	91.9
77.5°	292.3	164.3	114.1	100.2	69.6	97.4	144.8	128.1	80.7	50.1	44.5
80°	183.8	108.6	66.8	47.3	33.4	52.9	78.0	55.7	30.6	11.1	8.4
82.5°	97.4	55.7	25.1	16.7	13.9	16.7	19.5	13.9	5.6	0.0	0.0
85°	39.0	19.5	8.4	5.6	2.8	0.0	5.6	2.8	0.0	0.0	0.0
87.5°	13.9	2.8	0.0	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)