

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: P882940

Luminaire Tested: **NAV-SB3A-750-U-T4FT-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882940
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-SB3A-750-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 5000K, 350mA 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: 10983 lumens
Efficiency: N/A
Efficacy: 129.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

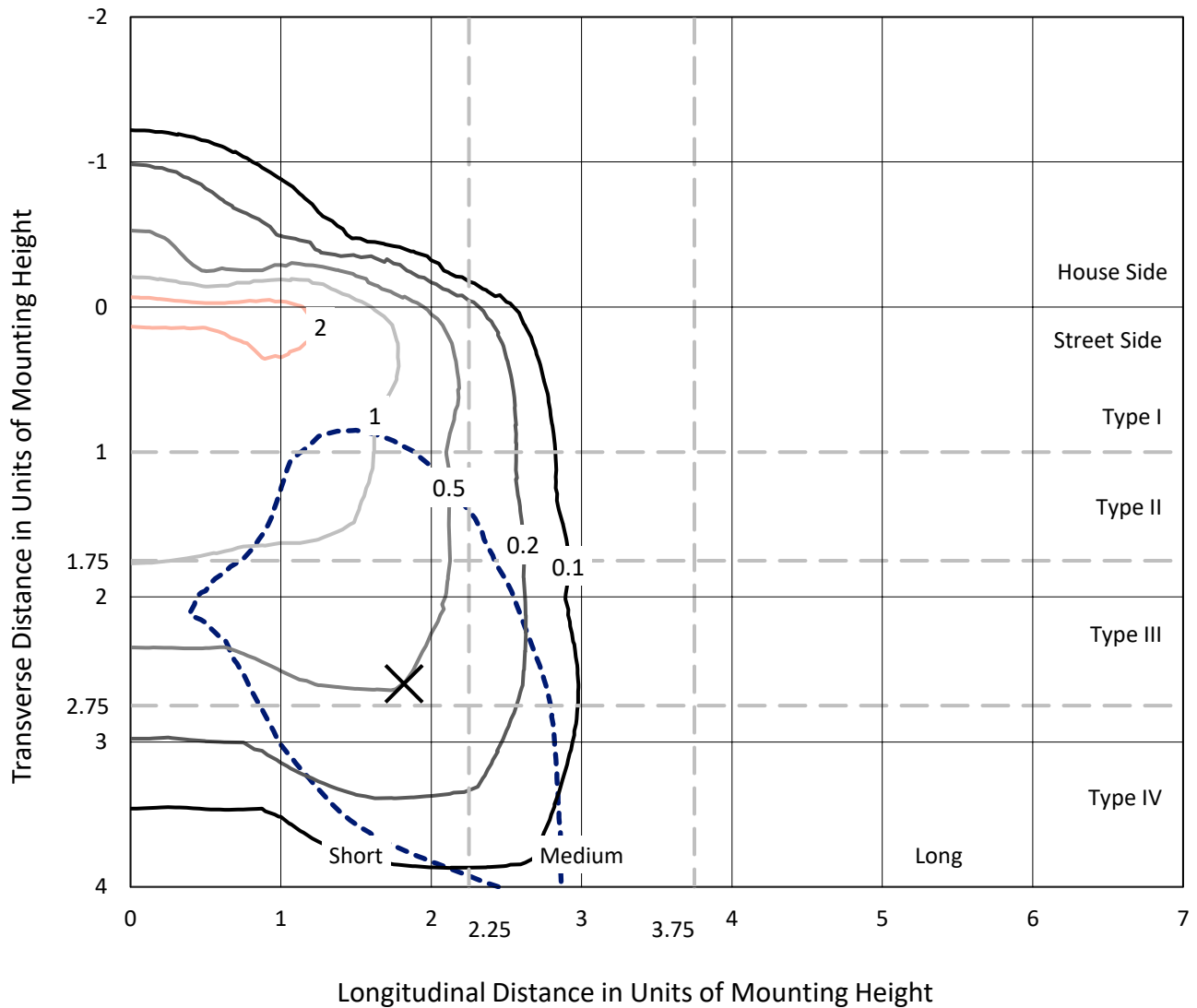
Input Watts (W): 84.7
Input Voltage (V): 120.0
Input Current (Ain): 0.717
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

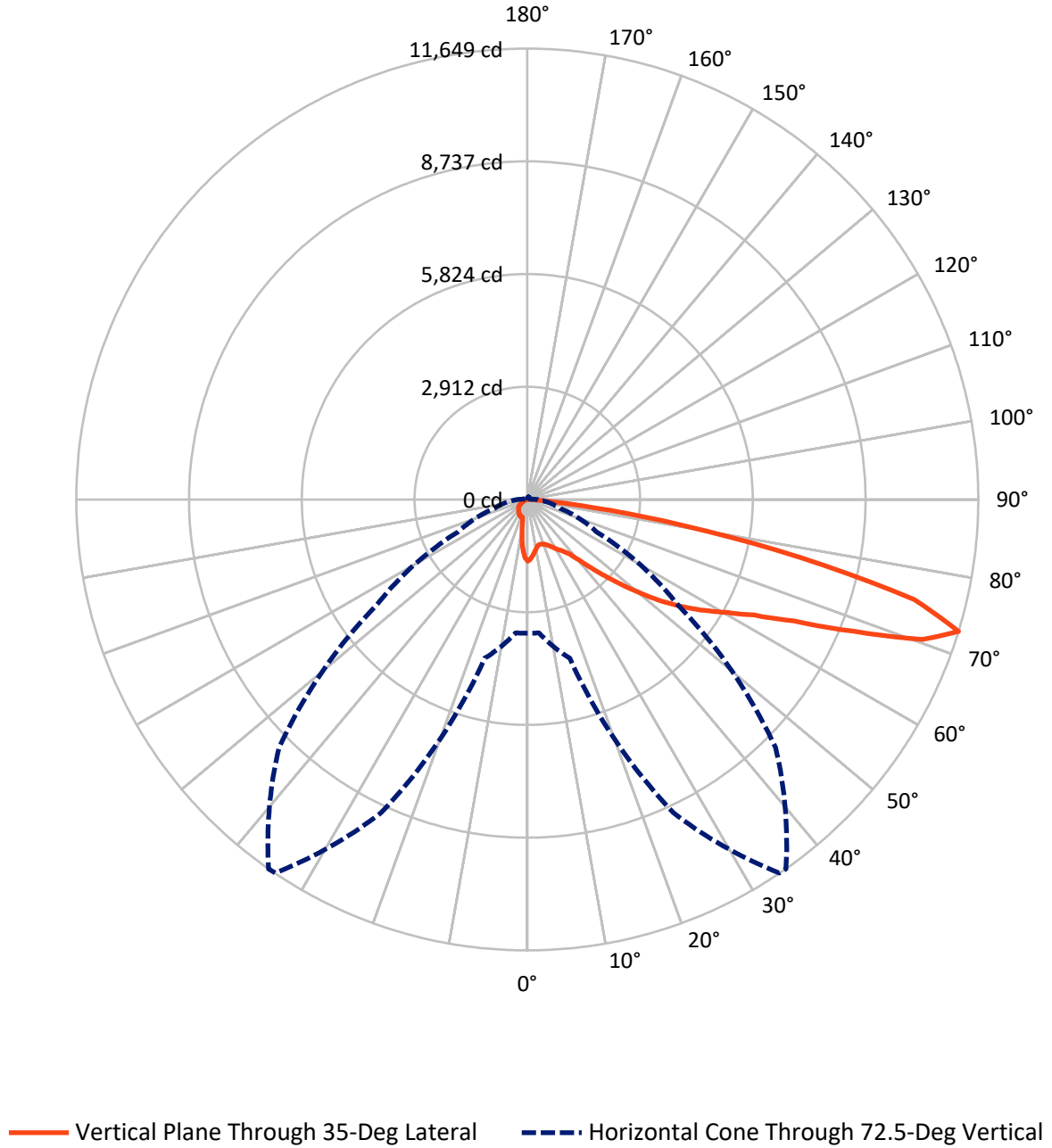
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 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	1236.1	0.0	1236.1
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	9746.9	0.0	9746.9
	% Fixture	88.7	0.0	88.7
Total	Lumens	10983.0	0.0	10983.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.8	1.2
10°-20°	306.0	2.8
20°-30°	497.1	4.5
30°-40°	829.4	7.6
40°-50°	1569.2	14.3
50°-60°	2493.5	22.7
60°-70°	3084.6	28.1
70°-80°	1917.4	17.5
80°-90°	155.0	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°	10983.0	100.0
0°-180°	10983.0	100.0

Coefficient of Utilization



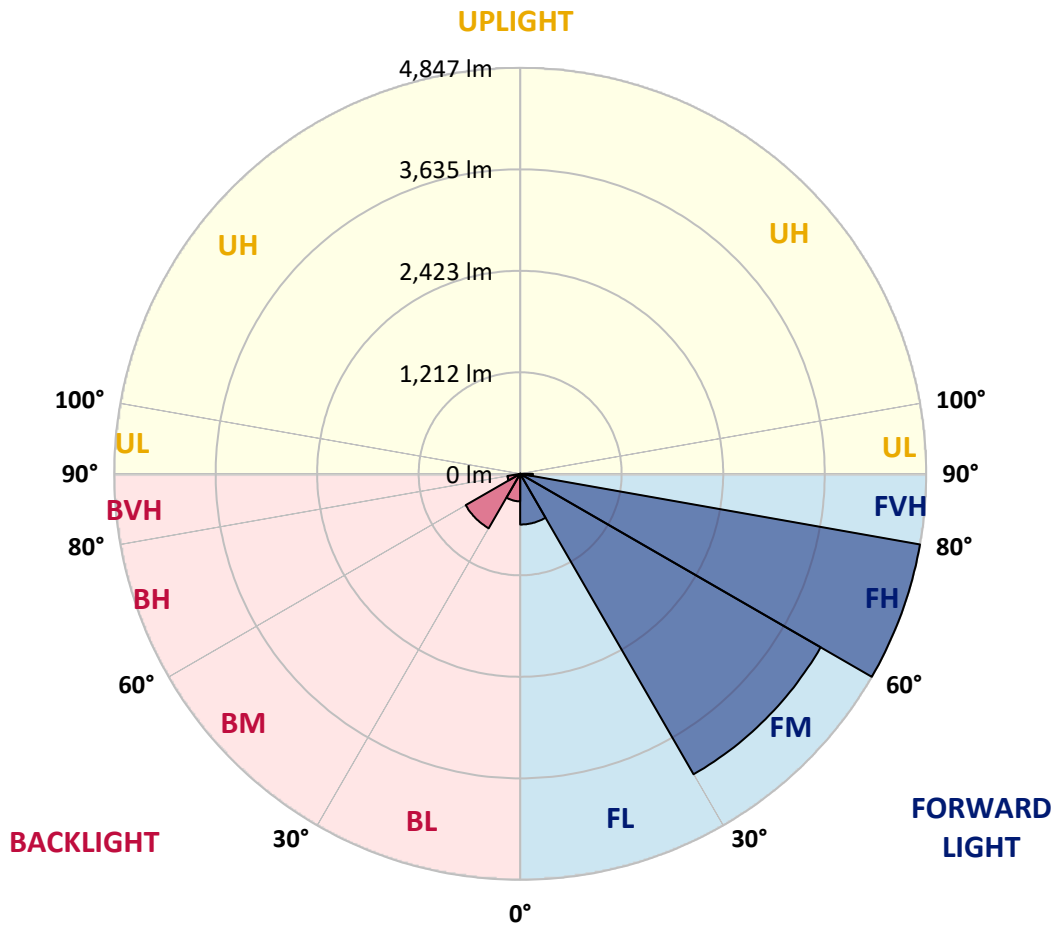
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	605.4	5.5			
FM (30°-60°)	4141.7	37.7			
FH (60°-80°)	4846.9	44.1			G2/5000
FVH (80°-90°)	152.9	1.4			G2/225
BL (0°-30°)	328.5	3.0	B1/500		
BM (30°-60°)	750.4	6.8	B1/1000		
BH (60°-80°)	155.1	1.4	B1/500		G1/500
BVH (80°-90°)	2.1	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	1591.8	1591.8	1591.8	1591.8	1591.8	1591.8	1591.8	1591.8	1591.8	1591.8	1591.8
2.5°	1521.0	1533.9	1536.3	1540.3	1540.3	1545.1	1553.2	1564.4	1583.0	1592.6	1599.0
5°	1401.9	1411.5	1423.6	1433.3	1451.8	1454.2	1485.6	1516.2	1558.8	1591.0	1613.5
7.5°	1282.0	1293.2	1309.3	1332.7	1356.8	1364.1	1411.5	1463.0	1530.6	1591.0	1628.8
10°	1197.5	1198.3	1212.8	1236.1	1274.7	1283.6	1341.5	1414.8	1499.3	1581.3	1643.3
12.5°	1150.0	1155.6	1162.1	1179.8	1216.8	1222.4	1284.4	1370.5	1467.9	1575.7	1660.2
15°	1150.0	1154.0	1158.0	1166.9	1196.7	1201.5	1256.2	1342.3	1451.8	1578.1	1687.6
17.5°	1162.1	1168.5	1165.3	1175.7	1207.1	1210.4	1258.6	1334.3	1451.0	1593.4	1729.4
20°	1191.0	1195.9	1189.4	1195.9	1227.3	1233.7	1283.6	1349.6	1464.7	1620.0	1781.7
22.5°	1236.9	1239.3	1224.0	1228.9	1261.1	1269.1	1327.0	1393.0	1497.6	1662.6	1851.7
25°	1294.9	1299.7	1276.3	1282.0	1312.6	1322.2	1389.0	1458.2	1550.0	1721.4	1941.1
27.5°	1361.6	1364.1	1343.9	1343.1	1382.6	1396.2	1463.8	1538.7	1620.0	1795.4	2053.7
30°	1438.1	1445.3	1426.0	1422.8	1472.7	1484.0	1550.8	1637.7	1723.0	1906.5	2213.9
32.5°	1498.5	1504.1	1492.8	1500.9	1551.6	1560.4	1656.2	1777.7	1884.7	2064.2	2432.0
35°	1585.4	1588.6	1562.8	1577.3	1635.3	1657.8	1800.2	1974.1	2088.3	2262.2	2716.9
37.5°	1900.0	1900.0	1790.6	1719.0	1774.5	1794.6	1997.4	2221.1	2339.4	2527.7	3075.8
40°	2335.4	2328.2	2168.0	2021.5	2014.3	2053.7	2278.3	2532.6	2663.7	2846.4	3479.8
42.5°	2799.7	2788.5	2570.4	2425.5	2401.4	2415.1	2602.6	2916.4	3050.0	3235.1	3914.3
45°	3211.8	3208.6	3009.0	2814.2	2770.8	2814.2	3007.4	3365.5	3461.3	3656.0	4348.1
47.5°	3557.0	3557.0	3411.4	3284.2	3261.7	3287.4	3555.4	3863.6	3854.8	4104.2	4770.6
50°	3954.6	3951.3	3812.9	3758.2	3781.5	3817.8	4186.3	4388.3	4262.0	4544.5	5148.0
52.5°	4233.0	4252.3	4204.8	4196.0	4315.1	4377.9	4826.9	4901.8	4626.5	4962.1	5430.5
55°	4453.5	4476.0	4530.8	4592.7	4822.1	4904.2	5447.4	5388.6	4931.5	5324.3	5593.0
57.5°	4765.8	4733.6	4818.1	4940.4	5311.4	5410.4	6048.5	5848.2	5177.0	5618.0	5610.8
60°	5144.8	5149.6	5164.1	5318.6	5799.9	5927.0	6640.8	6282.7	5334.7	5798.3	5414.4
62.5°	5600.3	5607.5	5637.3	5874.7	6455.7	6575.7	7271.8	6638.4	5407.1	5747.6	4907.4
65°	5568.9	5599.5	5931.8	6743.8	7452.8	7571.1	8008.1	6887.9	5297.7	5284.0	3995.6
67.5°	5073.2	5123.1	5679.2	7782.0	8956.1	9088.1	8898.2	6937.0	4825.3	4109.1	2606.6
70°	4422.9	4440.6	5109.4	8715.5	10696.8	10830.4	9694.9	6397.0	3661.6	2291.9	1167.7
72.5°	3454.0	3458.0	4242.7	8932.0	11641.6	11648.8	9069.6	4748.9	1969.2	880.4	405.6
75°	2467.4	2443.2	2841.6	7243.6	10242.1	10324.2	6799.4	2227.6	752.4	416.1	202.0
77.5°	1323.0	1349.6	1607.9	4295.8	7075.4	7215.4	3709.9	642.2	383.1	283.3	133.6
80°	408.8	431.3	659.1	1966.8	4007.7	4092.2	1375.3	285.7	267.2	202.0	87.7
82.5°	128.8	133.6	307.4	826.5	1663.4	1702.1	398.4	161.8	182.7	133.6	51.5
85°	37.0	37.8	136.8	308.2	411.2	419.3	111.9	62.8	104.6	82.9	26.6
87.5°	4.0	12.9	51.5	51.5	36.2	35.4	12.1	13.7	29.8	10.5	4.8
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°	1591.8	1591.8	1591.8	1591.8	1591.8	1591.8	1591.8	1591.8	1591.8	1591.8	1591.8
2.5°	1595.0	1595.8	1585.4	1567.7	1548.3	1532.3	1512.1	1496.0	1484.8	1481.6	1487.2
5°	1606.3	1600.7	1570.9	1517.0	1452.6	1397.1	1335.1	1286.0	1253.8	1240.1	1245.0
7.5°	1623.2	1607.1	1541.9	1435.7	1312.6	1203.1	1092.1	1005.9	951.2	923.9	927.9
10°	1637.7	1605.5	1493.6	1318.2	1129.9	964.1	814.4	710.6	652.7	625.3	626.1
12.5°	1651.4	1604.7	1430.9	1179.0	923.9	721.1	581.8	530.3	514.2	508.6	507.0
15°	1677.1	1607.1	1352.0	1019.6	718.6	544.8	494.1	493.3	496.5	494.9	494.1
17.5°	1712.5	1609.5	1262.7	850.6	554.5	480.4	478.0	485.3	490.1	487.7	486.9
20°	1758.4	1619.2	1167.7	683.2	476.4	464.3	470.0	476.4	480.4	476.4	475.6
22.5°	1822.8	1636.1	1063.9	548.8	451.5	454.7	459.5	466.8	470.8	465.1	464.3
25°	1901.6	1662.6	961.7	477.2	439.4	443.4	450.7	458.7	463.5	457.9	457.1
27.5°	2003.8	1705.3	867.5	461.1	427.3	429.7	440.2	452.3	458.7	451.5	451.5
30°	2151.9	1775.3	786.2	468.4	420.1	414.4	428.9	445.8	453.1	446.6	445.8
32.5°	2348.3	1874.3	736.4	479.6	416.9	396.7	410.4	432.2	444.2	440.2	440.2
35°	2605.8	2024.8	717.0	492.5	414.4	378.2	387.9	411.2	432.2	436.2	436.2
37.5°	2918.0	2234.0	722.7	498.1	407.2	362.9	367.8	387.9	415.3	428.1	431.3
40°	3272.9	2477.8	754.9	492.5	399.2	350.1	350.9	366.2	390.3	409.6	416.1
42.5°	3639.1	2762.7	814.4	471.6	391.9	338.8	336.4	346.8	362.9	376.6	382.3
45°	3987.6	3055.7	873.2	442.6	383.1	327.5	321.9	325.9	329.1	334.8	338.0
47.5°	4291.8	3261.7	856.3	416.1	371.0	314.7	305.0	303.4	293.7	292.9	292.1
50°	4501.8	3306.7	760.5	389.5	353.3	300.2	284.9	275.2	258.3	250.3	251.1
52.5°	4568.6	3128.9	621.3	362.9	324.3	280.9	259.1	243.8	222.9	215.7	214.9
55°	4480.1	2780.4	496.5	330.8	284.1	255.1	231.0	210.8	193.9	185.1	185.1
57.5°	4263.6	2337.0	392.7	292.9	241.4	226.1	202.0	181.9	167.4	158.5	156.9
60°	3904.7	1855.8	310.6	247.9	206.0	194.8	169.8	156.9	144.1	133.6	131.2
62.5°	3359.9	1324.6	243.8	196.4	172.2	159.3	144.9	135.2	119.9	105.4	103.0
65°	2621.9	810.4	188.3	144.1	138.4	132.0	123.1	114.3	95.8	81.3	78.9
67.5°	1653.8	383.9	134.4	108.6	109.4	106.2	102.2	95.0	81.3	68.4	66.8
70°	728.3	185.9	88.5	82.9	81.3	81.3	84.5	82.1	69.2	57.1	54.7
72.5°	247.9	99.8	66.0	62.8	58.7	57.9	70.8	68.4	55.5	44.3	41.8
75°	129.6	66.8	48.3	45.1	35.4	42.7	56.3	53.1	39.4	29.0	26.6
77.5°	84.5	47.5	33.0	29.0	20.1	28.2	41.8	37.0	23.3	14.5	12.9
80°	53.1	31.4	19.3	13.7	9.7	15.3	22.5	16.1	8.9	3.2	2.4
82.5°	28.2	16.1	7.2	4.8	4.0	4.8	5.6	4.0	1.6	0.0	0.0
85°	11.3	5.6	2.4	1.6	0.8	0.0	1.6	0.8	0.0	0.0	0.0
87.5°	4.0	0.8	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)