

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: P964205

Luminaire Tested: **NAV-SB3B-830-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964205
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-830-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11781.4 lumens
Efficiency: N/A
Efficacy: 107.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

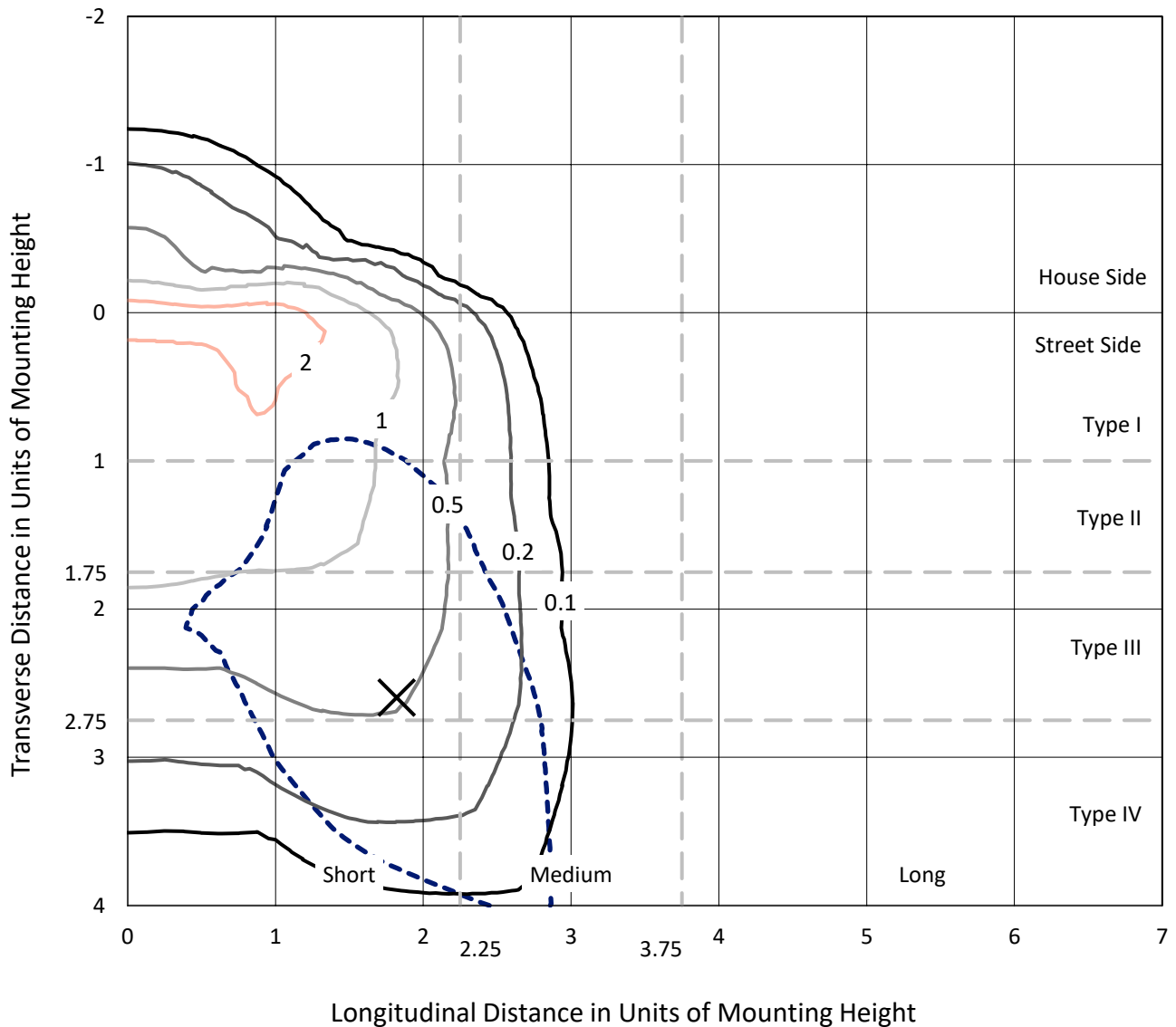
Input Watts (W): 109.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

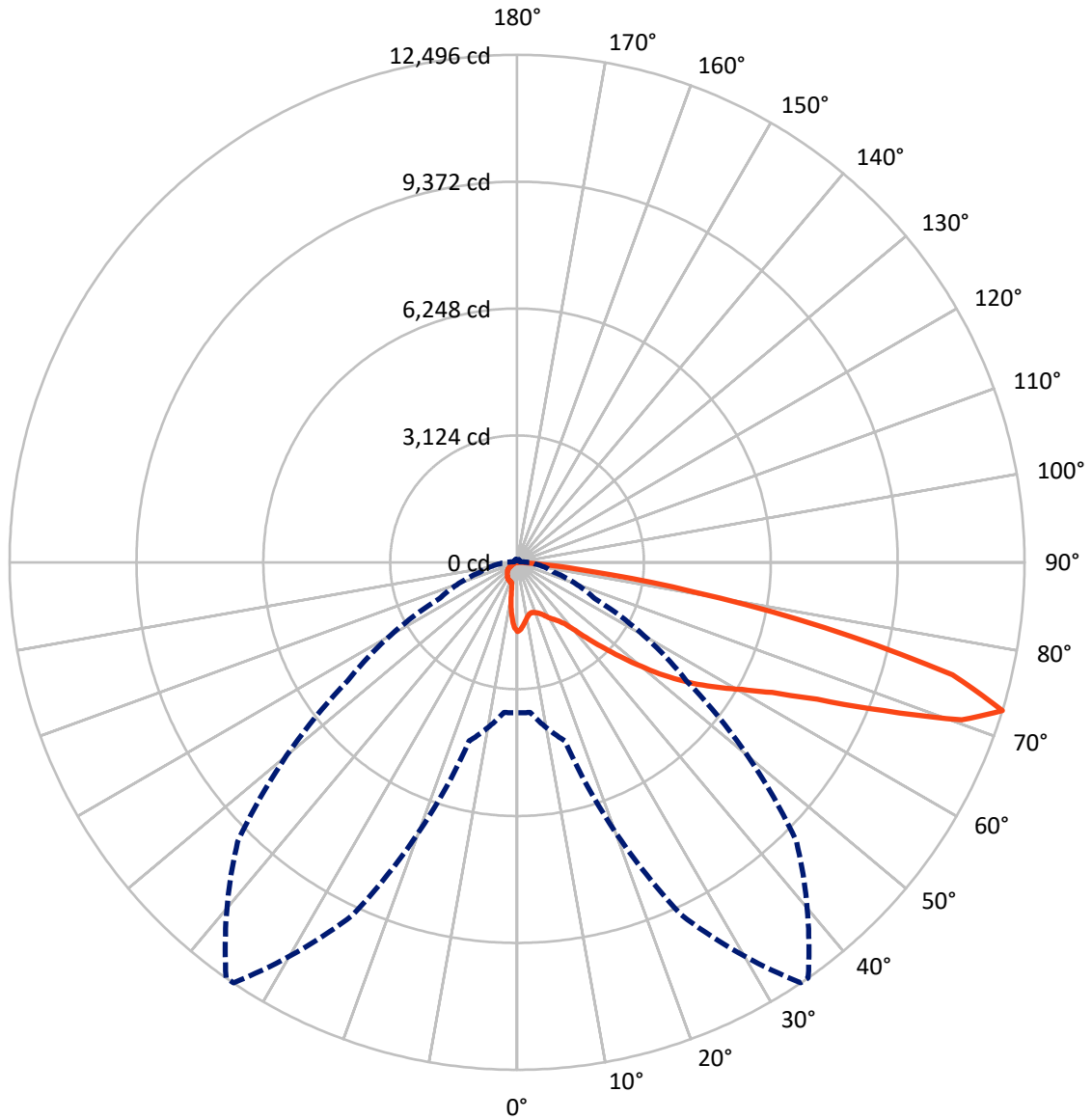
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1325.9	0.0	1325.9
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	10455.4	0.0	10455.4
	% Fixture	88.7	0.0	88.7
Total	Lumens	11781.4	0.0	11781.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.3	1.2
10°-20°	328.2	2.8
20°-30°	533.2	4.5
30°-40°	889.7	7.6
40°-50°	1683.3	14.3
50°-60°	2674.7	22.7
60°-70°	3308.8	28.1
70°-80°	2056.8	17.5
80°-90°	166.2	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°	11781.4	100.0
0°-180°	11781.4	100.0

Coefficient of Utilization



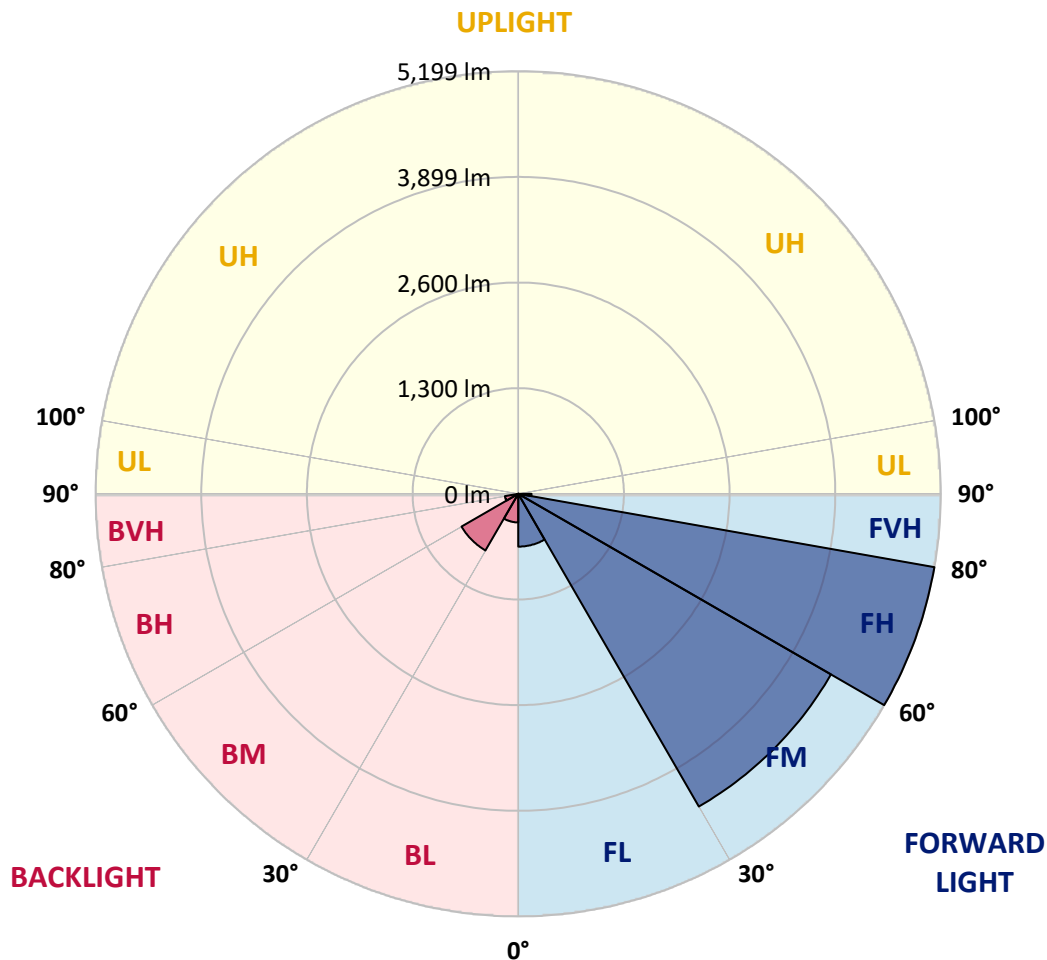
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	649.5	5.5			
FM (30°-60°)	4442.7	37.7			
FH (60°-80°)	5199.3	44.1			G3/7500
FVH (80°-90°)	164.0	1.4			G2/225
BL (0°-30°)	352.3	3.0	B1/500		
BM (30°-60°)	805.0	6.8	B1/1000		
BH (60°-80°)	166.4	1.4	B1/500		G1/500
BVH (80°-90°)	2.3	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	1707.5	1707.5	1707.5	1707.5	1707.5	1707.5	1707.5	1707.5	1707.5	1707.5	1707.5
2.5°	1631.6	1645.3	1648.0	1652.3	1652.3	1657.4	1666.0	1678.1	1698.0	1708.4	1715.2
5°	1503.8	1514.1	1527.0	1537.5	1557.3	1559.9	1593.6	1626.4	1672.1	1706.6	1730.8
7.5°	1375.1	1387.2	1404.6	1429.6	1455.4	1463.2	1514.1	1569.4	1641.9	1706.6	1747.2
10°	1284.5	1285.4	1300.9	1325.9	1367.4	1376.9	1439.0	1517.6	1608.2	1696.3	1762.8
12.5°	1233.6	1239.6	1246.5	1265.6	1305.2	1311.3	1377.7	1470.2	1574.6	1690.2	1780.9
15°	1233.6	1237.9	1242.2	1251.7	1283.6	1288.8	1347.6	1439.9	1557.3	1692.8	1810.3
17.5°	1246.5	1253.5	1250.0	1261.3	1294.9	1298.4	1350.1	1431.3	1556.5	1709.3	1855.1
20°	1277.7	1282.8	1275.9	1282.8	1316.5	1323.4	1376.9	1447.7	1571.1	1737.7	1911.2
22.5°	1326.9	1329.4	1313.0	1318.1	1352.7	1361.3	1423.5	1494.2	1606.5	1783.5	1986.3
25°	1389.0	1394.1	1369.1	1375.1	1407.9	1418.3	1489.9	1564.3	1662.7	1846.5	2082.2
27.5°	1460.6	1463.2	1441.7	1440.7	1483.1	1497.7	1570.3	1650.6	1737.7	1925.9	2203.0
30°	1542.6	1550.4	1529.7	1526.2	1579.7	1591.8	1663.5	1756.7	1848.2	2045.1	2374.8
32.5°	1607.4	1613.5	1601.4	1610.0	1664.4	1673.8	1776.5	1906.9	2021.7	2214.2	2608.7
35°	1700.6	1704.1	1676.4	1692.0	1754.1	1778.3	1931.1	2117.5	2240.1	2426.6	2914.4
37.5°	2038.1	2038.1	1920.7	1843.9	1903.4	1925.1	2142.6	2382.6	2509.5	2711.4	3299.4
40°	2505.2	2497.4	2325.6	2168.5	2160.7	2203.0	2443.9	2716.7	2857.4	3053.4	3732.7
42.5°	3003.2	2991.2	2757.2	2601.9	2575.9	2590.6	2791.8	3128.4	3271.7	3470.2	4198.8
45°	3445.2	3441.7	3227.7	3018.8	2972.2	3018.8	3226.0	3610.2	3712.9	3921.8	4664.2
47.5°	3815.6	3815.6	3659.4	3522.9	3498.7	3526.4	3813.8	4144.5	4135.0	4402.6	5117.3
50°	4242.1	4238.6	4090.1	4031.4	4056.4	4095.3	4490.6	4707.3	4571.8	4874.8	5522.2
52.5°	4540.8	4561.5	4510.5	4501.0	4628.8	4696.1	5177.8	5258.0	4962.8	5322.8	5825.2
55°	4777.2	4801.4	4860.1	4926.6	5172.6	5260.6	5843.3	5780.4	5290.0	5711.3	5999.6
57.5°	5112.2	5077.6	5168.3	5299.5	5697.5	5803.7	6488.2	6273.2	5553.3	6026.4	6018.6
60°	5518.8	5523.9	5539.5	5705.3	6221.4	6357.9	7123.5	6739.4	5722.5	6219.7	5808.0
62.5°	6007.3	6015.1	6047.1	6301.7	6925.0	7053.6	7800.4	7121.0	5800.2	6165.4	5264.1
65°	5973.7	6006.5	6363.0	7234.0	7994.6	8121.5	8590.2	7388.6	5682.8	5668.1	4286.0
67.5°	5441.9	5495.4	6092.0	8347.6	9607.1	9748.7	9545.0	7441.2	5176.0	4407.8	2796.1
70°	4744.4	4763.4	5480.8	9349.0	11474.4	11617.7	10399.5	6862.0	3927.8	2458.6	1252.6
72.5°	3705.1	3709.4	4551.1	9581.2	12487.8	12495.6	9728.9	5094.0	2112.4	944.4	435.1
75°	2646.8	2620.8	3048.1	7770.1	10986.6	11074.6	7293.6	2389.5	807.2	446.3	216.7
77.5°	1419.2	1447.7	1724.8	4608.0	7589.7	7739.9	3979.6	688.9	410.9	303.9	143.3
80°	438.5	462.7	707.0	2109.8	4299.0	4389.7	1475.3	306.5	286.6	216.7	94.1
82.5°	138.2	143.3	329.7	886.5	1784.3	1825.7	427.3	173.5	196.0	143.3	55.2
85°	39.7	40.6	146.8	330.7	441.2	449.8	120.0	67.3	112.2	88.9	28.5
87.5°	4.3	13.8	55.2	55.2	38.8	38.0	12.9	14.7	32.0	11.2	5.2
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°	1707.5	1707.5	1707.5	1707.5	1707.5	1707.5	1707.5	1707.5	1707.5	1707.5	1707.5
2.5°	1710.9	1711.9	1700.6	1681.6	1660.9	1643.6	1622.1	1604.7	1592.7	1589.3	1595.3
5°	1723.0	1717.0	1685.1	1627.2	1558.2	1498.7	1432.1	1379.4	1344.9	1330.2	1335.5
7.5°	1741.2	1723.9	1653.9	1540.1	1407.9	1290.6	1171.5	1079.0	1020.4	991.0	995.4
10°	1756.7	1722.2	1602.2	1414.0	1212.0	1034.2	873.6	762.3	700.1	670.8	671.6
12.5°	1771.4	1721.3	1534.8	1264.6	991.0	773.5	624.1	568.9	551.7	545.6	543.9
15°	1799.0	1723.9	1450.3	1093.8	770.9	584.5	530.0	529.2	532.6	530.9	530.0
17.5°	1837.0	1726.5	1354.4	912.5	594.8	515.4	512.8	520.5	525.7	523.2	522.2
20°	1886.2	1736.9	1252.6	732.9	511.1	498.0	504.1	511.1	515.4	511.1	510.1
22.5°	1955.3	1755.0	1141.2	588.8	484.3	487.7	492.9	500.7	505.0	499.0	498.0
25°	2039.9	1783.5	1031.6	511.9	471.3	475.7	483.4	492.1	497.2	491.2	490.4
27.5°	2149.5	1829.2	930.6	494.7	458.4	460.9	472.2	485.1	492.1	484.3	484.3
30°	2308.3	1904.3	843.4	502.5	450.6	444.5	460.1	478.3	486.1	479.1	478.3
32.5°	2518.9	2010.5	789.9	514.4	447.2	425.6	440.2	463.6	476.5	472.2	472.2
35°	2795.2	2172.0	769.2	528.3	444.5	405.7	416.0	441.2	463.6	467.9	467.9
37.5°	3130.1	2396.3	775.2	534.3	436.9	389.3	394.5	416.0	445.5	459.2	462.7
40°	3510.8	2657.9	809.7	528.3	428.1	375.6	376.4	392.8	418.7	439.4	446.3
42.5°	3903.6	2963.6	873.6	505.8	420.5	363.5	360.8	372.1	389.3	404.0	410.0
45°	4277.4	3277.7	936.6	474.8	410.9	351.4	345.3	349.6	353.1	359.2	362.5
47.5°	4603.7	3498.7	918.5	446.3	398.0	337.5	327.2	325.4	315.1	314.3	313.3
50°	4829.1	3547.1	815.8	417.8	378.9	322.0	305.6	295.2	277.1	268.4	269.4
52.5°	4900.7	3356.4	666.5	389.3	347.9	301.2	278.0	261.6	239.1	231.3	230.5
55°	4805.7	2982.5	532.6	354.8	304.7	273.7	247.7	226.2	208.1	198.5	198.5
57.5°	4573.5	2506.8	421.3	314.3	259.0	242.6	216.7	195.1	179.6	170.0	168.3
60°	4188.5	1990.7	333.2	265.9	221.0	208.9	182.1	168.3	154.6	143.3	140.7
62.5°	3604.1	1421.0	261.6	210.6	184.7	171.0	155.4	145.0	128.6	113.1	110.5
65°	2812.5	869.3	202.0	154.6	148.5	141.6	132.1	122.6	102.7	87.2	84.6
67.5°	1774.0	411.7	144.1	116.5	117.4	114.0	109.7	101.9	87.2	73.4	71.6
70°	781.3	199.4	94.9	88.9	87.2	87.2	90.6	88.0	74.2	61.3	58.7
72.5°	265.9	107.0	70.8	67.3	63.0	62.1	76.0	73.4	59.6	47.5	44.9
75°	139.0	71.6	51.8	48.4	38.0	45.7	60.5	57.0	42.3	31.1	28.5
77.5°	90.6	50.9	35.4	31.1	21.6	30.2	44.9	39.7	25.0	15.6	13.8
80°	57.0	33.6	20.7	14.7	10.4	16.4	24.2	17.2	9.5	3.5	2.6
82.5°	30.2	17.2	7.8	5.2	4.3	5.2	6.0	4.3	1.7	0.0	0.0
85°	12.1	6.0	2.6	1.7	0.8	0.0	1.7	0.8	0.0	0.0	0.0
87.5°	4.3	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)