

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: P883140

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

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883140
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-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: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11190 lumens
Efficiency: N/A
Efficacy: 102.5 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

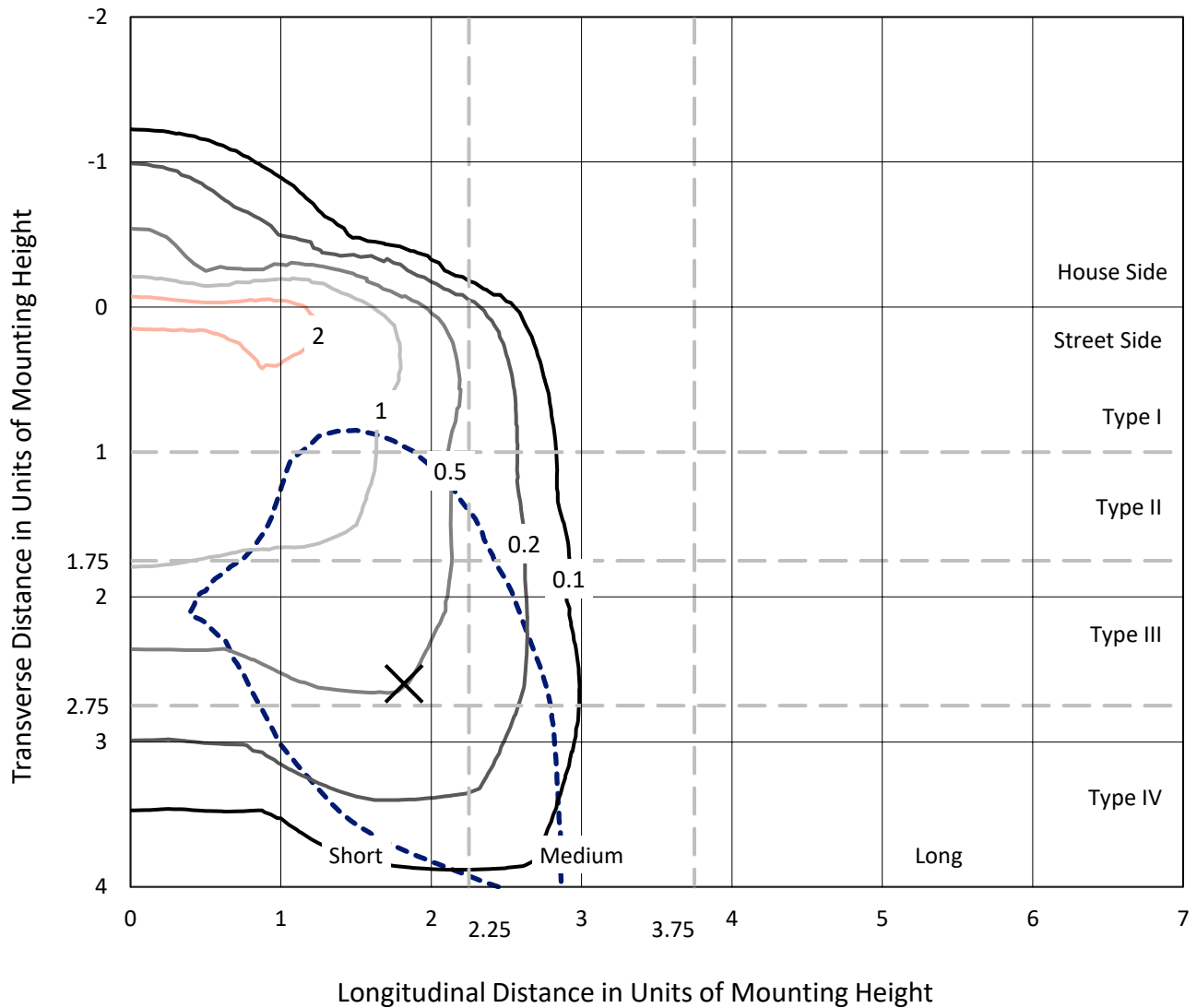
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

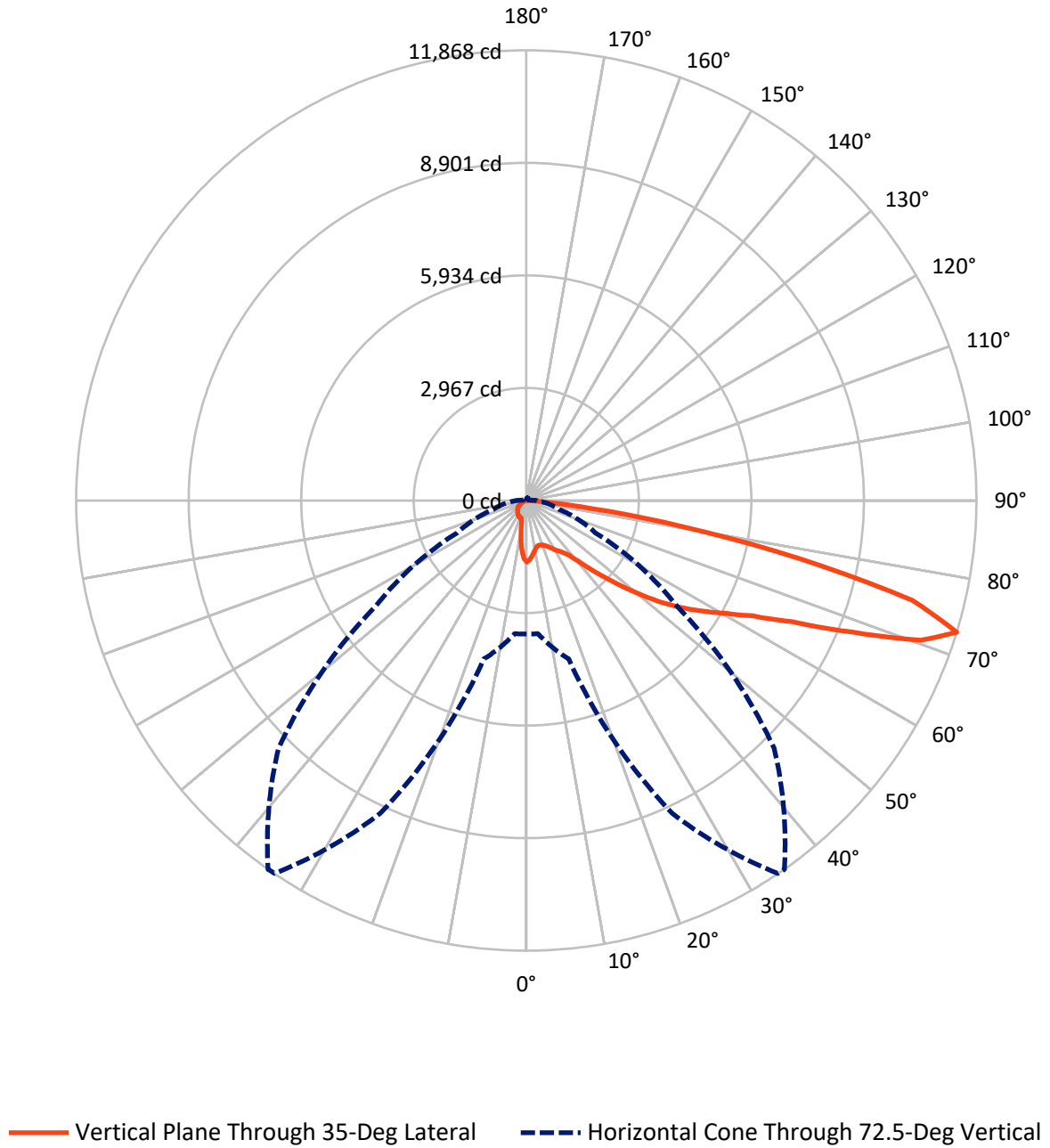
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 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	1259.4	0.0	1259.4
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	9930.6	0.0	9930.6
	% Fixture	88.7	0.0	88.7
Total	Lumens	11190.0	0.0	11190.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.3	1.2
10°-20°	311.8	2.8
20°-30°	506.5	4.5
30°-40°	845.0	7.6
40°-50°	1598.8	14.3
50°-60°	2540.5	22.7
60°-70°	3142.8	28.1
70°-80°	1953.6	17.5
80°-90°	157.9	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°	11190.0	100.0
0°-180°	11190.0	100.0

Coefficient of Utilization



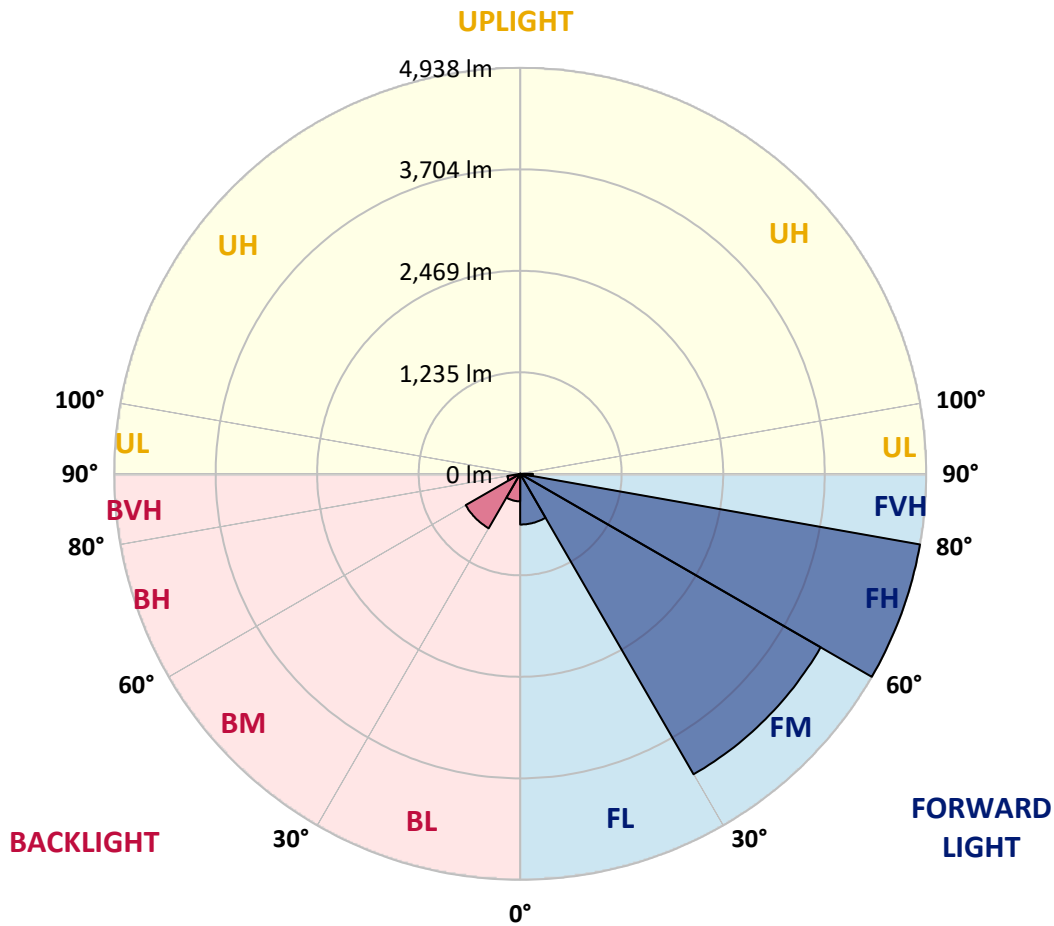
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	616.9	5.5			
FM (30°-60°)	4219.7	37.7			
FH (60°-80°)	4938.3	44.1			G2/5000
FVH (80°-90°)	155.7	1.4			G2/225
BL (0°-30°)	334.6	3.0	B1/500		
BM (30°-60°)	764.6	6.8	B1/1000		
BH (60°-80°)	158.0	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°	1621.8	1621.8	1621.8	1621.8	1621.8	1621.8	1621.8	1621.8	1621.8	1621.8	1621.8
2.5°	1549.7	1562.8	1565.2	1569.3	1569.3	1574.3	1582.4	1593.9	1612.8	1622.6	1629.2
5°	1428.3	1438.1	1450.4	1460.3	1479.1	1481.6	1513.6	1544.7	1588.2	1621.0	1643.9
7.5°	1306.1	1317.6	1334.0	1357.8	1382.4	1389.8	1438.1	1490.6	1559.5	1621.0	1659.5
10°	1220.0	1220.9	1235.6	1259.4	1298.8	1307.8	1366.8	1441.4	1527.5	1611.1	1674.3
12.5°	1171.7	1177.4	1184.0	1202.0	1239.7	1245.5	1308.6	1396.3	1495.5	1605.4	1691.5
15°	1171.7	1175.8	1179.9	1188.9	1219.2	1224.1	1279.9	1367.6	1479.1	1607.9	1719.4
17.5°	1184.0	1190.5	1187.2	1197.9	1229.9	1233.2	1282.4	1359.4	1478.3	1623.4	1762.0
20°	1213.5	1218.4	1211.8	1218.4	1250.4	1256.9	1307.8	1375.0	1492.3	1650.5	1815.3
22.5°	1260.2	1262.7	1247.1	1252.0	1284.8	1293.0	1352.1	1419.3	1525.9	1694.0	1886.6
25°	1319.3	1324.2	1300.4	1306.1	1337.3	1347.1	1415.2	1485.7	1579.2	1753.8	1977.7
27.5°	1387.3	1389.8	1369.3	1368.5	1408.6	1422.6	1491.4	1567.7	1650.5	1829.2	2092.4
30°	1465.2	1472.6	1452.9	1449.6	1500.5	1511.9	1580.0	1668.5	1755.5	1942.4	2255.6
32.5°	1526.7	1532.4	1521.0	1529.2	1580.8	1589.8	1687.4	1811.2	1920.3	2103.1	2477.8
35°	1615.2	1618.5	1592.3	1607.0	1666.1	1689.0	1834.2	2011.3	2127.7	2304.8	2768.1
37.5°	1935.8	1935.8	1824.3	1751.4	1807.9	1828.4	2035.0	2263.0	2383.5	2575.4	3133.7
40°	2379.4	2372.0	2208.9	2059.6	2052.3	2092.4	2321.2	2580.3	2713.9	2900.1	3545.3
42.5°	2852.5	2841.0	2618.8	2471.2	2446.6	2460.6	2651.6	2971.4	3107.5	3296.1	3988.1
45°	3272.3	3269.0	3065.7	2867.3	2823.0	2867.3	3064.0	3428.9	3526.5	3724.9	4430.0
47.5°	3624.1	3624.1	3475.7	3346.1	3323.1	3349.4	3622.4	3936.4	3927.4	4181.6	4860.5
50°	4029.1	4025.8	3884.8	3829.0	3852.8	3889.7	4265.2	4471.0	4342.3	4630.1	5245.0
52.5°	4312.8	4332.5	4284.1	4275.1	4396.4	4460.4	4917.9	4994.1	4713.7	5055.6	5532.8
55°	4537.4	4560.4	4616.2	4679.3	4913.0	4996.6	5550.1	5490.2	5024.5	5424.6	5698.5
57.5°	4855.6	4822.8	4908.9	5033.5	5411.5	5512.3	6162.5	5958.4	5274.6	5723.9	5716.5
60°	5241.8	5246.7	5261.4	5418.9	5909.2	6038.7	6766.0	6401.1	5435.3	5907.5	5516.4
62.5°	5705.8	5713.2	5743.6	5985.4	6577.4	6699.6	7408.8	6763.5	5509.1	5855.9	4999.9
65°	5673.9	5705.0	6043.6	6870.9	7593.3	7713.8	8159.0	7017.7	5397.5	5383.6	4070.9
67.5°	5168.8	5219.6	5786.2	7928.6	9124.9	9259.4	9065.9	7067.7	4916.3	4186.5	2655.7
70°	4506.3	4524.3	5205.7	8879.8	10898.4	11034.5	9877.6	6517.6	3730.6	2335.1	1189.7
72.5°	3519.1	3523.2	4322.6	9100.3	11861.0	11868.4	9240.5	4838.4	2006.3	897.0	413.2
75°	2513.9	2489.3	2895.1	7380.1	10435.2	10518.8	6927.5	2269.5	766.6	423.9	205.8
77.5°	1348.0	1375.0	1638.2	4376.7	7208.8	7351.4	3779.8	654.3	390.3	288.6	136.1
80°	416.5	439.5	671.5	2003.9	4083.2	4169.3	1401.2	291.1	272.2	205.8	89.4
82.5°	131.2	136.1	313.2	842.1	1694.8	1734.1	405.9	164.8	186.1	136.1	52.5
85°	37.7	38.5	139.4	314.0	419.0	427.2	114.0	64.0	106.6	84.5	27.1
87.5°	4.1	13.1	52.5	52.5	36.9	36.1	12.3	13.9	30.3	10.7	4.9
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°	1621.8	1621.8	1621.8	1621.8	1621.8	1621.8	1621.8	1621.8	1621.8	1621.8	1621.8
2.5°	1625.1	1625.9	1615.2	1597.2	1577.5	1561.1	1540.6	1524.2	1512.8	1509.5	1515.2
5°	1636.6	1630.8	1600.5	1545.6	1480.0	1423.4	1360.3	1310.2	1277.4	1263.5	1268.4
7.5°	1653.8	1637.4	1571.0	1462.7	1337.3	1225.8	1112.6	1024.9	969.1	941.3	945.4
10°	1668.5	1635.7	1521.8	1343.0	1151.2	982.3	829.8	724.0	665.0	637.1	637.9
12.5°	1682.5	1634.9	1457.8	1201.2	941.3	734.7	592.8	540.3	523.9	518.2	516.6
15°	1708.7	1637.4	1377.5	1038.8	732.2	555.1	503.4	502.6	505.9	504.3	503.4
17.5°	1744.8	1639.8	1286.5	866.7	564.9	489.5	487.0	494.4	499.3	496.9	496.1
20°	1791.5	1649.7	1189.7	696.1	485.4	473.1	478.8	485.4	489.5	485.4	484.6
22.5°	1857.1	1666.9	1083.9	559.2	460.0	463.3	468.2	475.6	479.7	473.9	473.1
25°	1937.5	1694.0	979.8	486.2	447.7	451.8	459.2	467.4	472.3	466.5	465.7
27.5°	2041.6	1737.4	883.9	469.8	435.4	437.8	448.5	460.8	467.4	460.0	460.0
30°	2192.5	1808.7	801.1	477.2	428.0	422.3	437.0	454.2	461.6	455.1	454.2
32.5°	2392.5	1909.6	750.2	488.7	424.7	404.2	418.2	440.3	452.6	448.5	448.5
35°	2654.9	2062.9	730.6	501.8	422.3	385.4	395.2	419.0	440.3	444.4	444.4
37.5°	2973.0	2276.1	736.3	507.5	414.9	369.8	374.7	395.2	423.1	436.2	439.5
40°	3334.6	2524.5	769.1	501.8	406.7	356.7	357.5	373.1	397.7	417.3	423.9
42.5°	3707.7	2814.8	829.8	480.5	399.3	345.2	342.7	353.4	369.8	383.7	389.5
45°	4062.7	3113.2	889.6	451.0	390.3	333.7	328.0	332.1	335.3	341.1	344.4
47.5°	4372.6	3323.1	872.4	423.9	378.0	320.6	310.8	309.1	299.3	298.5	297.6
50°	4586.6	3369.1	774.8	396.8	359.9	305.8	290.3	280.4	263.2	255.0	255.8
52.5°	4654.7	3187.9	633.0	369.8	330.4	286.2	264.0	248.4	227.1	219.7	218.9
55°	4564.5	2832.8	505.9	337.0	289.4	259.9	235.3	214.8	197.6	188.6	188.6
57.5°	4343.9	2381.1	400.1	298.5	246.0	230.4	205.8	185.3	170.5	161.5	159.9
60°	3978.3	1890.7	316.5	252.5	209.9	198.4	173.0	159.9	146.8	136.1	133.6
62.5°	3423.2	1349.6	248.4	200.1	175.5	162.3	147.6	137.7	122.2	107.4	105.0
65°	2671.3	825.7	191.9	146.8	141.0	134.5	125.4	116.4	97.6	82.8	80.4
67.5°	1684.9	391.1	136.9	110.7	111.5	108.2	104.1	96.8	82.8	69.7	68.1
70°	742.0	189.4	90.2	84.5	82.8	82.8	86.1	83.6	70.5	58.2	55.8
72.5°	252.5	101.7	67.2	64.0	59.9	59.0	72.2	69.7	56.6	45.1	42.6
75°	132.0	68.1	49.2	45.9	36.1	43.5	57.4	54.1	40.2	29.5	27.1
77.5°	86.1	48.4	33.6	29.5	20.5	28.7	42.6	37.7	23.8	14.8	13.1
80°	54.1	32.0	19.7	13.9	9.8	15.6	23.0	16.4	9.0	3.3	2.5
82.5°	28.7	16.4	7.4	4.9	4.1	4.9	5.7	4.1	1.6	0.0	0.0
85°	11.5	5.7	2.5	1.6	0.8	0.0	1.6	0.8	0.0	0.0	0.0
87.5°	4.1	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)