

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: P883138

Luminaire Tested: **NAV-SB3B-830-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883138
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-830-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11591 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

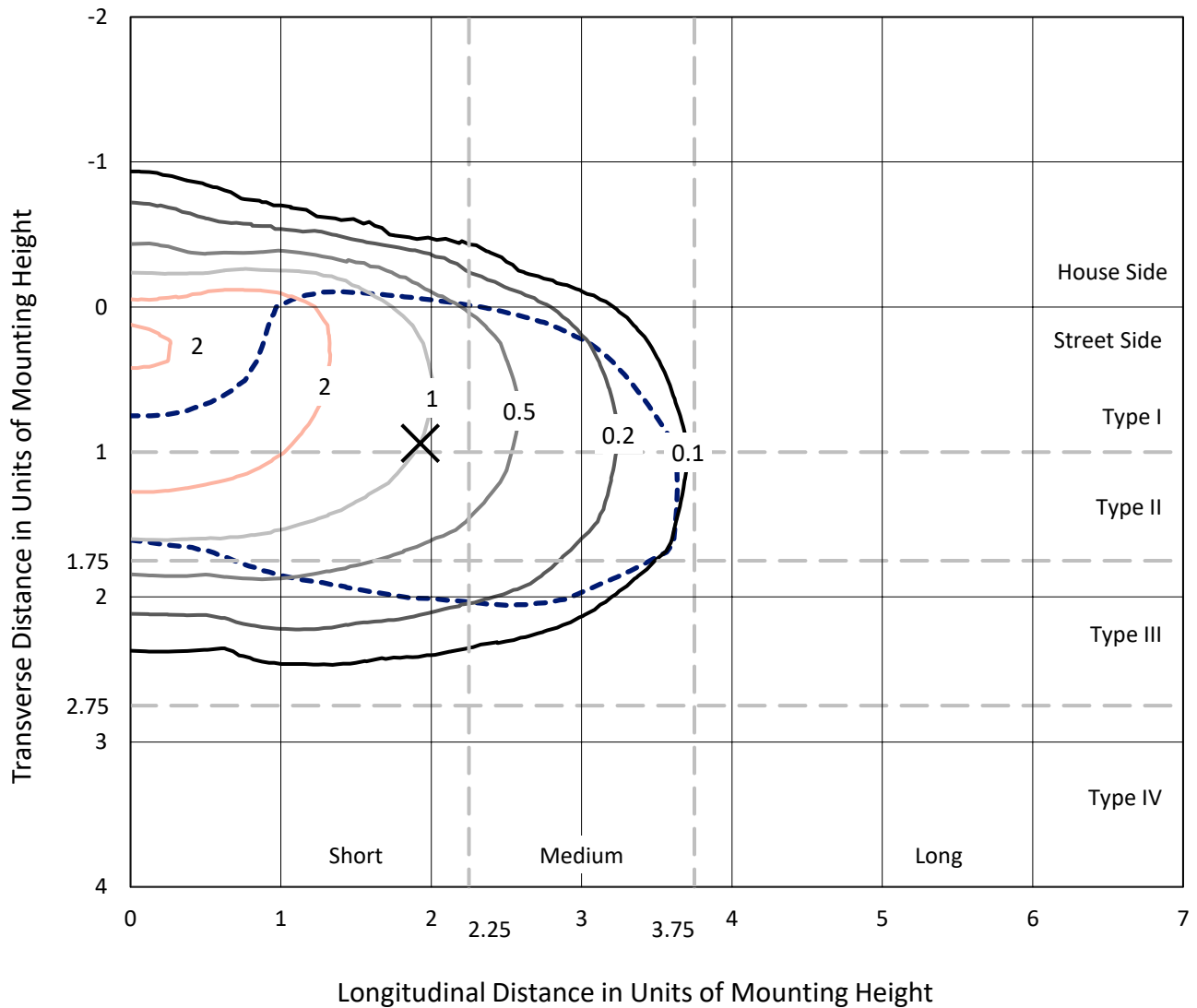
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

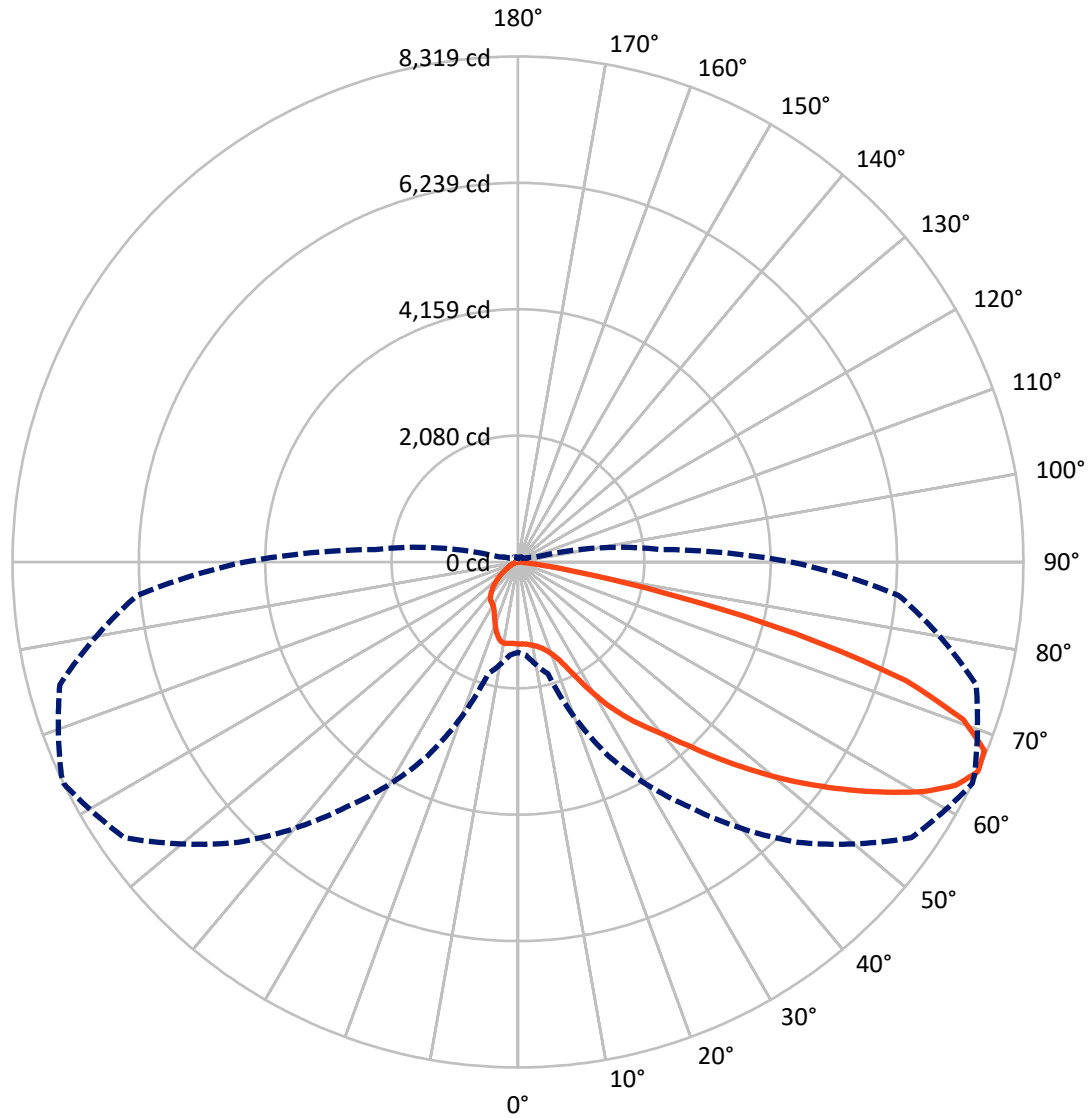
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1550.1	0.0	1550.1
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	10040.9	0.0	10040.9
	% Fixture	86.6	0.0	86.6
Total	Lumens	11591.0	0.0	11591.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.4	1.1
10°-20°	337.4	2.9
20°-30°	639.3	5.5
30°-40°	1293.6	11.2
40°-50°	2203.6	19.0
50°-60°	2996.7	25.9
60°-70°	2814.1	24.3
70°-80°	1127.4	9.7
80°-90°	54.6	0.5
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°	11591.0	100.0
0°-180°	11591.0	100.0

Coefficient of Utilization



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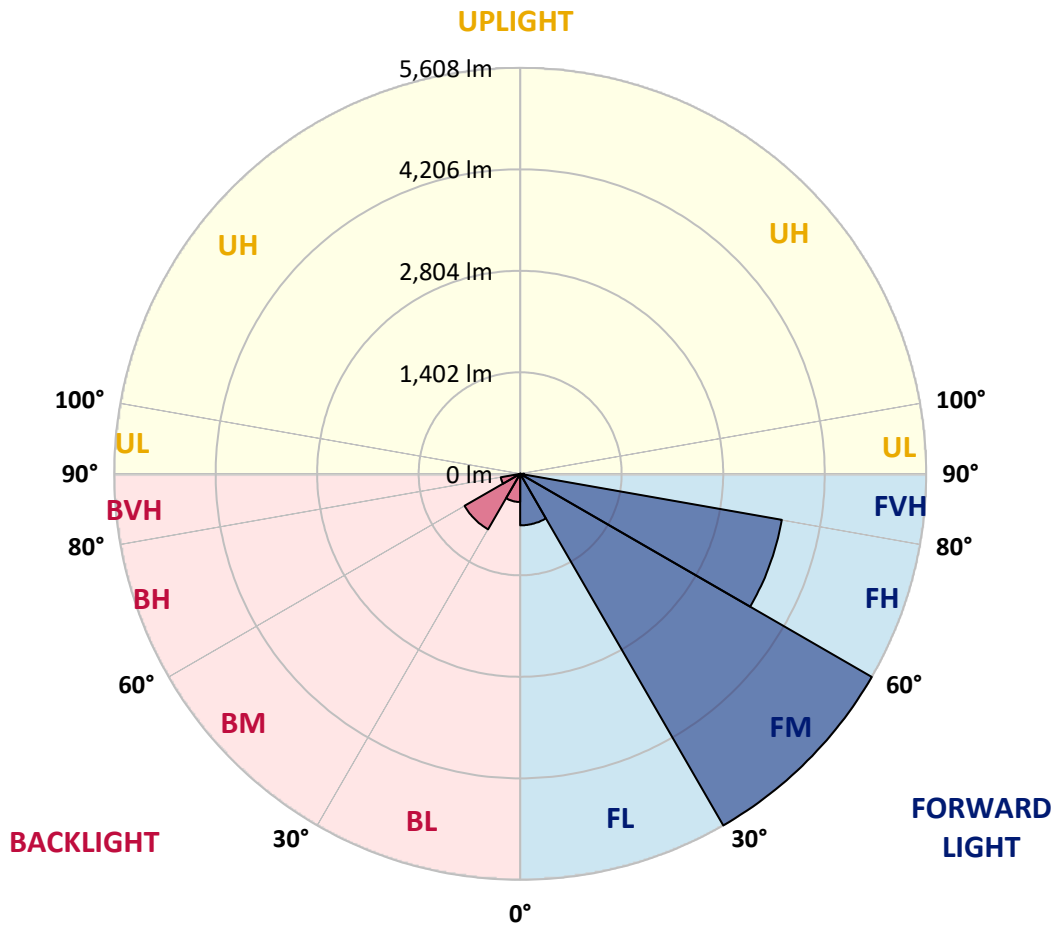
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	711.8	6.1			
FM (30°-60°)	5607.7	48.4			
FH (60°-80°)	3669.4	31.7			G2/5000
FVH (80°-90°)	52.0	0.4			G1/100
BL (0°-30°)	389.2	3.4	B1/500		
BM (30°-60°)	886.2	7.6	B1/1000		
BH (60°-80°)	272.1	2.3	B1/500		G1/500
BVH (80°-90°)	2.7	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1348.2	1348.2	1348.2	1348.2	1348.2	1348.2	1348.2	1348.2	1348.2	1348.2	1348.2
2.5°	1343.5	1352.8	1350.5	1348.2	1347.4	1348.9	1349.7	1348.9	1348.9	1348.9	1349.7
5°	1317.8	1325.6	1325.6	1331.1	1338.8	1348.2	1355.1	1356.7	1358.3	1360.6	1359.8
7.5°	1268.9	1275.1	1279.8	1297.6	1317.1	1341.9	1362.9	1373.8	1375.3	1383.9	1387.0
10°	1235.5	1243.3	1251.0	1269.7	1297.6	1334.9	1370.7	1397.1	1401.0	1421.2	1430.5
12.5°	1233.9	1241.7	1251.8	1272.0	1304.6	1344.3	1387.8	1425.9	1432.9	1462.4	1481.8
15°	1250.2	1259.6	1268.9	1293.8	1328.7	1376.9	1423.5	1470.9	1477.9	1519.9	1540.9
17.5°	1283.7	1296.1	1303.1	1328.0	1365.2	1418.9	1480.2	1534.6	1540.9	1589.8	1616.2
20°	1349.7	1364.5	1366.8	1387.0	1423.5	1481.0	1554.1	1621.7	1629.4	1685.4	1714.9
22.5°	1486.5	1507.4	1488.8	1498.9	1531.5	1589.0	1668.3	1753.8	1764.6	1828.4	1854.8
25°	1727.3	1756.9	1708.7	1691.6	1705.6	1765.4	1864.9	1972.9	1985.3	2036.6	2049.8
27.5°	2200.6	2162.5	2089.4	2018.0	1976.0	2010.2	2122.1	2255.7	2271.3	2321.0	2305.5
30°	2720.4	2687.0	2588.3	2429.8	2330.3	2324.9	2428.2	2577.4	2595.3	2642.7	2595.3
32.5°	3241.0	3209.1	3101.9	2906.9	2734.4	2648.9	2720.4	2885.9	2895.2	2925.5	2855.6
35°	3753.1	3720.4	3613.2	3413.5	3201.4	3007.1	2993.1	3179.6	3182.7	3214.6	3110.5
37.5°	4268.2	4241.1	4126.8	3931.0	3722.0	3453.9	3324.2	3457.8	3461.7	3492.8	3384.8
40°	4635.8	4647.4	4569.0	4417.4	4237.9	3945.0	3695.6	3753.9	3730.5	3782.6	3718.1
42.5°	4951.3	4974.6	4906.2	4830.0	4725.9	4467.9	4155.6	4145.5	4108.2	4136.2	4069.3
45°	5224.0	5243.4	5182.0	5164.2	5161.8	4980.8	4658.3	4597.7	4545.6	4540.2	4460.2
47.5°	5324.2	5361.5	5388.0	5447.8	5564.3	5488.2	5178.2	5084.1	5025.9	4983.1	4856.5
50°	5362.3	5401.9	5492.1	5666.1	5942.0	5974.6	5695.7	5590.0	5518.5	5440.8	5254.3
52.5°	5311.0	5381.7	5503.0	5795.9	6196.1	6364.7	6192.2	6099.7	6018.1	5891.5	5614.8
55°	5008.8	5079.5	5327.3	5794.3	6322.7	6638.2	6661.5	6620.3	6528.6	6328.9	5906.2
57.5°	4371.6	4476.5	4868.9	5597.0	6320.4	6873.6	7121.5	7151.0	7048.5	6762.5	6135.5
60°	3488.9	3631.1	4109.7	5159.5	6125.4	7001.1	7524.8	7672.4	7563.6	7189.9	6321.2
62.5°	2434.4	2599.2	3052.2	4474.2	5679.3	6909.4	7819.3	8092.0	8009.7	7572.2	6392.7
65°	1484.9	1537.7	1903.0	3520.7	4921.0	6525.5	7910.2	8318.9	8291.7	7806.1	6287.0
67.5°	989.2	1033.5	1138.4	2414.2	3819.9	5758.6	7692.6	8279.3	8287.1	7768.0	5900.0
70°	596.0	634.1	702.4	1404.1	2475.6	4558.1	7018.9	7774.2	7819.3	7259.0	5166.5
72.5°	245.5	271.2	333.3	636.4	1282.1	2892.9	5589.2	6674.7	6779.6	6103.6	3965.2
75°	139.1	152.3	195.8	319.4	556.4	1348.2	3385.5	4738.4	4893.0	4206.9	2385.5
77.5°	92.5	98.7	126.7	206.7	313.1	460.0	1446.8	2468.6	2763.9	2297.7	1032.7
80°	62.2	67.6	87.0	138.3	203.6	197.4	460.8	914.6	1125.1	789.5	251.8
82.5°	42.0	42.7	62.2	90.9	129.0	95.6	136.0	284.4	357.4	228.4	95.6
85°	24.1	23.3	45.8	52.8	57.5	39.6	41.2	85.5	111.9	96.4	54.4
87.5°	3.1	4.7	17.9	14.0	7.8	8.5	8.5	14.8	21.8	23.3	11.7
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°	1348.2	1348.2	1348.2	1348.2	1348.2	1348.2	1348.2	1348.2	1348.2	1348.2	1348.2
2.5°	1349.7	1348.9	1346.6	1344.3	1338.8	1335.7	1337.3	1335.7	1334.9	1335.7	1338.8
5°	1359.8	1357.5	1351.3	1343.5	1332.6	1319.4	1310.9	1298.4	1286.8	1279.8	1281.3
7.5°	1387.0	1384.7	1376.1	1354.4	1319.4	1264.2	1213.7	1169.4	1136.0	1116.6	1117.4
10°	1430.5	1426.6	1413.4	1365.2	1273.6	1153.1	1052.9	969.7	915.3	889.7	887.4
12.5°	1481.8	1477.1	1453.8	1355.1	1186.5	998.5	860.2	767.7	717.2	694.7	692.3
15°	1542.4	1536.2	1490.4	1307.0	1059.9	827.5	700.9	631.7	599.1	578.9	579.7
17.5°	1617.8	1606.9	1517.5	1234.7	922.3	697.0	603.0	550.9	522.2	502.7	501.2
20°	1715.7	1697.8	1539.3	1148.5	795.7	614.6	536.9	493.4	471.7	454.6	451.5
22.5°	1852.4	1826.8	1565.7	1055.2	706.3	557.9	488.0	456.1	438.2	418.8	415.7
25°	2021.8	1991.5	1598.4	969.0	644.9	509.0	452.2	425.8	404.8	382.3	380.0
27.5°	2258.8	2204.4	1637.2	898.3	592.1	467.0	419.6	390.1	366.0	347.3	343.4
30°	2523.0	2433.7	1671.4	855.5	543.9	428.1	376.9	347.3	324.8	311.6	309.3
32.5°	2773.2	2652.0	1693.9	836.9	500.4	383.9	330.2	298.4	281.3	277.4	279.7
35°	3009.5	2849.4	1691.6	819.0	461.6	339.6	284.4	251.8	238.5	240.9	240.9
37.5°	3281.4	3060.0	1675.3	791.0	429.7	299.2	244.8	216.0	204.4	205.1	208.2
40°	3597.7	3303.2	1665.2	738.2	394.7	261.9	212.1	188.8	180.3	177.2	176.4
42.5°	3934.9	3538.6	1666.7	678.4	351.2	228.4	189.6	170.2	162.4	160.1	159.3
45°	4273.7	3763.2	1669.1	616.2	305.4	202.8	173.3	157.0	152.3	149.2	149.2
47.5°	4592.3	3954.3	1625.6	549.4	260.3	183.4	160.1	149.2	145.3	141.4	141.4
50°	4889.1	4081.8	1520.7	471.7	224.6	167.8	150.0	142.2	138.3	134.4	134.4
52.5°	5119.9	4102.0	1347.4	391.6	199.7	156.2	143.8	136.8	132.1	128.2	127.4
55°	5222.4	3975.3	1101.1	317.0	180.3	146.1	137.5	130.5	125.1	121.2	120.4
57.5°	5196.0	3708.8	858.6	254.9	161.6	136.0	129.8	125.1	118.9	112.7	111.9
60°	5066.3	3352.1	647.3	212.1	144.5	125.1	121.2	117.3	108.8	99.5	97.9
62.5°	4841.7	2903.8	461.6	175.6	125.9	112.7	111.1	108.0	95.6	78.5	76.9
65°	4498.2	2359.1	310.8	146.1	108.0	98.7	99.5	94.0	77.7	58.3	56.7
67.5°	3996.3	1725.0	198.9	119.7	90.1	82.4	83.1	80.0	66.0	49.7	47.4
70°	3356.8	1142.2	129.8	90.9	72.3	63.7	68.4	69.2	55.9	40.4	38.9
72.5°	2460.9	674.5	90.9	67.6	52.8	44.3	55.9	57.5	45.1	30.3	28.8
75°	1402.5	320.1	68.4	49.0	32.6	31.1	43.5	43.5	31.1	20.2	18.6
77.5°	589.0	133.6	48.2	31.9	18.6	17.9	29.5	27.2	15.5	9.3	9.3
80°	170.2	59.8	25.6	15.5	7.8	7.0	11.7	8.5	3.9	1.6	1.6
82.5°	66.8	26.4	10.1	6.2	3.1	3.1	1.6	0.0	0.0	0.0	0.0
85°	39.6	10.9	4.7	2.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.1	2.3	1.6	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)