

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: McGRAW-EDISON

Report Number: P833688

Luminaire Tested: **TTN-D2-830-U-RW-CG-UPL3**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833688
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G3-2308-121-4) AND
Test Lab: INNOVATION CENTER
Issue Date: 5/15/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TTN-D2-830-U-RW-CG-UPL3
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND RECTANGULAR DISTRIBUTION WITH CLEAR GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5072.7 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type II - Short
BUG Rating: B2 - U4 - G2

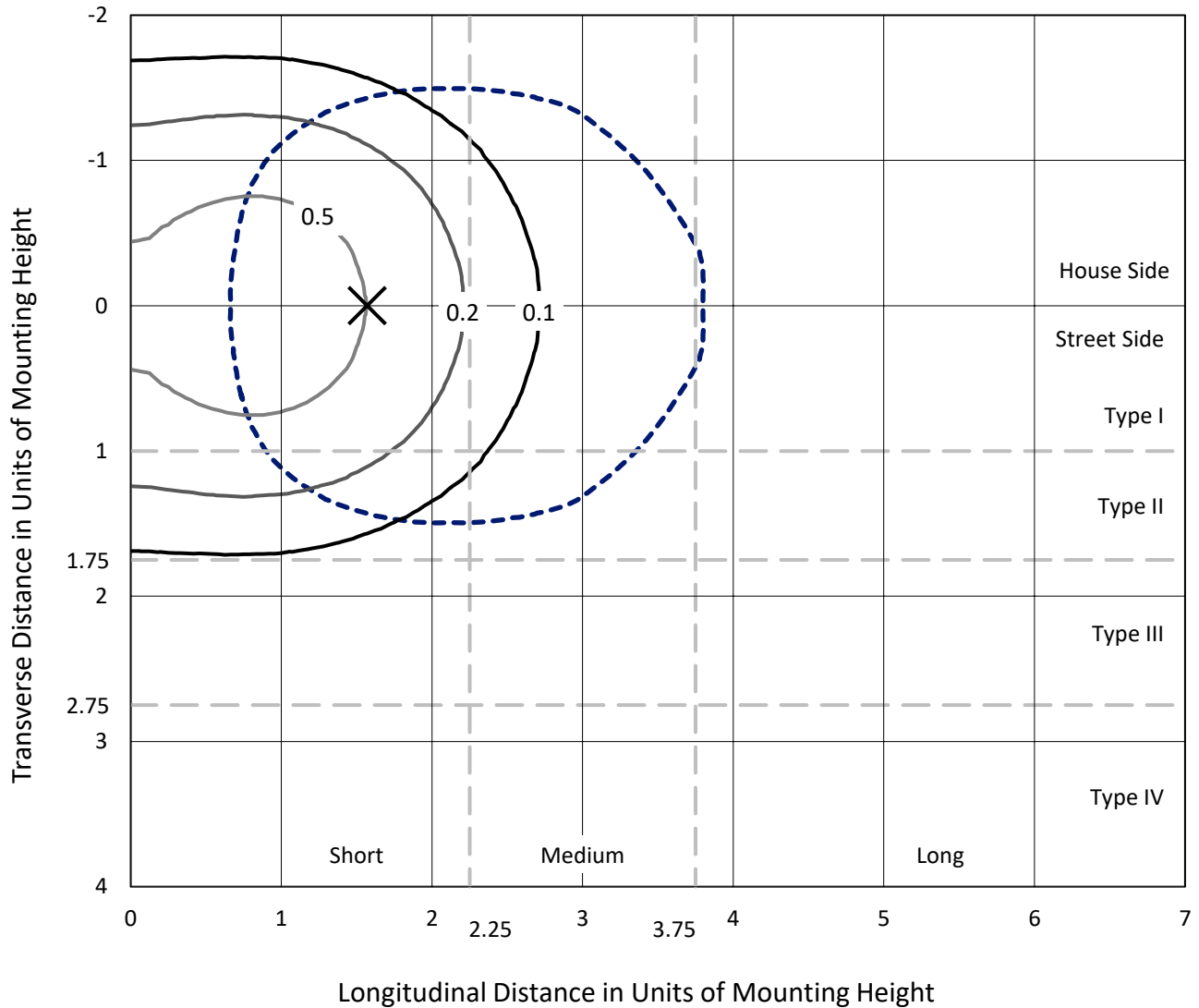
Input Watts (W): 49.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

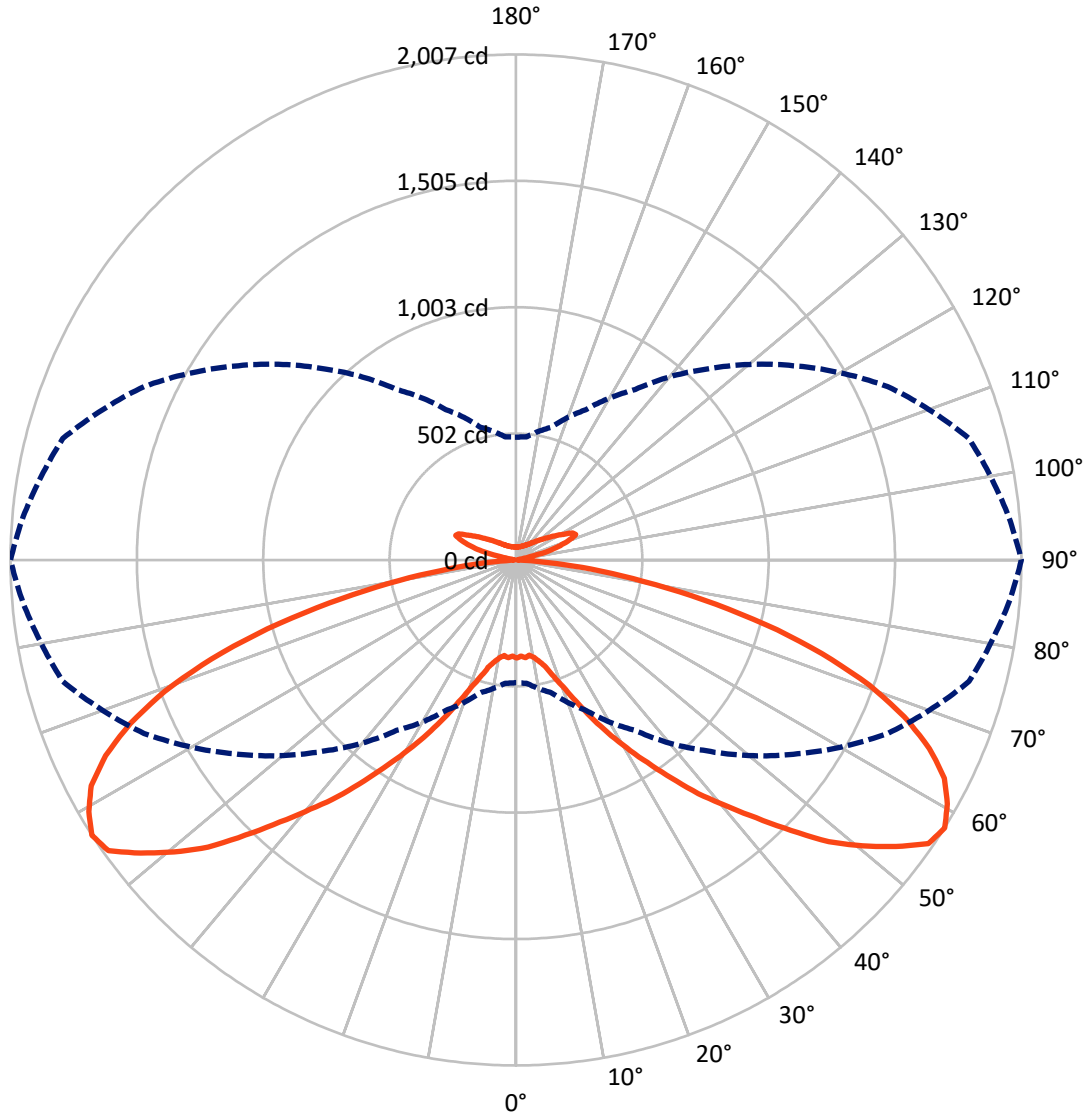
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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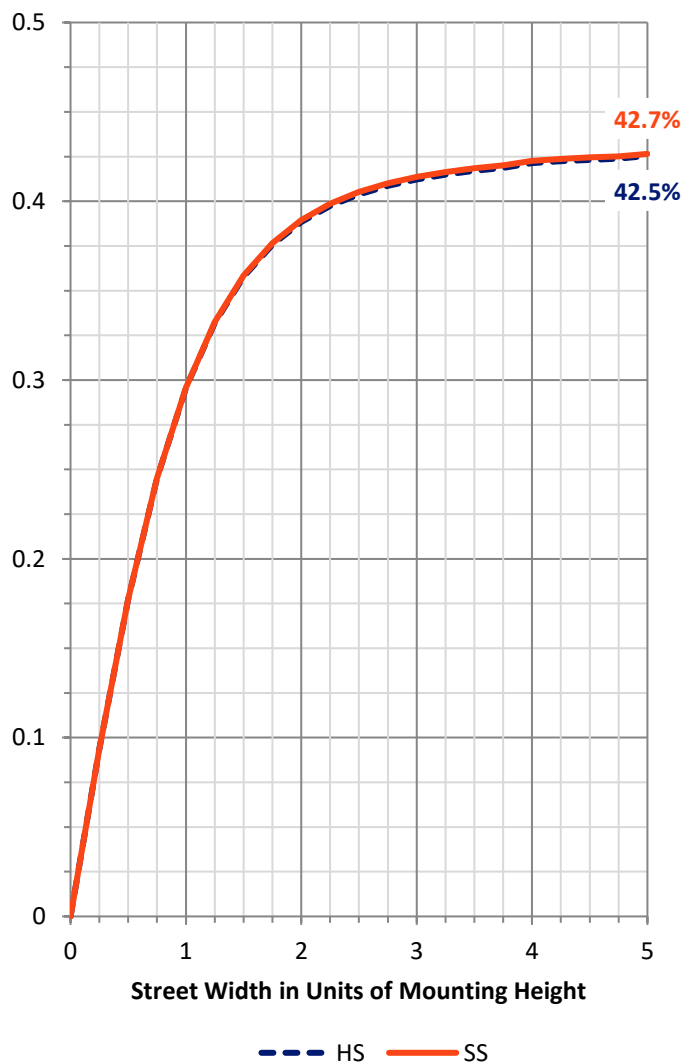
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2166.0	370.3	2536.3
	% Fixture	42.7	7.3	50.0
Street Side	Lumens	2166.0	370.3	2536.3
	% Fixture	42.7	7.3	50.0
Total	Lumens	4332.0	740.7	5072.7
	% Fixture	85.4	14.6	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.1	0.7
10°-20°	119.7	2.4
20°-30°	254.7	5.0
30°-40°	469.4	9.3
40°-50°	755.8	14.9
50°-60°	1023.0	20.2
60°-70°	994.7	19.6
70°-80°	578.7	11.4
80°-90°	98.8	1.9
90°-100°	16.5	0.3
100°-110°	168.0	3.3
110°-120°	245.6	4.8
120°-130°	142.5	2.8
130°-140°	75.5	1.5
140°-150°	44.9	0.9
150°-160°	27.6	0.5
160°-170°	15.1	0.3
170°-180°	4.9	0.1
0°-90°	4332.0	85.4
0°-180°	5072.7	100.0

Coefficient of Utilization



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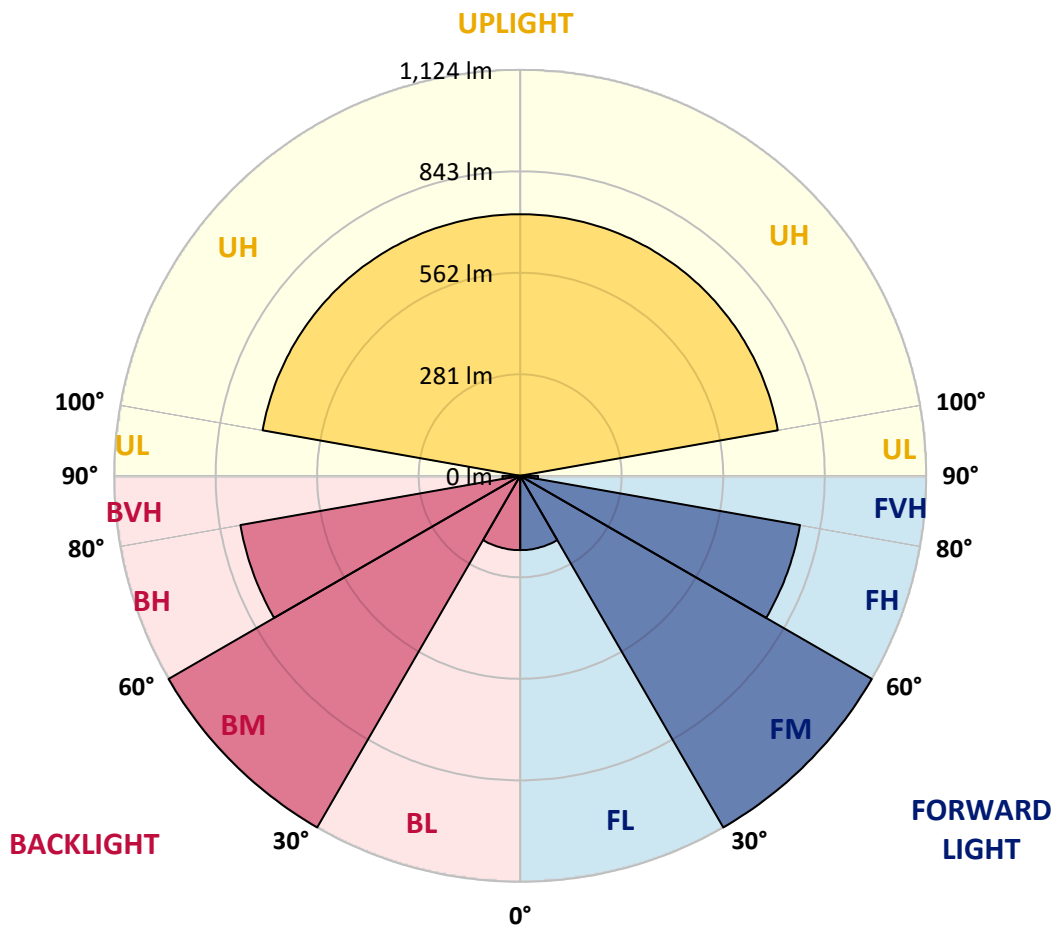
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	205.7	4.1			
FM (30°-60°)	1124.2	22.2			
FH (60°-80°)	786.7	15.5			G1/1800
FVH (80°-90°)	49.4	1.0			G1/100
BL (0°-30°)	205.7	4.1	B1/500		
BM (30°-60°)	1124.2	22.2	B2/2500		
BH (60°-80°)	786.7	15.5	B2/1000		G2/1000
BVH (80°-90°)	49.4	1.0			G1/100
UL (90°-100°)	16.5	0.3		U2/50	
UH (100°-180°)	724.2	14.3		U4/1000	

BUG Rating: B2-U4-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7
2.5°	389.7	389.7	389.7	389.7	385.8	385.8	385.8	381.9	381.9	381.9	381.9
5°	389.7	389.7	389.7	393.6	393.6	393.6	389.7	389.7	389.7	389.7	389.7
7.5°	389.7	393.6	393.6	389.7	389.7	385.8	385.8	385.8	381.9	381.9	381.9
10°	389.7	389.7	389.7	389.7	385.8	385.8	389.7	389.7	393.6	393.6	393.6
12.5°	385.8	385.8	389.7	389.7	389.7	393.6	401.4	405.3	409.2	413.1	413.1
15°	389.7	389.7	393.6	397.5	401.4	409.2	420.9	432.5	440.3	444.2	440.3
17.5°	389.7	393.6	397.5	405.3	417.0	428.6	448.1	463.7	479.3	483.2	487.1
20°	397.5	397.5	401.4	417.0	436.4	455.9	483.2	510.5	530.0	537.8	537.8
22.5°	401.4	405.3	409.2	428.6	459.8	491.0	530.0	561.1	588.4	604.0	607.9
25°	413.1	413.1	420.9	448.1	487.1	533.9	584.5	631.3	666.4	685.8	689.7
27.5°	420.9	424.7	436.4	471.5	522.2	580.6	650.8	705.3	748.2	771.6	775.5
30°	428.6	432.5	455.9	494.9	557.2	627.4	709.2	779.4	833.9	861.2	865.1
32.5°	440.3	444.2	471.5	514.4	588.4	674.1	767.7	853.4	931.3	954.7	958.6
35°	452.0	455.9	487.1	537.8	623.5	720.9	830.0	931.3	1024.9	1056.0	1063.8
37.5°	463.7	467.6	498.8	561.1	658.6	771.6	900.2	1021.0	1122.3	1165.1	1176.8
40°	475.4	479.3	514.4	584.5	693.6	826.1	974.2	1106.7	1223.6	1274.2	1282.0
42.5°	483.2	487.1	526.1	604.0	728.7	876.8	1052.1	1200.2	1324.9	1391.2	1398.9
45°	494.9	498.8	541.7	631.3	759.9	935.2	1126.2	1305.4	1449.6	1523.6	1531.4
47.5°	502.7	506.6	553.3	646.9	794.9	989.8	1204.1	1398.9	1570.4	1648.3	1671.7
50°	506.6	510.5	561.1	662.5	818.3	1028.8	1266.5	1492.5	1675.6	1773.0	1784.7
52.5°	506.6	514.4	565.0	674.1	833.9	1063.8	1317.1	1570.4	1776.9	1886.0	1889.9
55°	502.7	506.6	561.1	670.2	841.7	1079.4	1352.2	1617.2	1847.1	1952.3	1987.4
57.5°	487.1	491.0	545.6	658.6	826.1	1071.6	1344.4	1628.9	1862.7	1964.0	2006.8
60°	463.7	471.5	522.2	631.3	802.7	1044.3	1321.0	1605.5	1839.3	1964.0	1967.9
62.5°	436.4	440.3	491.0	596.2	767.7	1001.5	1278.1	1558.7	1784.7	1913.3	1909.4
65°	397.5	401.4	444.2	553.3	705.3	919.6	1192.4	1484.7	1679.5	1815.9	1804.2
67.5°	354.6	358.5	397.5	494.9	631.3	830.0	1075.5	1360.0	1531.4	1671.7	1663.9
70°	307.8	307.8	342.9	424.7	553.3	728.7	946.9	1196.3	1367.8	1484.7	1488.6
72.5°	253.3	253.3	284.5	354.6	463.7	611.8	798.8	1021.0	1161.2	1262.6	1270.4
75°	198.7	194.8	222.1	280.6	366.3	487.1	631.3	822.2	931.3	1028.8	1024.9
77.5°	140.3	140.3	155.9	202.6	265.0	362.4	467.6	619.6	693.6	775.5	759.9
80°	89.6	89.6	97.4	132.5	175.4	241.6	307.8	420.9	471.5	533.9	514.4
82.5°	46.8	42.9	50.7	70.1	93.5	132.5	171.5	245.5	268.9	315.6	300.1
85°	15.6	15.6	15.6	23.4	35.1	50.7	66.2	105.2	109.1	140.3	128.6
87.5°	3.9	0.0	0.0	3.9	3.9	3.9	3.9	11.7	11.7	23.4	15.6
90°	6.3	6.3	7.6	7.6	7.6	7.6	7.6	7.6	7.6	6.3	6.3
92.5°	6.3	6.3	6.3	8.9	10.1	8.9	10.1	7.6	7.6	6.3	6.3
95°	7.6	7.6	8.9	11.4	13.9	15.2	15.2	8.9	8.9	7.6	7.6
97.5°	10.1	11.4	11.4	13.9	22.8	41.8	25.3	12.7	12.7	11.4	10.1
100°	16.5	17.7	17.7	31.7	67.2	90.0	64.6	32.9	24.1	17.7	17.7
102.5°	53.2	55.8	68.4	102.6	152.1	138.1	116.6	110.2	76.0	60.8	58.3
105°	135.6	134.3	144.5	171.1	212.9	209.1	192.6	174.9	150.8	139.4	139.4
107.5°	178.7	178.7	187.5	210.4	242.0	282.6	286.4	226.8	198.9	186.3	185.0
110°	201.5	201.5	209.1	228.1	269.9	326.9	324.4	280.0	245.8	229.4	226.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	206.5	207.8	218.0	247.1	292.7	318.1	306.7	288.9	273.7	261.0	258.5
115°	214.2	214.2	225.6	253.4	278.8	288.9	276.2	262.3	252.2	247.1	249.6
117.5°	211.6	215.4	218.0	233.2	249.6	257.2	250.9	231.9	224.3	221.8	218.0
120°	196.4	196.4	198.9	206.5	215.4	219.2	216.7	204.0	197.7	196.4	193.9
122.5°	174.9	176.1	174.9	178.7	185.0	188.8	186.3	176.1	173.6	173.6	171.1
125°	153.3	153.3	152.1	154.6	158.4	157.1	158.4	153.3	152.1	152.1	150.8
127.5°	138.1	136.9	134.3	135.6	136.9	136.9	138.1	133.1	134.3	135.6	134.3
130°	122.9	122.9	120.4	120.4	120.4	117.8	120.4	117.8	119.1	120.4	121.6
132.5°	109.0	109.0	105.2	103.9	103.9	103.9	105.2	103.9	106.4	109.0	109.0
135°	97.6	97.6	93.8	95.0	95.0	93.8	95.0	93.8	96.3	97.6	97.6
137.5°	88.7	88.7	86.2	86.2	86.2	84.9	86.2	86.2	87.4	90.0	91.2
140°	81.1	81.1	79.8	79.8	78.6	79.8	79.8	79.8	81.1	82.4	82.4
142.5°	77.3	76.0	74.8	73.5	74.8	74.8	74.8	73.5	74.8	77.3	77.3
145°	71.0	71.0	69.7	69.7	69.7	71.0	69.7	69.7	71.0	71.0	72.2
147.5°	67.2	67.2	65.9	67.2	67.2	67.2	67.2	65.9	67.2	67.2	68.4
150°	65.9	64.6	63.4	64.6	64.6	63.4	63.4	63.4	63.4	64.6	64.6
152.5°	62.1	62.1	60.8	62.1	60.8	60.8	60.8	60.8	60.8	62.1	63.4
155°	59.6	59.6	58.3	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6
157.5°	57.0	58.3	57.0	57.0	57.0	57.0	57.0	57.0	57.0	58.3	58.3
160°	55.8	55.8	55.8	55.8	54.5	54.5	54.5	55.8	55.8	55.8	57.0
162.5°	54.5	54.5	54.5	54.5	53.2	53.2	53.2	53.2	54.5	54.5	55.8
165°	54.5	53.2	53.2	53.2	52.0	52.0	52.0	52.0	53.2	54.5	53.2
167.5°	52.0	52.0	52.0	52.0	52.0	50.7	50.7	52.0	52.0	52.0	53.2
170°	52.0	52.0	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	52.0
172.5°	52.0	52.0	52.0	52.0	50.7	50.7	50.7	50.7	50.7	52.0	52.0
175°	52.0	52.0	52.0	52.0	50.7	50.7	50.7	52.0	52.0	52.0	50.7
177.5°	52.0	52.0	52.0	52.0	50.7	52.0	52.0	52.0	52.0	52.0	52.0
180°	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0

(END OF REPORT)